SPECIAL EDITION VOLUME 1

WWW.REDHERRING.COM

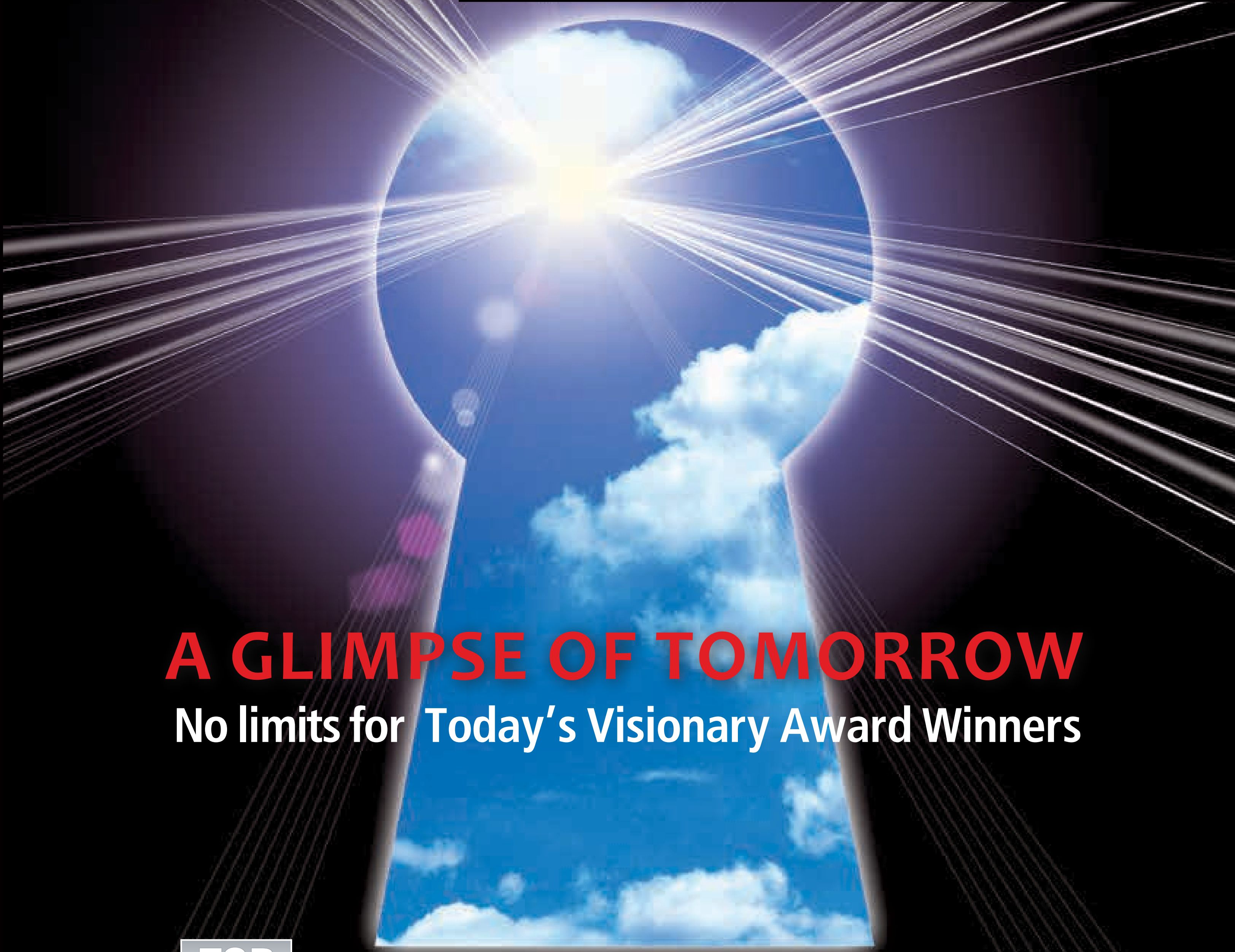
RED HERRING

$3.99 / $4.99 CANADA

Featuring:

Red Herring
TOP 100
COMPANIES

RED HERRING MAGAZINE | SPECIAL EDITION 2014 VOLUME 1



A GLIMPSE OF TOMORROW

No limits for Today's Visionary Award Winners

TOP 100 Technology Companies

Top Technology Companies
Europe & North America

Red Herring Magazine

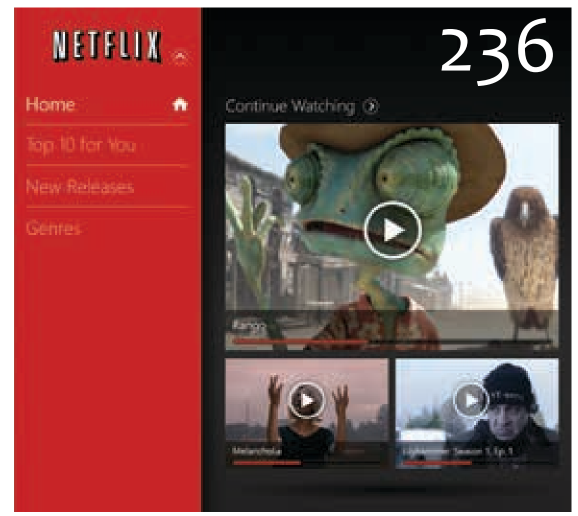
top 100 award

In this issue, the Red Herring Top 100 award highlights the most exciting startups from Europe and the Americas. Hundreds of companies from both regions were reviewed in a rigorous 3-step process. Congratulations to all the winners.

red herring

Special Edition 2014

C O N T E N T S



this issue

8 **PUBLISHER'S NOTE**

10 **TOP 100 COMPANIES: EUROPE**
European innovators and entrepreneurs to know

12 **LIST OF EUROPEAN WINNERS**

114 **FACTUAL STATS: EUROPE**

122 **TOP 100 COMPANIES: NORTH AMERICA**
U.S. companies forging ahead into uncharted territory

124 **LIST OF NORTH AMERICAN WINNERS**

226 **FACTUAL STATS: NORTH AMERICA**

features

116 **APPLE'S CHINA MOBILE DEAL**
Providing some relief

117 **AFRICAN E-COMMERCE MARKET**
Mobile Internet builds promise

118 **VOLVO'S AUTOMATED VEHICLES**
The 'moonshot' project is in action

120 **NEXTDOOR'S SOCIAL PLATFORM**
Connecting U.S. neighborhoods

228 **EDUCATION THROUGH KHAN ACADEMY**
Education for all

231 **BUDAPEST BLOSSOMS WITH TECH TALENT**
Despite government red tape

232 **TAXI APP**
Compete Globally

233 **ALIBABA IPO**
Leaving Hong Kong Stock Exchange sweating

235 **ACER'S COMEBACK**
Founder Stan Shih takes control

236 **NETFLIX STREAMS AHEAD**
Proves to be the king of streaming industry

238 **MERITECH BLAZES A TRAIL**
Gaining command of the landscape

240 **AMAZON'S DRONE**
Plan or distraction?

241 **SNAPCHAT TURNED DOWN FACEBOOK**
Tactical or foolish?

242 **EUROPEAN FIRMS LOOK TO ISRAELI**
Model for U.S. Success

243 **SAMSUNG SUFFERS DROP**
Budget smartphones disrupt market

244 **VERISILICON**
What makes a smartphone so smart?

SPECIAL EDITION VOLUME 1 SPRING 2014

RED HERRING

Red Herring is published by Red Herring, Inc.

7660 Fay Avenue, Suite H
La Jolla, CA 92037
Telephone: (650) 461-9156

To participate or advertise in Red Herring events, contact
aalpenia@redherring.com or Call (650) 461-9156

POSTMASTER:
Please send change of addresses to:

Red Herring
7660 Fay Avenue, Suite H
La Jolla, CA 92037

ISSN: 1080-076X
Printed in the USA

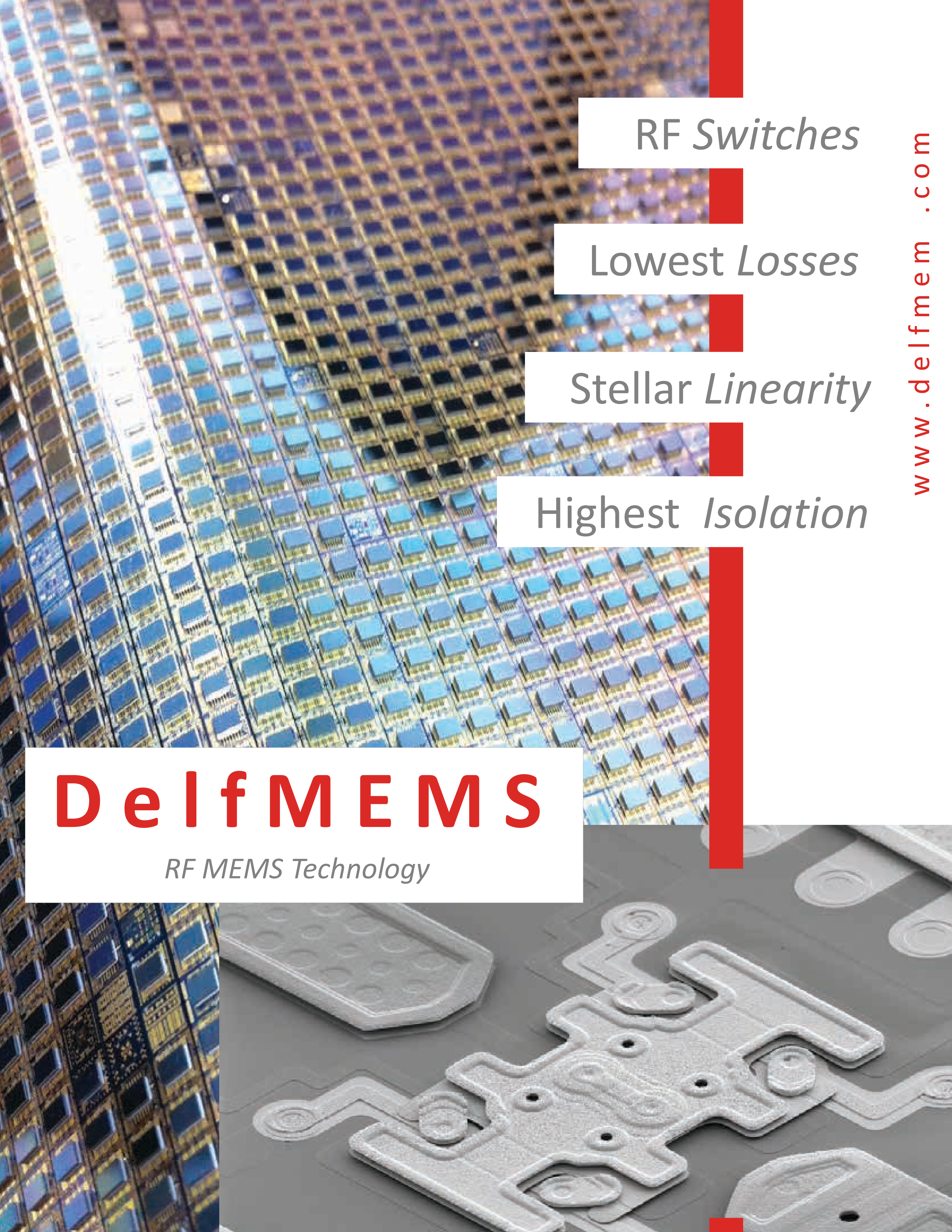
www.redherring.com

Digital edition available online at www.redherring.com

Write To Us!

We would love to hear from you.

Send questions and comments to comments@redherring.com or call (650) 461-9156 and leave us a message.


RF Switches
Lowest Losses
Stellar Linearity
Highest Isolation
www.delfmem.com
DelfMEMS
RF MEMS Technology


Centric Software
Industry's Best PLM Software
Proud Winner of Red Herring
Top 100 Private Companies
Honored Winner of Best
PLM Software for Global
Retail, Fashion and Apparel
Delighted to Provide
Exceptional Business Value
to Marquee Brands and Retailers
RETAIL. APPAREL. FOOTWEAR. LUXURY. CONSUMER PRODUCTS.
485 Alberto Way Suite 200 Los Gatos, CA 95032 USA
E centric@centricsoftware.com T +1.408.574.7802 X399
www.CentricSoftware.com
CENTRIC SOFTWARE

In today's world, the visual reward of publishing a magazine could be deemed archaic or at least passé. During its history, Red Herring has gone from being an iconic paper, read throughout the world, to a vestige of a bygone era, and now attempts to supplement other forms of editorial content with its unique global point of view on technology. But the story features the same actors, entrepreneurs, disruptors, naysayers, established incumbents, money-makers, losers, venture capitalists and idealists.

In this issue, you will read about all of the above. We put the spotlight on people who are changing the mobile environment, revolutionizing the enterprise world with better security, storage, cloud, analytics and data, or just embracing social causes with a new approach. We predicted in 2011 that we were watching a new generation's rise. In fact, it is a combination of new ideas and veteran entrepreneurs that are taking charge of this universal cycle. In Europe, America and Asia successful CEOs are putting their experience and expertise to work, enabling incredible growth and speed of change.

> "We put the spotlight on people who are changing the mobile environment, revolutionizing the enterprise world with better security, storage, cloud, analytics and data, or just embracing social causes with a new approach."

Over the past five years, global economic trends have reshuffled dramatically. South to South trade will overcome OECD commerce this decade. Even more compelling is the fact that 6.8 billion people subscribe in one way or another to the digital age. By 2015 we will have exceeded the magic 1.0 ratio of subscriber per human on this planet.

This issue will tell the tale of this transformation, page after page. And countries such as Turkey, South Africa and Brazil are playing a pivotal role, not a secondary role in this silent revolution. Our journalists have interviewed CEOs on five continents, and have reported on local markets as well as global strategies. To be at the forefront of this exciting evolution is a craft, and not so passé after all. Thank you for sharing it with us.

Alex Vieux,
Editor-in-Chief and Publisher

Europe's Top 100

THE MOST PROMISING AND INNOVATIVE TECHNOLOGY STARTUPS IN 2013

It has been another year of struggle for Europe. Recovery has been slow or non-existent in some countries and conditions for entrepreneurism could barely be tougher. That's why this year's Red Herring 2013 Top 100 Europe winners fully deserve all the plaudits coming their way.

In times of recession and austerity, cash can be hard to come by and great ideas can be squandered as funding becomes sparse. But these 100 companies made it anyway.

What Europe lacks in funding, it more than makes up for in talent. The whole continent is awash with great minds and universities such as those in Dublin, Paris Delft and many others act as conveyor belts for exciting new entrepreneurs, ready to take the market by storm.

As the U.S. frets over the possibility of another tech bubble, those in Europe know that, because of the debt crisis and looming deflation problem, only the best of the best will make it. And the cream of that crop is displayed in the winners this year.

But there is hope for the 28 members of the European Union. November forecasts by the European Commission suggest that although GDP across the EU will stagnate this year, it will expand by 1.4% in 2014. There is also expected to be signs of recovery in the 17 countries tied to the Euro. The European Commission estimated a 1.1% increase in GDP in 2014, after a 0.4% dip this year.

With a vague hint of hope on the horizon, entrepreneurs in Europe can go into the New Year with even more confidence, that their products, services and technology will be even more successful in a recovering economy.

Many of the Top 100 companies work in essential markets where brilliant new innovations cannot fail, such as biosciences. Others concentrate on making business easier, through financial, payment and funding assistance. Yet more attack a new wave of industries such as the internet of things.

The Red Herring 2013 Top 100 Europe winners are a standout group of companies, and share not just talent, innovation and huge potential, but also a steely reserve built up from the testing surroundings in which they have prospered. They are to be congratulated today, watched closely next year, and admired in the years to come.

2013: TOP 100 Technology Companies

Europe: A-Z

- Abiquo
- AdMingle
- Adomik
- Advaltis
- af83
- Agaidi
- Amikod
- Anatole
- Apptivation Mobile
- Automsoft
- AVK Systems
- Beslist.nl
- BIMobject
- Brand Embassy
- Catchoom
- Celeno
- Cirrato Technologies
- Cleeng
- CLIQ Digital
- CloudPay
- Conferize
- Creativesystems-Sistema
- Crunchfish
- D-ORBIT
- DelfMEMS
- Delivery Hero
- DEM Solutions Ltd
- Dream Broker
- Ductor Corp.
- Evmanya.com
- Ezakus
- Falcon Social
- FeedHenry
- FlatFrog
- Frafos
- Global Business Register
- GlobalOrange
- Greenclouds
- i-Optics
- iData
- IDchecker.com
- inbenta
- Innotech Solar
- Indisys
- Intune Networks
- Jinny Software Ltd
- Jongla
- LiTHIUM Balance
- Magine
- Modelity Technologies Ltd
- Multi Touch
- MVF Global
- Mythings
- Next Media Group
- Nitor Creations
- NLT Spins Ltd
- Oxford Immunotec Ltd
- PacketFront Software Solutions
- ParStream
- Paylogic
- Paymill GmbH
- Payson
- Phinergy
- Pozitron
- Proxistore
- Puzzlepart
- RTR Rete Rinnovavile
- Sefaira
- Sefamerve
- Showroomprive.com
- Sievo
- Sigfox
- SkySQL
- smartTrade Technologies
- Softkey
- Solutions30
- Somoto
- Sportradar
- Spreadshirt GmbH
- Sticky Ads TV
- Sympa
- Tageos
- TeamUp
- Tethras
- Upfront Chromatography
- Vaadin
- Valens Semiconductor Ltd
- Varaani Works
- Varnish Software
- WalkMe
- Watchful Software
- Wi-Next
- Widespace
- WITBE
- WiTech
- XMOS
- Xstream
- YD
- Zerogrey
- Zoobe

Abiquo

www.abiquo.com

Gilles Samoun

Virtualization

UK

Yes

» Companies of all different sizes are now looking into developing their own cloud services. Some of these are hosted on a public cloud, and aimed at customers or clients, and others are on private clouds, and for the sole use of employees. This mass migration to the cloud has created a market in managing and providing platforms for the companies making the switch.

Abiquo, is one such company which provides clients with a single management layer that allows them to build the infrastructure that becomes their cloud. The key to operating in this market is to be flexible enough to serve both groups of cloud users – the public and private. "It's applicable to an enterprise customer who wants to take their existing infrastructure and technologies and turn it into a more flexible platform for themselves," says Jim Darragh, CEO of Abiquo. "And it would also be applicable to a service provider who actually wants to take infrastructure and build a cloud that can then be consumed as a public cloud. So I guess at some level allows a public cloud that would rival Amazon at the top of the market."

Abiquo has three core tenants to its proposition. The first of these is independence, which means the firm offers the widest variety of underlying infrastructure possible. Put simply, the firm concentrates on giving the customer the maximum number of options and control over the cloud solution they are trying to build through the Abiquo platform.

The company also makes every effort to make the whole process as easy as possible for the client. This means making sure any processes that can be automated are automated. "We're trying to take away the mundane tasks, the repeatable tasks and allow the IT department to get greater scales of economy from having a tool like ourselves," says Mr. Darragh.

The final element that the company puts heavy emphasis on is making sure that the product is completely secure.

Abiquo has evolved since its inception in 2006, although one of the founders, Xavier Fernandez, is still with the company as head of engineering. The product went to market in 2009 and got its first customers in 2010. The firm recently raised another round of funding and is planning to enter the North America market this year. The development work is done in the company's offices in the UK and Spain but Abiquo is now planning sales and commercial teams in the U.S.

Earlier this year specialist growth capital investor Oxford Capital led a $5 million funding round into Abiquo. Oxford Capital joined Balderton Capital and Nauta Capital as a major backer of the firm. Colin Watts, Partner, Oxford Capital said: "Cloud computing gives businesses far greater control over their software and systems, benefitting from a more flexible IT framework. Abiquo is at the leading edge of this change, the software essentially allows businesses to not only utilise Cloud computing but to also effectively manage it through its easy to use portal. With the Abiquo solution businesses are not required to remove their current IT systems which can be costly and time consuming. Instead, the management platform that Abiquo provide integrates easily with most technologies, making it an exceptional product in the market."

The major challenge now for Abiquo, and other firms in the same market, is to stay on top of the technology advancements which are continuously happening. "The breadth of what we have to support keeps us on our toes. Every time you want to enhance the product you have to enhance it times the number of products you support," says Mr. Darragh. "We've grown the engineering team steadily as we've gone in order to support that. If you really want to be an enterprise player, your level of integration with legacy technology and processes, supporting the things that are important to the enterprise is more of a challenge and it's something that we focus an awful lot of effort on. We want to be an enterprise software company, not just a service provider software company and that takes an awful lot of time and effort." RH

adMingle

www.admingle.com

Shlomi Benbasat

Social Media

Turkey

No

» The social-network era is expected to bring more and more innovation with it, and has already introduced new ways of making money online. "People share what they do and a lot of it has commercial value. You share it anyhow, so why not make money from it?" says Shlomi Selim Benbasat, co-founder and CEO of AdMingle, a new advertising platform for social networks, based in Turkey.

After signing up for adMingle, users can select their interests like sports, music, cars, etc., and choose publishers to team up with, to become their brand and messaging ambassadors. On the other end, brands can reach out to users according to profile indicators and ask those users to join specific campaigns. They can join or not; if they choose to participate, they can enter their own message regarding the campaign and a preferred day and time to publish messages. The payment is per-campaign, according to each user's "reach".

AdMingle developed its own "reach algorithm" in order to calculate the scope that each signed-up user has on social media. "We look at how many people have liked your posts, shared them or commented on them in cycles of 15 days," Benbasat explains, "we also trace the third and fourth circles of friends that receive the shared content, which can sometimes be a lot greater than the first circle." Traditional online advertising measures like cost per click (CPC) and cost per acquisition (CPA) are also considered when calculating the return for users.

Their reach algorithm can provide better premiums for users, Benbasat says. "You might post a link about BMW cars and have 100 people click on it, so you'll get paid for 100 clicks. But actually, you have a reach of 1000 people, who may have seen the post but did not click on it, [and] in this case your compensation using the reach method is better," Benbasat says.

The reach model works best with celebrities, who usually have more followers than other social media users. However, only about 15 percent of registered users of AdMingle are celebrities, while the rest are part of the general public. "Celebrities don't have as much time as other people," Benbasat says. He explains that some people can become "Wellebrities" and have a big impact and wide readership online, even though they are not VIPs in the real world. "The return on the Wellebrities' user base can be 60 percent to 150 percent, while some real celebrities can have a return as low as 6 percent to 15 percent," he explains. "Besides, the common people have more credibility."

And credibility is indeed a big challenge for AdMingle. Would you believe that your favourite singer posted "I love Diet Coke" simply because they liked it? "This was our main concern when we started this," Benbasat says. However, users can edit advertisement posts before AdMingle posts them on their profile page (or even reject them) in order to make them seem more "real".

"I won't post an ad for a car that I don't drive," Benbasat explains, adding that 8 percent to 20 percent of advertising campaigns get rejected by users. In addition, every message that comes out of AdMingle's system includes a specific hashtag that indicates its origin on the user's profile. "I'm not deceiving followers — I'm telling them that this is where the post came from," Benbasat says.

AdMingle started in Turkey, a good spot for social media startups. According to research by comScore media metrix, Turkey accounted for 23.1 million unique Internet visitors of Europe's 372 million visitors during August 2011, coming in third after the United Kingdom and the Netherlands. According to the research, Facebook was the most engaging site in Turkey, accounting for 28.8 percent of all time spent online during the month.

"Turkey is our backyard," Benbasat says. He and Moshe Franko, co-founder and COO of the company, are childhood friends and have been partners in various technology and internet ventures over the past 10 years. Arman Acar, co-founder and CBDO used to work in one of the companies Benbasat and Franko exited a few years ago. The company was originally self-funded by Benbasat and Franko, but they plan to raise $3 million this year. "Some angels wanted to help us, but we prefered venture capital, since it's 'smart' and not 'stupid money,'" Benbasat adds. He is aiming for a future IPO, and has no M&A plans.

AdMingle started selling in October 2012 and Benbasat hopes to reach the break-even in the next few months. AdMingle shares 50 percent of profits from every campaign with users; this business model attracts them to the platform. "They know that we are partners," Benbasat says. He still meets with and writes emails to some users. "It creates trust, and they always give me new ideas," he says.

The company's current customers in Turkey include Opel, Fiat and MasterCard. AdMingle has launched in the United Kingdom and Italy, and in the future hope to reach customers in 14 other countries, including Germany and France.

Telecom companies show the most interest in AdMingle, Benbasat says, since text messaging advertising is getting less popular among advertisers. All three telecom companies in Turkey are already working with AdMingle, while similar companies in Russia and France have indicated interest in their platform.

AdMingle's main competition comes from United States-based companies like Izea, MyLikes and Adly, which makes the prospect of a U.S.-market entry all the more challenging. In contrast, penetrating the European market will prove relatively easy, as it contains no significant competition. In addition, none of the competitors use the reach metrics that AdMingle developed, as most of them leverage business models based around CPC.

Online ad spending as a percentage of total ad spending has increased by more than 17 percent in 2012, while a smaller increase of 10-12 percent in online marketing is expected in 2013 to 2015, according to data by eMarketer. Social network ad revenues, however, are expected to grow more slowly as years go by, after cresting in 2011 when social ad revenues increased by more than 55 percent in one year.

However, Benbasat is confident in his product. "I want to change the way we do Internet," he says. "People spend 8 hours a month on social networks, it's like a day of work. If we can become the price list of social transactions, it's a multi-billion dollar business."

adomik

www.adomik.com

Nicolas Schueller

Internet/Online

France

No

» Pretty soon, companies like adomik will help humans turn digital advertising over to machines and data. Today, the company, which provides clients "ad sales intelligence tech," enables publishers to sell and target ads more quickly than any person ever could: i.e., within the blink of an eye.

"Digital advertising has changed a lot in the last few years," says adomik co-founder and CEO Nicolas Schueller. "We're moving from a traditional commercial model based on human relationships where you have the seller and...a handful of sales per month."

Instead of between people in offices, sales now occur between machines on fresh ground: the ad exchange. The digital landscape allows for almost instantaneous selling and a more refined approach to target marketing. Plus, advertisers massively ramp up the number deals closed. "[The] ad exchange is a technology platform that plays the role of the middleman between buyers and sellers, and that handles programmatically sales transactions," Schueller says. "In the traditional sales, [you have] a handful of sales per month; when you change to the exchange, you have hundred of millions per month."

It's an entirely new world for publishers, and it takes some getting used to––not to mention expert advice and insight. According to the adomik's blog, the company's "advertising intelligence" platform guides publishers in solving three crucial quandaries: what to sell, at what price, and to what buyer. Adomik's proprietary technology, bidExplorer, brings publishers the data analysis they need to make decisions.

"What they provide us and what we rely on is the look into raw data," says Marius Rausch of Interactive Media, an adomik client. "[Adomik's] analyzing huge amounts of data, transactional data, auction data, getting insight for us to really see what is going on under the hood––what specific partners from our side were interested in purchasing and buying, how they were valuing our inventory, our media."

Adomik's data-driven perspective provides guidance as publishers adapt to the quickfire, tech-based nature of the ad exchange. The company's tech chews through information to produce analysis; i.e. what inventory (often ad space) advertisers want to buy and why.

"Imagine you are browsing a website (let's take theDailyPlanet.com), and you are loading the homepage. Assuming the Daily Planet sales house made this space eligible for programmatic trading on an ad exchange, as soon as you load the page on your browser a request is fired to ad exchange," Schueller says. "The role of ad exchange then is to gather all interested buyers to set up an auction, to gather all the bids from the buyers, to resolve the auction, to attribute the sales to one of the buyers ... and send it back to your browser."

"Here you have the process of selling in no more than 120 milliseconds," he says.

Adomik generates revenue by powering through information and providing insights. "We are a pure technology platform, and our product is processing huge amounts of data, so our business model is volume-based," he says. "We charge by ad request ... so it's a pure CPM model." Though Schueller says the market has yet to be measured, he gauges his company's opportunity at billions of dollars.

While competitors address what Schueller calls the whole value chain from advertisers to publishers, adomik limits its focus; and in doing so, carves out a niche position for itself in the industry.

"It was a strange thing because you have billions and billions of investment to help one side [(the demand side)] and practically zero for the other side," says Denis Barrier of Iris Capital, who invested in and incubated the company. Seeing an opportunity, adomik zeroed in on the opposite side of the ecosystem.

"We have made the choice to be...fully-publisher focused," Schueller says. "From the beginning, adomik has put customers first and prioritized their feedback in creating the platform. "There is nothing that has been developed without the customer sponsorship," he says.

Last May, investors Elaia Partners and Iris Capital financed adomik's seed round, contributing €1.3 million. Schueller says the company sought backers with specific skills. "We have selected our VCs based on their capacity to support our international development also, so...definitely we have the ambition to become global," he says. Adomik's first-ever customer resides in the U.K., and 80 percent of their revenues originate from companies based outside France.

"We serve clients in seven different countries in Europe, [and we're] looking at the other side of the Atlantic very cautiously," Schueller says. "We have just been integrated as an app within AppNexus, one of the ad-exchange platforms. This allows third parties to provide value-added services to their customers, so we are now embedded within the AppNexus ecosystem, and we believe that this will definitely be the commercial kickoff of the company."

Though adomik already partners with New York City-based AppNexus, Schueller remains trepidatious in approaching the U.S. advertising market. With the company off and running, Schueller says adomik concentrates on impetus in a market still finding its footing. "Our belief is that this whole business is a question of momentum, so we are [making decisions] very quickly, we are building features after the customers' sponsorship," he says. "Our forecast is to double the customer portfolio each quarter." However, growth untempered by strategy won't yield the results adomik hopes for. "We need to be very cautious of the maturity of our addressable market because again, life is changing for publishers and networks," he says.

As the company gains ground, Schueller projects adomik will cross the break-even line into profitability in 2015. RH

Advaltis

www.advaltis.com

Jaoued Ahmed

Cloud Computing

UK

No

» Designing a piece of software is very energy expensive process. The amount of work which goes into applications, games and cloud services cannot be underestimated. Therefore products which help ease the whole process are very highly valued.

A company based in the UK is offering a suite of products that do just that, and two of them stand out in particular – one in development and another already available. Advaltis is a business solution provider with offices in Oxford in the UK and Casablanca in Morocco.

Advaltis CEO and founder Jaoued Ahmed was born in France, but moved to the UK in 1994 to undertake a PhD at Oxford University. In the late 1990s he went to work for major telecoms companies in London, including British Telecom, Cable & Wireless and Logica. Towards the end of 2010 he quit his job at Logica to become and entrepreneur.

"I needed two things, one is a great idea and the other is investment funding. Over time I managed to get the two," says Mr. Ahmed. "So I gave my resignation to Logica and in September 2010 I set up Advaltis UK to help companies to accelerate their adoption of cloud computing services."

The cloud services market is an extremely profitable one. Earlier this year Gartner released a report forecasting that the public cloud services market would grow 18.55 in 2013 to $131 billion. "The continued growth of the cloud services market will result from the adoption of cloud services for production systems and workloads, in addition to the development and testing scenarios that have led as the most prominent use case for public cloud services to date," said Ed Anderson, research director at Gartner.

Although he was targeting the UK and French markets, Mr. Ahmed decided to build the services he was to offer in Morocco, and Casablanca in particular. "Altogether we have 20 people, mainly software developers and software engineers. One solution we are proud of which we are trying to boost across the market, is a software testing platform called Act, Adaltis cloud testing," says Mr. Ahmed.

"That's quite a breakthrough because you don't need a license, you don't need to install anything you just upload the online and then you can carry on your software testing," he adds.

The other product idea which Mr. Ahmed is particularly proud of is yet to be launched on the face of it could be huge. He has, together with a partner, developed a tool called My App Converter, which converts the code of applications from one platform to another. "As you know mobile applications are everywhere, everyone has an application for anything. Whether it's weather, food, games, maps, there is an application for it. The problem is you have four or five mobile handsets with different operating systems mainly Android Apple, Blackberry and Windows," he says.

One of the biggest frustration for mobile application developers is that once an application is developed, it has to be recoded to work on other platforms. Supporting all these different platforms costs both time and money. My App Converter works in three steps, a user uploads the code for their application, the coding is done automatically by the company, and it is then downloaded for whichever platform was selected.

However, Mr. Ahmed has decided to launch the new product as a new company, and funding has become an issue. "We have some funding issues, we are launching it separately as a separate company. We were supposed to launch by end of June the iOS to Android automatic code conversion but we've suspended it until September because there is still some mapping work to be done. As opposed to launch a semi-finished product we decided to postpone. I need a chairman basically, someone to raise the profile of My App Converter," says Mr. Ahmed.

The company has already done some free conversions for I.T. companies that have approached them and there is a sense of intrigue about the product already. If it makes it to market successfully it could have a major impact on one of the biggest markets in technology – mobile apps. RH

af83

af83.com

Louis Montagne

Software

France

No

» In 2006 Louis Montagne and Stephane Distinguin were part of a Parisian delegation visiting San Francisco, along with the Mayor of Paris, to sign the digital sister cities act. The pair were on the trip as entrepreneurs, and were keen to learn from the thriving technology sector in San Francisco. They discovered many new ways to embrace the digital revolution, and on their return journey they decided to form an agency, one which they named after the flight number they were on at the time – af83.

"We decided to create this company as a mix between a technology consulting company and a web agency. With the strong will to work on the hard subject of helping our clients turn their businesses to digital," says Mr. Montagne. "What we saw and learned in San Francisco and the Valley helped us build the proposition that we have today. There was a cruel need for that in France with almost no players on this market."

The market for helping companies embrace digital is a huge one, but is difficult to serve, according to Mr. Montagne. "Our main strength is that we managed to have teams specialized in user experience, tech and communications, working together to create new services. The basic idea behind the need for digital transformation is that it allows our clients to become leaders on their markets," he states.

"It's easy to sell. Transformation of the business means mainly adding digital services for us, but for our clients it means a lot: the business units need to organize for that, there is a lot of governance and HR involved."

Af83 boasts an impressive client list, which includes companies such as EDF, the giant electric utility company, France TV and Opera Online. Another client, Cleverscale, a cloud based platform for content delivery and analytics, was pleased with the work done. "af83 demonstrated their ability to innovate and propose the right technologies and infrastructure related to analytics," said Anh-Tuan Gai, Founder & CEO, CleverScale.

The competition in the market is tough. "There is a lot of competition on the tech and communication side. There are very few competitors, at least on the French market, for user experience, and, very, very few competitors managing correctly the mix between user experience and tech," says Mr. Montagne.

The company has a subsidiary office in San Francisco, but for now it is mainly focused on Europe and expanding locally. This expansion is being targeted internally and externally, with the firm aiming to add IoT and mobile experts to the team, and also to increase sales. Mr. Montagne says that the company is aiming for two new clients in Germany, one in the U.S. and one in Asia. He also reveals that this summer has seen an increase in activity due to a number of reasons.

"In France, 60% of the PIB is made up by companies that do need to transform and the future leaders, market by market, will be those who managed the mutation.

This is the first reason. The second is that the crisis leads to thoughts about strategy for a lot of companies. Which often leads to digital. At least to considering it strategic. Which is good for us," says Mr. Montagne. RH

Agaidi

www.agaidi.com

Tiina Vuorio

Telecommunications

Finland

N/A

» A small company in Finland has begun trials on a system which may revolutionize the way supermarkets advertise and promote their products to shoppers while they are in the store.

Agaidi, a firm based in Espoo, Finland, and consisting of eight employees, has combined its expertise in low power wireless technology and electronic paper to build a system which offers supermarkets the chance to advertise offers and promotions to customers based on where they are on the store.

The technology is fitted onto the handle bars of the shopping cart, and operates completely wirelessly. This allows supermarkets to do two things – one is to track shoppers as they move around the store, giving them crucial business intelligence by tracking the habits and patterns of their customers. The second is even more interesting. "Because we have this ePaper display attached to the handlebar, it is able to show customers different types of coupons or promotions or offers related to the place where the customer is," says Tiina Vuorio, CEO and Co-Founder of Agaidi. "So it's basically location based advertising or promotions within stores."

This type of system has been tried before with LCD displays, but trials have always come unstuck when faced with the issue of charging. The ePaper displays used in the Agaidi solution are battery powered. The system is currently being trialled by a major Finish hypermarket chain and the company will begin another pilot in Sweden in September.

A recent report by Gartner revealed that this form of marketing was very much a reality, and would be seen widely in the future. "A future is coming when shoppers will get personalized, real-time offers while they are in the store, powered by context-aware computing," the report, titled Me Marketing: Prepare for the Challenges of Real-Time, Context-Aware Offers in Consumer Goods, stated.

Other forms of location based advertising are popular, but have led some to question whether the privacy of the consumer is invaded, particularly when they have not opted into a service. Agaidi does have a solution to provide personalized marketing, but it doesn't affect the user's privacy in any way.

"In our solution there is an option, and we believe it would be a really cool thing, where me as a customer for example, when I go to the hypermarket I could touch the handlebar with a card or smart phone and it would identify me and after that I get these cool offers and promotions that are only for me," says Ms. Vuorio. "People are willing to accept advertisement and offers if they are relevant to them. When I leave the hypermarket I show my card again and it says goodbye. So it knows I'm identified with the cart but it is in my control and it has a start and an ending."

Agaidi was created with loans from a Finnish government program and a handful of angel investors, but the company now needs more investment. "We have ongoing discussions with a few investors but we are looking for investors until something is closed. Another option is of course to look for strategic investment from the industry and that is something that interests us a lot," says Ms. Vuorio.

The company is also looking at the U.S. market as an ideal location for its solution. U.S. supermarkets or grocery stores have a large number of coupons and offers, and Ms. Vuorio believes the American public would react well to the offers appearing on their shopping carts.

Initial testing results from the pilot of the Agaidi system have been encouraging. Of the shoppers who used a shopping cart with the system installed, 95% of those interviewed afterwards said they noticed the promotions were changing as they were going around the store, and understood that the messages were referring to products that were nearby. Over 60% of respondents took action and went to items advertised or actually bought them.

In a market such as this, Agaidi will only need one major contract for the idea to take off. There are few, if any, alternatives on the market which deliver this type of marketing, and with all the shopping carts being used in the world every day, the opportunity is huge. RH

Amikod

www.amikod.com/en

Andrej Brilly

Banking/M&A

Slovenia

No

» One of the biggest challenges for any small or medium sized enterprise is to raise the cash needed to make the business a success. In recent years, a number of new financing methods have emerged as options for entrepreneurs, such as peer to peer lending and crowdfunding. Another solution is also being offered by a company in Slovenia, and it may have the potential to disrupt the lending industry permanently.

"If I had 30 seconds to introduce my company I would say something like this," says Adrej Brilly, founder and CEO of Amikod. "Amikod is changing the rules of providing loans to small and medium companies. What we do is very simple – our partners or customers simply come on our webpage and register for our solutions and start to use them. After three months we approach them and if we see that they have made some progress in the organization of the company, we simply give them an offer for financing and our top consultancy helping them be even better organized."

Although currently based in Slovenia, the company is in the middle of a proposed move to London. Mr. Brilly proudly states that the company is profitable currently, and is making 50% returns, on average, on the loans that it is providing for its customers.

The company was conceived as a reaction to the reckless lending Mr. Brilly witnessed prior to the economic downturn which has hit Europe so hard. "There was too much money on the market, the money was cheap, the request to get the money was easy, so with ours it's different. You need it make some kind of improvement in your organization. It's good for you as well because you become profitable as a company too. But for sure the environment is why we are growing."

Mr. Brilly explains that the company is currently finalizing stage one of its roadmap. This stage involved achieving the best business model and finding ways for the business to be as efficient as possible. As part of this first stage the company is about to release a new solution onto the market, a communication tool that promotes collaboration within companies. Amikod will offer the tool for free, and follows the strategy of giving the tools for companies to improve at no charge, and then approaching the company over funding. The company also plans to offer two solutions which will be sold to customers in the coming months. The final process in this stage is for the company to move capital from Slovenia to the UK.

The second stage involves relocating the headquarters of the company from

Slovenia to the UK and spread the business through Europe. Amikod is aiming to raise 15 million Euros in capital and another 700 million Euros from debt financing. "Altogether we believe we can reach the turnover of more than 250 million Euros based on that capital and debt and we need to get only 500-700 customers to reach that, and that is not so large amount for Europe so we don't see any problems to get this amount of cash. Already in Slovenia we have 100 customers and the demand is quite large," says Mr. Brilly.

Mr. Brilly says that the way in which companies are evaluated prior to them being given loans is out of date, and this is the problem that his company remedies. "They are simply taking the financial data of the company, checking it and if they see that this company is valued then they give them the loan. With us it's different because we believe that financial data is history, and with how the world is changing so fast and business is changing so fast, you need to adopt organisation."

"We give you the tools and approaches which help you have better organisation and this helps you become more organised, and organized companies become more competitive, and more competitive companies make profit and only profitable companies can pay the loan," he concludes. RH

Anatole

www.anatole.net

Nicolas Peltier

Software

France

Yes

» In the age of Bring Your Own Device to work and the proliferation of mobility, companies have a lot more to worry about when it comes to IT expenses than just office desktops or the printer that constantly breaks down. As businesses see increased mobility use among their employees, managing those devices becomes an expensive challenge where costs easily run out of control.

Anatole provides fixed and mobile telecom lifecycle management solutions. It helps corporate accounts to grasp their telecom budget and reduce both direct and indirect costs. Anatole empowers the management of expenses from any network, and provides a vision on the telecom convergence challenges. It also specifically helps answer today's mobility challenges, including BYOD, policy management and real time costs analysis.

"We help large accounts control their budgets and reduce spend," said Nicolas Peltier, CEO of Anatole. "A big part of it is about mastering and reducing your invoices from subscribers, but it is also through minimizing indirect costs, which tend to be very expensive. With our solution, you know who owns what; you are able to set up and enforce telecom policies, allocate thresholds, and gain an ability to have a strong control with what you allow users to do. Companies today need to master their telecom expenses."

Anatole's clients typically realize a 15 to 25 percent return in investment. Indirect costs and the time spent managing mobility are typically a third to half of the industry standard. A telecom manager that typically oversees 1,000 to 2,000 devices can often handle 2,000 to 4,000 devices using Anatole's software.

Headquartered in France, Anatole's focus is primarily Europe, where it excels due to the vast network of providers on the continent. Unlike the mere handful in the US, Europe has as many as 150 carriers. Countries have their own data regulations, currencies, and languages. Anatole's system is deeply engrained with each carrier to be able to handle them all. "This is more than just iPhone and Android capability," Peltier said. "Telecom expenses have to be integrated with IT asset management, dealing with security, ESCHER, Finance, and a whole range of web services."

Facing a worldwide market estimated at $2 billion, Anatole serves over 250 end customers, typically companies earning $5 million to $40 million per year. For the past six years, it has grown 20 to 50 percent annually, with a high renewal rate. Its base continues to expand as its own customers globalize the solution.

Founded in 1999, Anatole began selling mobile devices to carriers, but quickly recognized the pain telecom companies had managing the expense. The company decided to instead switch to a telecom expense management company, rewriting the entire network in 2009 to handle its growing customer base and the massive amount of data that generated.

The company has raised $5.2 million from A Plus Finance, an independent private equity firm, as well as existing shareholders. Coming out of a strong investment phase, it recently reached the breakeven point. Today it earns about $10 million in revenue. Peltier sees a potential for $40 million to $65 million in the next five to eight years.

"Everything is moving very fast in mobility management, and for corporate customers it's a critical subject," Peltier said. "It has been a consumer market, but companies are just beginning to understand what it can bring them as well as the challenges. Managing budget expense is absolutely key. We are in an ideal position for this market." RH

Apptivation Mobile

www.apptivation.co.uk

Mark Kanji

Mobile

UK

No

» The arrival of the internet brought with it a world of possibilities for every business on the planet. But it also produced a huge gap in skills that was promptly exploited by entrepreneurs the world over. Gradually, the world caught up and e-commerce, web marketing and internet based services are now the norm. But then along came mobile, and the whole process started again.

Once again a skills gap has been created, as large corporations scramble to ensure a presence in the mobile channel. "What we're seeing right now is basically every large corporation has budget and activity going on around mobile application development," says Ian Finley, Research Vice President, Gartner. "Generally both on the client facing side and on the employee facing side."

"We have this very rapid expansion and a number of companies looking for services and the skills are not keeping up so we have a lot of people looking for those skills," he adds.

Mark Kanji, now CEO and founder of Apptivation, was a keen observer of the mobile app market, and previously worked on the client side of the business, with agencies. He noticed not only the huge gap in the mobile market, but also the inconsistency of work within mobile application development. "I was increasingly frustrated with the lack of quality and focus that was given to mobile — it's a niche channel and a specialist area," recalls Mr. Kanji.

Just under a year ago, Mr. Kanji formed Apptivation, which is described as a full service mobile agency. "I wanted to create an agency consisting of the best and brightest that understood mobile and getting them to work with some of the biggest and most challenging brands to deliver innovative solutions," Mr Kanji said.

Apptivation recorded turnover of $12.5 million in its first year and is forecasting that figure to double to $25 million in the second. It's focus so far has been on the banking sector, but there are plans to expand into travel, automotive and retail.

Apptivation took off fast, and the company went from one employee, the founder Mr. Kanji, to 50 in approximately six weeks. The company immediately targeted the finance sector and got its reward when it landed a deal with Lloyds Banking Group in the United Kingdom, to be the banking giant's mobile solutions provider. Apptivation delivers al of the mobile browser sites and native apps for the banking group, across all platforms. The firm will also build enterprise solutions and business to consumer applications for Lloyds Banking Group in the future.

With success arriving quickly in its home market, Apptivation is now looking to expand beyond the UK. "The focus so far has been in the UK but our intention is within the next six months is to start promoting our products internationally. Generally speaking I think the UK is a little bit ahead now in terms of the rest of the world when it comes to banking products on mobile and we're hoping to deliver all of our insight, experience and best practices to bundle that into several products and services that we can then promote internationally," says Mr Kanji.

The company may also look to expand into the Middle East and Africa in the future, and as attitudes towards mobile changes, the company can expect an increase in business. "Still I think when we talk to marketing managers, generally 70-80% of their focus and budget goes towards traditional channels," reveals Mr Kanji.

"Mobile in a lot of circles is still treated as 'we know we need to do something and we know its growing, but lets just dip our toe in the water and get an app out there.' So I think the biggest challenge is to educate brands that if you get this right on mobile and you think of it as a holistic approach integrating other channels then you'll end up with a much stronger return on investment."

The company is expecting to double its number of staff to 100 in its second year, a process that could prove challenging as the talent pool for those with skills in mobile application development is a shallow one. "There's a massive war going on at the moment in trying to attract the best and brightest when it comes to mobile," says Mr. Kanji. "It's still a growing industry and for us and when we need to scale upwards it's an increasing challenge trying to find, hire and also retain the best people in the market. It's an incredibly competitive market and there are lots of opportunities for good people."

Apptivation aims to reach 50-100 banks in the next two years, and few would bet against it, given the lightening start the company has made in the mobile application development market. "We see demand continuing to grow and banks and other brands will continue to look at ways in which they can use mobile to enrich a customer experience, retain the customers and also push new products and services to them and monetize the channel.," concludes Mr. Kanji. RH

Automsoft

www.automsoft.com

Paraic O'Toole

Clean Tech

Ireland

Yes

» Any entrepreneur will tell you that there needs to be a certain amount of faith in the idea of a company. But that faith can be tested when the market doesn't respond as you had hoped and investors start to turn away. Paraic O'Toole was not even the founder of Automsoft, when the venture capitalists invested in the company got cold feet. Instead of walking away though, he bought them out. And now he's reaping the rewards.

Automsoft is a database technology company, with a focus on time series data. "Back in the late 90s early 200s was identify that the technology for managing data with a single index, in this case time, was actually very limited," says Mr. O'Toole, CEO of Automsoft. "What we saw was the emergence of large scale sensor networks, metering systems and control systems that were starting to generate a very large volume of time series data."

Time series data is usually a measurement of some kind. In the example of an oil company, the data can be taken while drilling for oil. The temperature and depth of the drill (plus many other variables) can be recorded at extremely frequent intervals, and each measurement is structured with a timestamp and then the value. This may not seem like the most difficult data to deal with, but in some cases these measurements are taken every 100 nanoseconds, meaning the process takes a huge amount of processing time.

Automsoft has two offerings in this area. There are two basic products in the company, there is the database engine itself, which is the storage and retrieval logic, for want of a better term. And that sometimes is licensed to third parties who put their own analytics and visualizations on it," explains Mr. O'Toole. "And then there is the second part which can be embedded with the first but can also be standalone and that is the visualization and analytics platform."

The time series data can be processed using traditional database technologies, but it takes a lot more work and hardware costs are much higher as a result. "You get serious complications with traditional database technologies," says Mr. O'Toole. "Currently we have the highest performing time series database in the world, we're pretty sure of that, nothing else comes close to it. To give you an idea, just based on some live data experiences at one of the major oil companies, we can insert data into the database with a bout 2.5 million events per second and we can retrieve data from the database at about 4 million events per second."

The industries which are using this technology are the ones which are making better use of sensors and gathering more data about their operations. This trend falls in line with the larger Big Data phenomenon, which is ever growing. "The Big Data technology and services market represents a fast-growing, multibillion-dollar worldwide opportunity. The Big Data market is expanding rapidly as large IT companies and start-ups vie for customers and market share," said Dan Vesset, vice president for IDC's Business Analytics and Big Data program. "IDC expects the Big Data technology and services market to grow at a 31.7% compound annual growth rate through 2016."

Automsoft is not actively looking for investors, but that is not to say it hasn't had offers, and Mr. O'Toole says he is keeping his options open. "We're not particularly looking for funding at this time but we have conversations with people and that's something we continue to do because it's an open questions as to whether one way of accelerating our growth is to take a large chunk of money. So we're open minded about that." RH

AVK Systems

www.avksystems.com

Vijay Sathya

Entertainment & Media

Switzerland

N/A

» AVK Systems delivers HD Audio where media watchers used to hear nothing. The company's tech separates specific sounds from cacophony, enriching a listener's experience.

It hit AVK's founder and CEO Vijay Sathya while watching sports with a friend: the sound of silence.

"In 2006 ... I was watching a game of tennis in the U.K. It was an old game between Jimmy Connors and McEnroe... and you could hear the ball being smacked around," Sathya says. "Apparently England was playing Croatia [at the same time], and [my friend's girlfriend] zapped the channel, and at that instant, Beckham was taking a free kick."

Suddenly, the sound subsided from the smack of rackets smashing balls to nothing. "There was a close up shot on the soccer ball and he smacked the ball and I couldn't hear it," Sathya says. "Hang on, that was tennis ten years ago and this is football today, and you can't hear the ball."

Others had tried to solve the problem of sound on the soccer field and in other sports arenas before. But adding more microphones made no difference — even when, Sathya says, a leading south Brazilian broadcaster put them inside the ball itself. Rather than picked up, sound had to be drawn out, using technology overlaid on an established framework. "The key thing about the technology is that it works with the existing infrastructure," Sathya says. "[There are] no additional microphones, no additional camera, it's just a server being placed which works on the existing feed, extracts the sounds that are being lost, and brings them back to life."

Sathya says his company serves the newly-minted HD Audio market. With its tech, AVK provides sound solutions for league partners, and will offer its service direct-to-consumers with a mobile application. "You have the B2B model when you're selling to broadcasters, but we're also pairing up with the B2C experience ...wherein we are building a new mobile and tablet application called Pitchscreen," he says.

To monetize, AVK charges customers per game or per minute, as clients use the company's servers and services to enrich sound in clips, highlights and live games. Companies choose AVK for its capabilities — but also because nobody else does what they do. "It's totally a blue ocean, there is no competition, and I don't think in coming three to five years anyone will come this far," says investor Omprakash Yadav. "Because it takes a lot of research, a lot of mathematical algorithm to extract the real sound from a big field."

Sathya splits up the B2B market based on product offerings for slow-motion, live games and highlights. AVK'S slow-motion product runs clients $70,000, and with about 6,000 sales points "you're talking about $420 million in one-time revenue," Sathya says. "Similarly if you take the highlights and the other products, you're looking at close to half a billion in one-time sales... in just the tier one market, the top broadcasters." Maintenance support add recurring revenues to the opportunity. Meanwhile, AVK's live offering goes together with set-top boxes, of which there are 170 million in the United States. "Set-top boxes get replaced every three to four years so even if you're selling it at €1 per software per set-top box, you're looking at something like €230 million, €300 million [from the worldwide set-top box base] which can happen every three to four years."

In total, B2B offers the company the chance at $300 million to $400 million in revenues per year. Big money could come in windfalls should their app catch users' attention. AVK will cross the Atlantic to pursue consumers and the B2C market, a billion dollar opportunity.

AVK currently works with the Swiss League and has "roughly five [B2B] customers." Latent scale potential rests in partnership discussions with brands like Sky and Brazil's TV Globo. Sathya also mentions he has contacts with FIFA and UEFA. "We're on the verge of signing contracts with major European soccer leagues...and we have interest from Brazil for the World Cup, so things have really started picking up," Sathya says. In the next year, Sathya hopes to tap the top five European leagues, while the next deal they sign will help them cross the line into profitability. "Every deal that comes in, you end up having high margins," he says. "We're really poised for explosive growth and what we need now is capital."

Seed and Series A financing adds up to about $2 million, with the company previously valued at $10 million. Recently, private investors added $1 million to the funding pot, and the company received the FIT (Foundation for Technological Innovation) loan amounting to CHF 350,000 from the Swiss canton of Vaud. Sathya puts AVK on the path to raising an additional $10 million, now speaking with a number of institutional investors that have discussed a pre-money valuation of $30 million. "We intend to raise $10 million with a 25 percent valuation in the company," he says. "Once that $10 million is in place, the company should be looking at consistent revenues of $20 million to $30 million in 2015."

Currently, revenues stream mostly from Switzerland, pinned to the European soccer scene. Sathya sees AVK setting up shop in in India and America as well. In the latter market, the company looks to expand into other sports like baseball, basketball and football.

"It's all a question of money," he says.

Sathya says AVK is at a crossroads — where an "influx of capital is really going to change the way this company functions," Sathya says. "We will go from a startup to being a small corporate entity." The coming year may see rapid growth, international expansion, and a B2C product.

With potential partnerships and product offerings lined up, a favorable wind will send the company zooming into profits. But Sathya notes a Plan B ready to deploy if the clock runs out. 'If we don't get our act together in the next one year, we probably will end up being acquired," he says. "But we're trying to play the game right and make sure that we can scale up fast." RH

BestList.nl

www.beslist.nl

Kees Verpalen

Internet/Online

Netherlands

N/A

» Prior to founding BesList.nl, a price comparison website operating in The Netherlands and Flanders, Belgium, Kees Verpalen had a terrible experience buying a copier for his previous firm. It was an experience so bad, that it prompted him to start his current company, which offers consumers the chance to compare prices on thousands of everyday products.

"With the company I had before I once ordered a fax copier machine. At the time it cost 1000 Euros and a week later I saw the very same product in another store for 500 Euros and I felt screwed, so that's where the idea came from, I don't like to be screwed and other people in Holland don't like that either," says Mr. Verpalen.

Beslist developed all of its price comparison technology in house. "The first year and a half we didn't earn any money and our first break even month was somewhere in the beginning of 2006, we invested a year and a half almost on the technology," says Mr. Verpalen. "We processed all the data we had to make sure we could match products together while building the entire infrastructure. It was a lot of work and it took more time than I estimated but eventually we got there. But we're still working on it after eight years, it's never perfect."

Price comparison websites are being driven by the ever growing e-commerce market. A recent report by Hamburg based yStat.com revealed that business to consumer ecommerce is growing significantly across the globe. E-commerce accounts for just over 5% of total sales globally, according to the report. The U.S. has always dominated the e-commerce sector but other regions are beginning to catch up, most notably the Asia Pacific. "Western Europe will continue in third place globally. The share of Eastern Europe of global ecommerce has been increasing up to 2012, but will likely decrease steadily through 2016 as other emerging regions increase their share," says the report, titled Global B2C E-Commerce Sales and Shares Report 2013.

BesList makes its money from the companies that list their products on the site. There are around 8,000 shops listing products on the site, and 2,000 of these are pay per click. "We've got a bidding algorithm so you can decide how much you want to pay us per visitor per type of product. It can vary. For notebooks for example, you can offer us 20 cents but you can also say I don't want to pay anything. What we do is we list the merchants that are willing to pay us more higher than the merchants who are paying us less," explains Mr. Verpalen.

The price comparison market is a crowded and competitive one. And further treats are on the horizon for BesList. "Amazon is going to start in Holland as well, they should have started in October last year, and I thought the plans were for them to launch this summer but I haven't seen them yet. But sooner or later they will come in our direction. So we're facing some stiff competition from companies that are larger and bigger than we are," says Mr. Verpalen.

However, the company is investing in new technology and brand awareness techniques in order to combat this. Last year the firm began sponsoring a speed skating team in the Netherlands, and it has started a major TV campaign which will run for a further year and a half.

The company is focusing solely on The Netherlands and Flanders for the foreseeable future, and can't envisage international expansion in the near term. "Our ambition is to create some kind of role that Amazon has in the U.S., the biggest shopping platform there is and then a huge gap to the number two," says Mr. Verpalen. RH

BIMobject

www.bimobject.com

Stefan Larsson

Internet/Online

Sweden

No

» Building Information Modeling (BIM) has been around since the 1970s, but was only implemented in projects in the late 1980s. Today, it is used for decision-making in the design and construction of buildings, through to the operational life of a facility after it is built. The Swedish company BIMobject uses its BIM technology to create a social network, connecting product manufacturers in the engineering, design and construction (AEC) fields to architects around the world. "Our task is to become the Facebook within the construction-architecture industry," says Stefan Larsson, CEO & co-founder of BIMobject.

The National Building Information Model Standard Project Committee defines the technology as "a digital representation of physical and functional characteristics of a facility." Indeed, BIM takes architectural models from 2D to 3D, and adds helpful, relevant information. This type of modeling takes into account spatial relationships between objects, quantities, colors and more. BIM also allows better virtual communication between the design team, the manufacturers, the contractors and others that can add data and view the project simultaneously.

"In the last 10 years BIM is what everybody is going for," says Larsson, who's been part of the industry for more than 25 years. "But in that process we saw that there is huge glitch. The companies that are delivering the products are not part of the process."

BIMobject tries to resolve that issue with a two-year-old cloud-based portal. It provides software tools, web solutions and services that assist its customers in the creation of BIM objects in several formats, and introduces them to a cloud-based platform. Architects can then use the cloud-based system to find specific products, thereby generating sales for the manufacturers. Architects and consultants can share data, while all plans, sections and elevations are generated automatically and kept updated, thanks to the cloud. Advanced calculations take factors such as sunlight and shadows, energy and carbon dioxide, airflow and sound simulations into account. They may prove critical to figuring out how energy-efficient a project is, for example.

"The fact that with BIMobject we did not have to choose ArchiCAD or Revit (different BIM softwares), but we could have both, plus another software, was very appealing to us. We found a partner who could help us reach a wide range of users," says Mathias Odén, Product Manager LECA at Weber manufacturers in Sweden. BIMobject also presented Weber with new product capabilities such as integrated analytics, which helped them keep up with the BIM industry.

"The portal has also been a communication line between us as a supplier and our customers, as they create requests for new objects through the portal. In this way the objects are developed organically, as they need them," says Malene Koustrup Kærgaard, Operations Manager of Project Sales at Velfac A/S, a Danish window manufacturer. "Without very much support from us, they have found all necessary information to create the objects. For us, this is important as we have no in-house skills in this area, and have worked with a very time-demanding supplier before," she adds.

"If it has had an impact on revenue is yet to be proven, but what's more important is that without BIMobject we would not be considered as a supplier with a complete assortment," Kærgaard says. British law requires 3D BIM plans for all public buildings, and as a supplier for the UK market, this was critical for Velfac.

It took Larsson eight months to build the right business model. Manufacturers pay BIMobject to build digital replicas for their products and publish them on the platform. "The replicas imitate the way that objects can open and close in reality, change colors according to the design, etc." Larsson explains. Their company also builds microsites with the software, creating private clouds for specific manufacturers upon request.

Architects can contact manufacturers directly through the platform, but BIMobject is not part of the ordering process. "That's a very complex issue in the construction industry," Larsson explains.

"Designers waste a lot of time on building the "lego" pieces when trying to guess data about the objects in their designs, while the manufacturer can provide it," Larsson says. The company has had three rounds of investment adding up to a total of $1.1 million in funding. The main investors involved are Larsson and the rest of the management team, while French investors and business angels are also backing the company.

"VCs are rarely used in Europe in these early phases of a company, unlike in the U.S. where they are more open-minded," Larsson says. The stock market is a better opportunity for a small company like BIMobject, Larsson says. An IPO is imminent. "Industrial companies have also tried to partner with us but it's dangerous for us since we are building a neutral platform and everybody is welcome," he adds.

With BIM use and global understanding of its importance growing, BIMobject could become the go-to place for the manufacturers and designers of the industry. RH

Brand Embassy

www.brandembassy.com

Vit Horky

Social Media

UK

No

» Social media has created new and exciting ways for businesses to interact with their customers. However, with so many opinions being posted on so many different sites, tracking, managing and responding to customer views can become very tricky. This is why the social media customer service market is taking off.

Brand Embassy, a company formed two years ago, operates in this space. The company offers a platform which aggregates customer reviews and comments from all over the internet and provides a simple system for customer relationship personnel to reply with.

"We saw this gap on the market of creating a technology that will help them to listen to their customers across their social media platforms and help them to engage the customers on their preferred channel of communication," says Vit Horky, CEO of Brand Embassy.

"Our approach is that companies shouldn't care so much about where the customers are, it's our responsibility that we will be able to deliver them a platform that is listening to all of the customers out there. We do have very sophisticated monitoring, which is covering over 60 million web pages, discussion forums and blogs in 25 different languages," he adds.

A recent report by RnR Market Research revealed that the social customer relationship management market is expected to be valued at $1.91bn in 2013, and is set to grow to $9.08bn by 2018.

Brand Embassy's customers include Vodafone, Telefonica and Huawei, and they offer glowing reviews. "Thanks to Brand Embassy we have everything in one system – from customer responses to our own notes and statistics therefore we have more time to take care of our customers," says Ondrej Ullmann, Social Networks Specialist at Vodafone.

The social media customer service market is a very new one, and that creates challenges for those operating in it. Some education is required to inform the market of the full potential of social media, and how it can be properly utilized to interact with customers. Another challenge the companies operating in this space face is the language barrier. For a company to use the Brand Embassy platform to its full potential on a global scale, they must have local customer service agents to communicate with customers in their own language.

The Brand Embassy platform also provides companies with data and analytics, which can help decision makers. "Our clients have been using Brand Embassy on a daily basis on the actual engagement of the customers. And on the executive level marketing directors and CMOs have been using the analytics and data coming out of Brand Embassy when they need to make an important decision over how to change communication towards customers," says Mr. Horky.

The company has a large focus on innovation and half of its employees are in the project teams which are given the task of working on new releases of the Brand Embassy platform and new products in the company's portfolio.

Innovation is just one of the main goals of the company in the future. "Definitely continuing with the rapid customer acquisition," says Mr. Horky. "We've been reaching out to companies out there in the market as well as receiving a lot of interest from the customers so we need to manage it properly. Also, we'll be releasing new innovations to our product which is very important because we believe today the platform itself is already the best on the market and I mean globally for social media customer service. But we know that we need to keep up the same speed of innovation to stay ahead of the competition."

The company recently released new reporting and analytics capabilities into Brand Embassy and will soon be launching a new social customer relationship management tool into the platform. The company seems well positioned to take full advantage of a market which provides an increasingly vital service to the business world. RH

Catchoom

www.catchoom.com

David Marimon

Cloud Computing

Spain

Yes

» When you take a picture with your smartphone, the device deploys software trained to recognize specific items, words and objects for you. Catchoom produces the image recognition technology that enables a smartphone to know who's who and what's what.

Catchoom began as a spin-off of Telefónica Digital, and was meant to be a supermarket sales booster. The system allowed customers to take pictures of products while they shopped, and connected users immediately to pages with details about goods. David Marimon and Tomasz Adamek took the platform one step further and developed a cloud-based image recognition solution for more than 4 years, until it was ready to serve a larger market.

The company was finally founded in January 2012. "It wasn't a side project, we took the time to create a business plan," says Marimon, who was a Former Project Manager of Mobile Augmented Reality and Contextual Services at Telefónica, and is Catchoom's CEO today. Telefónica sold Catchoom's technology to customers before it was established as a company, and transferred them once Catchoom had been established. The strategy meant Catchoom had customers right away.

Catchoom's first customers were the augmented reality technology companies Metaio and Layar. When readers scan magazine or newspaper pages that have been augmented with Layar, content appears at the top of the printed page. (For example, a photo in the magazine might suddenly start playing as a video.) In order to know which content to show, Layar uses Catchoom's technology to recognize the page out of hundreds of thousands of other pages already uploaded to Layar's platform.

Dirk Groten, CTO at Layar, says that Catchoom has the best recall rate in the industry today, i.e. the highest percentage of matches for images scanned and recognized on Layar's database. "Without it, our users would have to tell us in another way what they are looking at, which would severely deteriorate the user experience and the ease of use of our application," Groten adds.

Image recognition is extremely important when it comes to Layar's market. According to Layar's 30M report from April 2013, when an image is present as interactive print content, it has a much higher click rate. In fact, 41 percent of all clicks in 2013 have gone to images.

A retail customer can upload a collection in less than a minute and add new images quickly. Catchoom never contacts the end user, but rather a development house or an agency that creates these platforms. Developers, ISVs and integrators use Catchoom's technology to create applications so shoppers using their apps can take pictures from their smartphones and get connected to websites, online content, offers, and digital experiences.

Catchoom has licensees that can upload an unlimited amount of images, but about 80 percent of its current customers use its no-cost SaaS model. Over 1,000 people have registered for the free version since deployment in November 2012.

Catchoom's 2012 revenues stood at €175,000. This year the company aims to reach €500,000 and hopes break-even will arrive early 2014. The company is backed by seed VC fund Inveready Asset Management in Barcelona, which invested a total of €300,000 in Catchoom in its first round of funding May 2012. Catchoom also raised €300,000 from the government and awaits a second round of funding that may take place in 2014.

"We believe image recognition is one of the technology enablers of [augmented reality] which has a chance to become a very powerful interface for the mobile devices replacing partially the keyboard. Catchoom has developed a technology platform that can serve horizontally the whole AR ecosystem," says Ignacio Fonts Cavestany, CEO of Inveready.

"The technology is built in a way that provides very high speed which makes recognition possible without having to install the image libraries on the client device (smartphone) and thus provides higher flexibility to publishers," Cavestany says, adding that Catchoom technology is also unique because it can recognize 3D images, whereas the company's major competitors focus on 2D recognition.

Catchoom's competitors include Zurich-based Kooaba, IQ Engines, based in San Francisco, and the French company, Moodstocks. "Kooaba and Moodstocks focus more on developers, they don't reach out to brands and media as much, while the market that we approach is closer to retail brands," says Marimon. While IQ Engines requires its customers to use its app, Marimon says, Catchoom provides a solution which integrates with the platform a customer already has.

The biggest challenge ahead is educating others on how physical objects connect with the digital world. "We need marketing departments to love the idea, but also educate end users," Marimon says, "Imagine that instead of going through categories online, you could take a picture of your box of cereal while eating breakfast and buy a new one. We need to convince supermarkets that they need our solution — escape from the 'Wow' effect and build the usefulness for our technology." RH

Celeno

www.abc.com

First Lastname

Blahblahblah

Country/State

Yes/No

» WiFi is found in almost every home, office and coffee shop in the developed world, allowing us to surf the web wherever we want without the need to connect computers to walls or routers. However, when it comes to the TV in our living room, we still use cables. Established in Israel in 2005, Celeno attempts to get rid of these cables by using a Wi-Fi chip portfolio that allows HD video streaming over standard WiFi. "We had a feeling back then that Wi-Fi was going to become the dominant technology in everyday life," says Gilad Rozen, Celeno's founder, president and CEO.

One of the major challenges that cable, satellite and telco IPTV providers need to address is home networking, namely how to connect the home router with multiple set-top boxes and a digital video recorder (DVR). Installing new cables can take time and money. To avoid that, service providers try to rely on no-new-wires technologies. In this respect, wireless technology such as WiFi is cheap, flexible, and easy to install — in other words, it is the most ubiquitous home networking technology.

"The WiFi technology allows telecom companies to add a new customer in tens of minutes instead of many hours," Rosen adds.

However, in order to get carrier-grade WiFi, Celeno still needs to make much progress; it must also carry out field experiments with partners around the world. This explains the large number of offices that the company runs in countries like Israel, the U.S., France, Taiwan, Korea and the Ukraine. "We work with clients from the U.S. and Asia at the same time, which requires unusual work hours and a very diverse group of people," Rosen says. "Sometimes you can hear Hebrew, English, French, German and Mandarin, all around the same meeting table."

Europe is the leading market for video-grade WiFi technology, which is mostly concentrated in Germany, Switzerland, the Netherlands and France. "Most of the apartments and homes in Europe don't have wires going through their walls due to historical traditions of having only one TV at home, so installing cables is more complicated, and thus WiFi makes sense," Rosen explains.

The situation in the U.S. market is a lot different, where the penetration of cable companies has been historically very high for decades. Hence, many US households have existing cabling infrastructures inside the walls in most of their rooms, though they're old and in many cases offer customers a low-quality experience.

Nonetheless, Rosen predicts that WiFi technology for video content is inevitable in the U.S. as well, as multi-screening expands and more users consume their media through several devices at the same time. "iPads. smartphones and laptops can only work with WiFi and this creates demand for better quality of WiFi which allows users to purchase video content on their tablet and watch it on their TV," Rosen explains.

Celeno doesn't sell directly to telecom companies, but to companies which implement the chip in their products. "Even though we only produce the technology, the chip itself, we still have to take part in selling the product to the end-users," says Rosen. Celeno puts a lot of effort in educating telecoms on their WiFi options, which can be a great challenge.

Large cable operators such as Liberty Global and Telenor in Europe and Comcast in the United States are already using Celeno's WiFi chips in their products. Celeno works with two telecom companies in France, along with Sagemcom, which sells telecom equipment globally. Another big client is Samsung, which operates from Korea but sells Celeno's products across Europe and Asia.

"Two years ago the technological barrier was the biggest challenge, but now it's the execution, and as the product proves itself and the market expands, so will the competition," Rosen says.

Celeno faces different kinds of competition. The strongest type comes from home routers and mobile devices producers, such as Qualcomm, Broadcom and others. However, as the complexity of these devices increases, Celeno claims to have the upper hand on the market.

Transferring HD video through WiFi requires complicated technologies beyond what's standard, and Celeno claims to have control over this high-end market of data and video gateways. According to market research by In-Stat, over 175 million WiFi enabled gateways, broadband routers and set-top boxes will be shipped in 2015. "This is a small market for the big players, but for us it's huge," Rosen says, adding that similar solutions may not cover the same range of square feet that Celeno's chips do, while competitors' error rate is usually higher.

The initial investment in the company came from private investors who were not as skeptical as others, but the first large funding round came only after the company had a prototype and positive feedback from clients. The total amount invested in the company so far stands at $68 million, with the latest series in September 2012 closing at $24 million. Deutsche Telekom is one of the first companies who supported and guided Celeno, and still works with with the company today. Other investors include Cisco and Liberty Global.

Even though research and development expenses are still high, Rosen hopes that the company will reach break-even by 2014. "Celeno currently has tens of millions in sales, but we would like to cross the $100 million sales-line in two to three years," Rosen says. He is confident about the future of his product, and predicts than it's only a matter of time until the word "cable" no longer goes with "TV". RH

Cirrato Technologies

www.cirrato.com

Gorm Halberg-Lange

Software

Sweden

N/A

» Like death and taxes, local print servers have long been regarded as a necessary bane of an office print environment-critical to manage the complexities of a large printing network, yet a major source of office profanity on any busy afternoon. Large organizations invest in multiple local print servers in order to deliver the print order more directly to the nearest printer, which can expound a print job five to 10 times as it's processed through the system. A system of 20,000 printers might require as many as 1,000 servers. This requires excessive administration to manage and support the distributed fleet. Multiple servers drag down a corporation's bandwidth. If one server goes down, every print order sent to it grinds to a halt.

Cirrato vastly simplifies a complex printing network by managing as many as 30,000 printers through a single printing server. It narrows down each printing order to a printing ticket, a 200 bit document that includes all the instructions necessary for the print job, including made the order and which printer to send it to. The ticket also enforces office rules and regulations regarding each print job, such as not allowing color or expensive formatting or limiting where the job is allowed to print due or by whom. Each ticket ensures the printing job is sent to the right driver. A global network can be upgraded to the right driver in as little as two minutes. By using the ticket method, Cirrato's software enables printing jobs to continue on a 24/7 basis, even when the server is being maintained, upgraded or taken offline. It also eliminates WAN print traffic, simplifies printing server maintenance, and provides complete analytics on printing jobs and infrastructure.

"A printing network should not cost a small fortune to maintain," said Gorm Halberg-Lange, CEO of Cirrato. "We handle large networks in a way that gives us full, 100 percent control in most print environments. In a traditional scenario, you simply cannot have this level of control. Everyone is looking to reconfigure and consolidate their print infrastructure, and we make it easy. This is a huge opportunity for us."

The company serves more than 150 customers, including GE Health Care, Nestle Oil, and the US state of Delaware. Its revenue and customer installed base has been growing at 110 percent. Most of its work is done through partnerships, particularly printing manufacturers, who supply the company with larger installments than a direct sales approach could provide, Halberg-Lange explained. Most printing manufacturers are using third party solutions and need to move to a service client to maintain their place in the market, he stated. Partners include Canon, HP, IBM, and Xerox.

"Our solution has received quite a huge interest because our software can integrate higher in IT departments," Halberg-Lange said. "We are looking to develop a solution where our partners could supply one server solution to thousands of customers, which we should achieve in the near future."

Cirrato hopes to be able to double its printing capacity of 30,000 printers on one server within the next year.

About 80 percent of Cirrato's customer base is currently in Europe, with the rest primarily in the US and Canada, though it has also received considerable interest in Australia and is looking to foray into South America. Buoyed by the interest Cirrato has received in the US, Halberg-Lange expects the company's footprint to change dramatically in the coming year to 60 percent Europe, 40 percent US.

Cirrato competes against Nuance, YSoft, and EveryonePrint, but is the only one on the market to be able to handle such a large network of printers from a single printing server.

Founded in 2003, Cirrato received patents for its technology in 2005. Working with a few pilot clients, it honed its solution over several years before fully launching to market in 2010. The company is headquartered in Stockholm, with sales offices in the US and UK.

Self-funded, Cirrato recently achieved profitability at a profit margin of 20 percent EBITA, but invests much of that back into its operations. The company earned $4 million in 2011, $5.2 million in 2012, and expects to earn $13.5 million in 2013. Over the next three to four years, Halberg-Lange expects Cirrato's revenues to grow 400 to 500 percent.

"We've been taken by surprise by client demand, and it's changed the way we look at the market dramatically," Halberg-Lange said. "We are taking it one step at a time, but we really see a two year window to achieve massive growth. To take advantage of this opportunity, we need to act now." RH

Cleeng

www.cleeng.com

Gilles Domartini

Internet/Online

Netherlands

No

» As more video content becomes streamed on the web, providers need to find better ways to monetize it.

Cleeng helps publishers do just this with premium content. The company provides an advanced ecommerce platform for digital content, and enables a patented in-page monetization approach to text, video, photos and apps. It offers pay-per-click, metered paywall or subscription, and ensures that content is not only readily available, but is also paid for.

"With Cleeng, publishers don't need to build their own specific e-commerce environments," said Gilles Domartini, CEO and Co-founder of Cleeng. "They get an extremely flexible solution to sell books, videos, live streams with the kind of great experience you would have on iTunes."

Moreover, it ensures the content is available when requested. "In live content, failure is not an option," Mr. Domartini added. "To guaranty a good experience, you need to make sure consumers get quality access on devices whenever they want. The experience needs to be seamless to avoid a disaster." Having hosted events for Cirque du Soleil, TED Conferences, and major sporting events, the company provides a proven method of delivering video and other content for mass consumption.

Making a streaming experience similar to iTunes had been the goal of the company since the beginning, said Mr. Domartini, who is a former Apple executive and worked for the company's iTunes store. He later worked for Philips, the electronics conglomerate, where many of the SaaS platforms that had been built in the '90s were more designed for physical goods than virtual content in the cloud. "iTunes taught us that if you provide a good user experience for consumers, they will buy and continue to buy," Mr. Domartini said. He founded Cleeng along with Donald Res, Nicolas Le Gail, and Benedicte Guicahard in 2011 with the goal of providing a seamless e-commerce solution better suited to digital goods.

The first year was spent mostly on development. Sales picked up considerably in 2012 as the company gained clients, including Dailymotion. "We might have been a bit early to the game, but now it seems that the stars are aligning properly," Mr. Domartini said. The company recently signed partnerships with Brightcove and Livestream.

Cleeng built an integration with Brightcove's Video Cloud that allows joint customers to monetize their online video content.

"Online video monetization can be cumbersome, but Cleeng's platform eases the process of setting up and managing paywalls," said Shiri Friedman, director of technology partnerships at online video pioneer Brightcove. "Content owners can instantly derive revenues from both on demand and live video events with pay-per-view, subscriptions, rentals or metered paywalls."

As more brands, musicians, and filmmakers turn to independent means to make money, the company finds itself in a market that has only begun to mature. "A massive industry is shifting," Mr. Domartini said. "Geographical expansion has enabled a new way of getting content. Why not simply sell it directly for a single contract?"

So far, the company serves about 2,000 customers, about 400 of which are significant and active, Mr. Domartini said. It multiplied its revenue 20 times in its first year, and by six times last year.

Mr. Domartini anticipates the company earning about $100 million in revenue over the next two to three years. About 50 percent of its revenues are concentrated in the U.S., with the rest in Western Europe.

The company has raised about $1 million. It is seeking another $4.5 million round over the next few months to further expand into the U.S.. Headquartered in Amsterdam with satellite offices in France, Poland, and the U.S, Cleeng competes against Piano Media.

"What makes us a success today is we've been able to attract very significant brands and customers in two years in a market that is extremely complex," Mr. Domartini said. "People were skeptical whether you could sell premium content outside Apple or Amazon, but we are proving every day you can generate revenue and build a stronger audience through premium content." RH

CloudPay

www.cloudpay.net

Andrew Pearson

Cloud Computing

UK

Yes

» Multinational companies are increasingly looking for centralized payroll operations, in order to boost efficiency, according to Cloudpay, a company operating in that space.

Cloudpay, which has offices in New York and London, offers software-as-a-service-based payroll automation to multinational organizations.

The company has targeted a growing market. Research by advisory firm Everest Group has predicted that the multi-country payroll outsourcing market will grow from $600 million to $1.3 billion by 2014, boosted by globalization and corporate adoption of SaaS.

"The value that our solution delivers is reflected by exceedingly high rates of customer base retention, plenty of new business and a strong pipeline," said Andrew Pearson, CEO of Cloudpay. "We've assembled a highly qualified executive team and board, invested throughout our organization and strengthened the balance sheet with our Series B round of funding to ensure we are able to aggressively accelerate our leadership position."

Cloudpay announced impressive results for 2012, doubling the number of clients with recurring revenue of $1 million or more for two successive years. The company also opened a new office in Bucharest and expanded its bases in Raleigh, London, Singapore, Shanghai and Paris.

"Organizations across every industry are challenged to improve their global payroll processes and seek a company that can provide a robust solution that brings greater control and visibility," stated Mr. Pearson. "This opens up an enormous opportunity for CloudPay across the market, particularly with our proven track record of focusing on the dual and complementary tracks of innovation and meeting our customers' needs."

The company recently expanded its global operations when it opened offices in Sao Paulo, Brazil. CloudPay also announced that it was forming a partnership with Brazilian payroll services firm Apdata.

"CloudPay stands apart from other global payroll providers, offering industry-leading expertise and a far reaching technology platform unrivaled in the payroll space," said Luiza Nizoli, president of Apdata. "We are very excited to grow our relationship with the company, as this partnership enables us to provide the very best global payroll solutions to our multi-national clients."

As companies become more and more global, and workers are increasingly employed in countries outside of their employers' headquarters, the need for global payroll initiatives, which leaves the likes of CloudPay in a privileged position. RH

company url ceo sector country vc$

Conferize

conferize.com

Martin Ferro-Thomsen

Internet/Online

Denmark

No

» "We are not just a database of events, we want catch the networking around and after each event and revitalize it," says Martin Ferro-Thomsen, Founder and CEO of Copenhagen-based Conferize, an online destination for physical events and conferences. As the company launched its new highlight player in June, it became the first in the world to introduce a full-service content marketing platform in the conference industry.

In 2008, Thomsen, former co-founder of Issuu (a free publication platform for magazines, newspapers and more), was looking leverage large events to market products, people and companies. "I spent 2 weeks generating an Excel sheet and I thought 'I know how big this industry is and I can't find it online.' That was the first thing I wanted to solve," he says. But he didn't just want to create a database of events and videos, but to create a place where online users could actively participate in conferences, just like people physically present at the events.

Conferize's tech brings conferences and events to online audiences and enables them to share their thoughts and ideas on Twitter, YouTube and Instagram and more, all from the same page and platform. "We are able to process the best tweets from big conferences, and if someone that you follow on Twitter is announced as a speaker, you will be the first one to know," Thomsen adds.

Conferize debuted its beta product in 2013 after it was introduced pre-launch at the seminal technology conference-slash-launchpad DEMO in Silicon Valley in 2011. According to a press release, $1.33 million in seed funding came in September from angels and an institutional investor. The company focuses on sectors like technology, mobile, and marketing mainly in the U.K. and the U.S., but also has representatives in India and Denmark as well.

"The Conferize platform allows me to maximize my interaction with attendees before, during and after the event. Even if I can't attend a particular event in person I can participate online," says Colin Crawford, an advisor to Conferize and the CEO of Media7, which offers consultancy services to venue owners. "Business professional opportunities now have an easy-to-use platform, to discover new events, to attend offline and online events and interact with their peers," he adds.

Event organizers can create an interactive version of their event, build an online community around it and thus create more "buzz" easily. In an era when marketing costs are highest for event organizers, this free, online-based marketing provides a useful solution.

More online marketing for events, especially on social media, may heighten awareness and encourage more people to register to attend in advance. Event organizers generate revenue from registrations and sponsors; but lately, vendors get less and less time to sell tickets. According to Conferize's research, five years ago, organizers had three weeks to sell 50 percent of their tickets. Now, vendors must sell half their tickets in eight days — meaning they need to spread the word about events that much more quickly.

"The biggest challenge is to build the audience and get organizer participation," says Crawford, "Already word of mouth and connecting the Conferize subscribers' professional networks has resulted in an audience of over two million [people]. Conferize has an exciting opportunity to build on that initial momentum."

The highlight player, which aggregates and displays media like Tweets about and video of the conference, is currently offered on a freemium basis. Through its product, Conferize can track events taking place, livestream them and show them on external networks. For these services, the company charges fees of event organizers. In the future, the company plans to generate revenue from organizers for every additional ticket sold through Conferize's system. "If I can help the organizer sell two tickets, they've already earned back the fee," Thomsen adds.

Various event organizing companies (Professional Conference Organizers, or PCOs) like MCI Group or Cvent offer similar solutions globally and provide tough competition for Conferize, but Thomsen isn't worried. "Conferize is more modern," Thomsen says. "We build a platform instead of a service, with a community kind of approach." Other event registries like Conference Alerts (which lists academic conferences worldwide) also compete with the company.

Conferize hopes to expand its global user base and add more major events to its platform in the future. An app is also in development. "I think that companies like LinkedIn will be interested in us," Thomsen adds. Nonetheless, he doesn't plan on being sold yet. "I'm here for at least five more years," he says. RH

Creativesystems

www.creativesystems.eu

JoaoVilaca

Software

Portugal

No

» Creativesystems develops integrated solutions for data flow automation and optimization, turning the old "tracking tags" into a smarter solution for retailers.

The range of tracking tags is wider than it seems. Back in 2004, many companies tagged objects by placing an RFID (Radio-Frequency Identification) tag directly on pallets. According to Vilaça, this kind of technology wasn't smart enough, and couldn't allow a salesperson to find a specific object on the sale floor, for example.

"We wanted the objects to communicate where they are," says CEO João Vilaça. As veteran electronics and computers engineer, he says that he "got fed up of the bad mood that the industry was in."

"Customers were becoming more demanding, and if a customer goes into a shop and doesn't find a shirt their size, they will leave. We guarantee that the product is on the floor, so that won't happen," Vilaça says.

He became an entrepreneur and started Creativesystems with €2.5 million ($3.4 Million) of initial cash. Creativesystems uses RFID technology to create advanced solutions for automatic identification of objects. The tracking tags the company makes help trail projects from the design level, through manufacturers anywhere in the world. At the end of the day, the company's products allow workers to find a specific object in-store at any time, while retailers can manage the status of their stores online, and adjust stock levels and the status of shipments.

In 2005, the company received €5,000 of angel investments. Friends from Portugal also invested €100,000 — which they've already earned back, Vilaça says.

Creativesystems puts special emphasis on retail, logistics and manufacturing, industries which often require better tracking technology. The company sells software along with consulting and professional services. The company has been profitable for several years, with $2.5 million in sales in 2012 and $0.5 million in profit, 2012. "We are planning to go up to $10 million in 2015," Vilaça says. IDTechEx puts the world market opportunity at $700 million.

Creativesystems has about 40 customers in Europe, including companies in Dubai and Russia. It also works with Asian companies in China and Japan, along with retail clients in Brazil and Columbia.

While most clients are retailers, the company started to work with logistics ventures in Portugal and Spain. Automotive industry groups such as Bosch and Faurecia, Delphi and Marigold Industrial, which have factories in Portugal and Spain, also work with Creativesystems, as well as pharmaceutical companies like Roche and Medlog.

"At the distribution centre an automatic RFID tunnel was implemented for receiving and cross-docking and shipping processes, capable of identifying hundreds of tags simultaneously and in a few seconds, with full integration with ERP [Enterprise Resource Planning] systems and transportation companies, ensuring that the right items are shipped to the right stores," says Jose Sousa, IT Director at Throttleman, a retailer which adopted Creativesystems' technology. By applying RFID tags to every item, Throttleman is able to control its products from the manufacturing sites, through a distribution centre in Portugal and then into stores.

At the store, the solution includes mobile RFID devices for stock-count purposes, RFID Point-of-Sale (POS) devices and, at the sales floor level, a Magic Mirror. The advanced technology is both a mirror and an interactive surface with a high definition display and a RFID reading infrastructure that fully integrated with store's ERP in real time. When consumers use the Magic Mirror they get information on each product presented such as garment composition, price, and also other sizes and colors that are available in-store. The software also up-sells and cross-sells for retailers as it recommends products that match pieces customers show the mirror.

Sousa says the company's solutions made Throttleman's shipping and receiving processes more efficient, improved stock visibility and inventory accuracy, and enhance the overall customer experience.

With the use of the RFID item-level tagging, Throttleman was able to reduce the time items spent in final part of the supply chain from five days to less than 24 hours, guaranteeing that products were available in stores to be sold. Furthermore, the company's platform enabled companies to use 60 percent less warehouse space and to cut down delayed deliveries from 21 percent of total to zero.

Next up is the U.S. In order to enter American markets and continue their development, the company is seeking $3 million to $5 million in an upcoming investment round. They're looking for "smart money," i.e. backers that can add value to the company and connect them with right contacts in their industry. "Because we are looking to enter the U.S. market, the smartest move will be to get money from the U.S.," Vilaça says, "The problem is that we need to get someone that is interested in this specific IT retail systems, and has contacts and knowledge there, so they can leverage the move." Recently, Creativesystems partnered with Avery Dennison, an American global labeling and packaging corporation.

One of the biggest challenges for the company, apart from the general need to grow, is making their software less complex, thereby reducing the need for on-site staff and support. But that's coming up. According to Vilaça, the company plans to release a lighter version of the software for small retailers in the next couple of years. This version will be cloud based and will be able to work anywhere in the world, with no need for in-store servers.

The next phase of its technology, Vilaça says, will concern consumers' connection with tags that allow tracking via smartphones.

With the unforgettable pink tree as the main symbol on the company's business cards, Creativesystems might be memorable and inventive enough to turn the tagging business into a stronger, cloud-based solution for retailers around the world. RH

Crunchfish AB

www.crunchfish.com

Joakim Nydemark

Telecommunications

Sweden

No

» When the touchscreen phone was first introduced to the world a few years ago, not everyone was sure the new technology would become popular among keyboard fans. Now, tapping at your phone is about to become old hat. Crunchfish, a Sweden-based company that focuses on touchless A3D software, detects and tracks objects in three dimensions relying only on video streams from cameras embedded in mobile devices. This way, users don't even have to touch their phone to use it.

Sweden-based Crunchfish was founded in 2010 with an initial focus on creating innovative applications for the iOS and Android markets. Soon, it had the support of the technical Guru and angel, Paul Cronholm, today the CTO and founder of Crunchfish.

In the summer of 2012 Crunchfish raised its first investment round. "We got a very clear message from the owners, saying that touchless is the focus, and the application development turned into a halt eventually," says Joakim Nydemark, Crunchfish's CEO. Today the company is completely dedicated to touchless interaction based on gestures.

The two main owners in the company, Sheikh Mohammed Al Amoudi and Crunchfish chairman Joachim Samuelsson, have invested more than $2 million in the company and own almost 60 percent of it together. The third largest owner is its founder, Paul Cronholm, who holds 13.2 percent. The remainder of shares are spread out among six private investors. Some of these owners contributed to the company's latest $3 million (€2.4 million) funding round in June. The company has not turned to VCs for investments. "We believe that we get a more engaged and business-oriented structure with private investors," says Nydemark.

Al Amoudi is a well known investor in Sweden and the owner of the country's national gas station network. Samuelsson is a serial entrepreneur that "kickstarts enterprises," as the company's website says. "I have been involved in Mobile IT companies before and recognized Crunchfish as a great opportunity with technology that enables a paradigm shift in how humans interact with electronics," Samuelsson says. "I would be willing to invest more if necessary. However, we have just completed our second round and believe this was the final round, " he adds.

Mobile device manufacturers and app developers use Crunchfish for mobile gaming. The market that included all consumer electronics seemed "too big initially," Nydemark says, since it counted laptops, media players, DVDs and even cars, "anything that has a camera," he says.

"The software can interoperate whether a hand or a face is moving in front of the camera," Nydemark says, "You can take any application, add an 'enable touchless controls' option to it and just define a gesture to control it.The only criteria that we need is a camera." App-related services such as a touchless media player, or a touchless option for your favorite game, are part of the the company's overarching plan.

Crunchfish uses the head and hand movement detector to control media players. "If you put a tablet down, turn your head away and move from the screen, the movie would stop," Nydemark says. With Crunchfish, users can move media from one device to another. For example, people might drag a movie from their phone onto their TV with a hand gesture. But this tech will require steady connectivity and cloud support.

Customers pay a unit and support fee, on a licenses basis. In some cases, the company charges a fee for a developer when an app user downloads the touchless option on the app.

The technology is still patent-pending, but covers object tracking that works even in dim light conditions, as well as a platform that runs on all major mobile operating systems such as iOS, Android and Windows.

"Any one with some good skills in image and video analytics can build something that uses the camera, the trick is to do this well and get the user experience, and we are able to do that," Nydemark says, explaining that the company's interactive approach makes it unique, as does its technology.

Before users go touchless, though, Crunchfish must convince the market, and the world, that it's a necessary innovation. "Seven to eight years ago people were skeptic, but after a while touchless interaction became common to interact with [on] tablets and phones," Nydemark says. "It won't be instead of the touchscreen, but it will be part of it. In a year or two most tablets will have touchless interaction."

"I believe we will see this technology in all such devices already in five years. Just look back five years then we did not even have touch technology and now every smartphone and tablet has it," Samuelsson says.

Devices such as Xbox, Kinect and Samsung Galaxy 4s, that incorporate touchless technology, serve as competition. U.S.-based Leap Motion produces a touchless device that connects to computers. However, Crunchfish doesn't add extra hardware and sensors, which can make the technology more complex and add more cost. On the other hand, these devices can recognize gestures that occur farther away from camera, unlike Crunchfish's software. away from the camera, unlike Crunchfish's case. Gestures-with-software solutions, such as the Israeli Omek and PointGrab, compete with Crunchfish as well.

Crunchfish has about 20 employees, most of whom are interaction designers and computer vision experts, all based in Sweden.

However, the company plans on reaching out and becoming as global as possible. In November 2011, Crunchfish debuted their technology in Stanford, CA as part of "Innovative Sweden," an exhibition run by the Swedish Institute, VINNOVA. Later on Crunchfish accompanied the exhibit through six cities in the U.S., Canada, Brazil and China — then through Berlin, Tokyo, and Seoul in 2013.

The company claims to have reached out to more than 20 manufacturers in China, Taiwan, Korea, Japan and other countries. Two of China's major domestic mobile players have signed deals with Crunchfish. "Implementation is ongoing," Nydemark says. With deals in-pocket and more on the way, the company's management hopes to reach break-even by 2014. RH

D-Orbit

www.deorbitaldevices.com

Luca Rossettini

Other

Italy

Yes

» While we all worry about earth pollution, some take it to the next level and worry about space pollution. As more satellites are launched into space, their due to collision fragments is expected to increase, and space debris will become a major threat for space activities. D-Orbit aims to reduce space collision and pollution using devices that dispose of artificial satellites at the end of their life by removing them from their orbit.

In 2008, Luca Rossettini, D-Orbit's CEO, was looking to bring sustainability principles into space. "I tried to talk to people about the issue, but at that time they were not worried about the problem," he says. At an internship at Nasa in 2009, the idea became a product and Rossettini's interest rose again. In 2010, he created a team that would help him reach a solution, and pitched a plan to the US and Italy. TTVenture, an Italian VCl, decided to seed the company, and by 2011, D-Orbit was founded. Two investment rounds, one of equity and one in a convertible note, provided €1 million to start with.

The device that D-Orbit develops is installed on the satellite prior to launch. The operators can manage it in space using a modular, independent system that allows them to command it even in case of total satellite failure, after that satellite has kicked the bucket. Solutions found today only allow operators to interact with satellites that are still functioning. This forces a choice: de-orbit the satellite before it "dies" or use it until its life ends — but lose control over its movement when that moment arrives. If operators lose satellites to dense and populated space orbits, sooner or later those satellites will collide with others of fall to Earth. With some satellites as big as school buses, the danger is great.

"When a satellite gets old it needs to be removed, but companies leave it there in order to make more money," Rossettini explains. Producing and launching a satellite can cost about $300 million, so commercial operators prefer to keep it functioning for as long as possible. D-orbit's system allows them to have it their way, but explaining the company's approach isn't always easy.

When deciding to deorbit a satellite, operators often make it re-enter the atmosphere in lowly-populated areas such as the Pacific Ocean. However, this requires extra fuel or the use of more engines — all this in a satellite whose advanced age heightens the probability of failure and therefore pilot loss of control. Operators also get rid of satellites through self-destruct, or by sending spacecraft to higher orbits far away from commercial positions, filling "satellite cemeteries" with dysfunctional satellites. Both alternatives still pollute the space environment.

Another solution for space pollution may be a spacecraft that would collect one failed satellite after another, removing about 10 satellites per year. "The world will send about 1,200 satellites in the next eight years," Rossettini adds, which makes the solution unsustainable.

Operators are able to monitor small pieces of satellites that are about to hit their own satellite, maneuver to avoid them. However, every move decreases the life of the satellite, and thus decreases the potential revenues it can generate. At the end of the day, space density decreases the revenues in any case, and satellites that are not removed on time make crowding even worse.

In February 2009, the first in-orbit accidental collision of two satellites happened and created

thousands of particles of debris. Kosmos-2251 was a Russian military satellite that had been deactivated prior to the collision and remained in orbit as space debris, that collided with Iridium 33, a commercial satellite owned by Iridium Communications Inc.

"This was a turnover point that convinced all space organisations to adopt strong measures to limit the number of space debris," says Enrico Corpaccioli, MetOp-SG Program engineering manager at Earth Observation Projects Department (EOP-PPE) at the European Space Agency (ESA), an international organisation funded by most European countries. "Now, for newly designed satellites, safe disposal is a must and money is finally being invested in deorbiting solutions," Corpaccioli says.

"After more than 50 years of space age, there are thousands of debris orbiting around the earth, posing a severe collision threat to any new satellite being put into orbit. For this reason, all future satellites need to be capable, at the end of their operational life, to be safely disposed," he adds.

D-orbit plans to be part of this evolving market, and hopes to increase awareness of the problem. "We are showing our technology to legislators as well, so they can push towards our solution," Rossettini says. However, not much regulation is found concerning space environmentalism, and political issues may be part of the problem. "The U.S. can't remove a Chinese satellite even if it's dead," he says. "We want less politics and more solutions."

"The main problem that we have right now is credibility," Rossettini says. D-orbit has completed most of its space qualifications on the ground instead of in space, so its Technology Readiness Level (TRL) is not at its best. None of the patents that the company has filed have been approved yet, and no products have been sold, so the company is not yet profitable.

However, the final test for the product was done in Germany in January 2013, and it is expected to launch beginning of 2014. D-Orbit is in discussions with NASA as it hopes to create the first actively de-orbited satellite in history. By 2014, Rossettini wants to partner with American companies to begin producing D-Orbit tech in the U.S.

Among the companies that showed interest in D-Orbit's technology is Thales Alenia Space, a 7,500-employee company that has operated for more than 40 years in the space market both in Europe and the U.S. Other manufacturers include the German OHB and European Astrium company.

"The approach is not particularly original," Corpaccioli says about D-orbit. ESA's reports on the subject show that the strategy was mentioned in 1998. However, D-orbit is the first private company to exploit this option. "At present I have no report on anyone else developing this kind of product, even if I cannot exclude some other space companies are doing the same in their labs," he adds.

Even though the market is still progressing and the company is not selling its product yet, Rossettin is confident in the innovative technology D-orbit offers. "We will remove a satellite in a few hours, while today it takes years," he says. And not just years, according to the international guidelines of the Outer Space Treaty, but takes 25 years. If D-orbit makes it into the market, this reality can change, and with it the future of our space environment. RH

DelfMEMS

www.delfmems.com

Guillaume d'Eyssautier

Consumer Electronics

France

Yes

» DelfMEMS provides a solution in tunable radio frequencies, enabling an efficiency 20 to 30 times better than traditional semi-conductor switches. The company's technology uses an radio frequency (RF) front end module to switch between antennas in 3G and 4G mobile platforms, optimizing the connection across over 40 bands to provide better linearity and lower data insertion loss.

The company's radiofrequency systems are based on MEMS ohmic switches, which can disconnect and reconnect like a lamp switch using a traditional mechanical relay. This means unlike a capacitor switch, no current passes when switched off, resulting in significant energy savings. In traditional capacitor switches, the current remains constant, regulated by the membrane's distance to the capacitor, so power continues to draw even when the switch is off.

DelfMEMS' switches are broadband and can adjust between 0 to 30 gigahertz. DelfMEMS also has developed a simple custom approach that makes it easier to create multiple switches in the same chip by stitching them together. Studies done by the DelfMEMS customers reveal a 30 to 40 percent energy savings in the front end module.

"We are the world's first supplier of tunable antennas based on MEMS ohmic switches," said Guillaume d'Eyssautier, CEO of DelfMEMS. "Our tunable switches provide stellar linearity, extremely low insertion losses and better isolation between brands. Our switches not only optimize data quality, but boost an efficiency that optimizes applications, resulting in lower energy costs across the whole device."

The company was founded in 2006 by Olivier Millet, who developed the technology while completing his PhD at Lille University of Science and Technology. He teamed up with Karim Segueni. The two spent three years developing the switch, and then transferred the production to a bigger foundry to increase the supply. After getting its first samples in early 2009, the company raised $10.5 million in December 2012 to build up production and strengthen the organization.

The company ensures a supply chain with two established sources. It holds a partnership with DoCoMo, the Japanese wireless network operator, and major manufacturers of RF front end modules. The company primarily serves the mobility markets, mostly based in the United States and Asia. It also provides solutions for Industrial, ATE and professional radiocomms applications.

D'Eyssautier expects the company to break even by 2015 and in the next few years to be earning hundreds of millions of dollars in revenue. "There's nobody doing what we're doing, which gives us a tremendous advantage in this market," d'Eyssautier said.

Headquartered in France, the company has raised $12.6 million from CDC Entreprises, Iris Capital, BPI-FSN, Capitalaria, VIVES, A2D Invest, Alliansys, Finorpa, Inovam, Rhône-Alpes-Création, and some business angels. It employs close to 20 people.

"Using existing technologies for the antenna switch and power amplifiers means more silicon and requires more power," said Frédéric Le Brun, Director of Investments for BPI-FSN. "All smartphone users know how batteries remain one of the most deceptive features. DelfMEMS' switch solves both issues: less silicon and less power to deliver best performance. This was instrumental in our investment decision." RH

Delivery Hero

www.deliveryhero.com

Niklas Ostberg

Internet/Online

Germany

Yes

» Years ago, food delivery mostly meant pizza. Today, having a three-course meal delivered to your home from any local restaurant is almost as common — depending on where you live. While food delivery sites like Seamless and Grubhub are the go-to sites in the United States, other continents have not yet adopted online delivery to the same extent. Delivery Hero has been trying to take over the online delivery business over the past 3 years in several international markets, but mainly in Europe. Will their technology and marketing strategies make them the a superpower in their industry?

Niklas Östberg started a food delivery website in Sweden in 2008, which soon extended to Finland, Austria and Poland. "I wanted to build something that will affect many consumers," Östberg says. He founded Delivery Hero in 2010 along with Team Europe and several other founders.

The superhero team is based in Berlin, while the company currently operates in 12 markets, including Germany, Sweden, Finland, Austria, Korea, Poland, Mexico and more. Most of the 10,000 restaurants they serve are located in the U.K.

About 30,000 participating restaurants appear on Delivery Hero's sites, which have a different name in every country. In comparison, Seamless lists about 12,000 American restaurants.

The U.S. market is the one area the company prefers to stay away from at this point. "It will require a lot of capital to get to the U.S., so we prefered to go for the markets where we can be number one," Östberg says. Europe presents a different type of opportunity. "There are more independent restaurants in Europe compared to the U.S.," he says.

The business model is simple. Delivery Hero does the marketing and the transactions for the restaurants and charges a 10 percent commission on the order value from the restaurants. However, the company is still not at break-even and hopes to be profitable by the end of 2013. According to Östberg, the company currently has €300 million in gross revenue and a gross profit of more than €35 million, while maintaining profitability in key markets. Investors such as Ru-Net, Kite Ventures, Tengelmann Ventures, Holtzbrinck Ventures, Point Nine Capital and Team Europe have helped raise more than $100 million for the company in the past two years.

"Even though the market and the financial support of the shareholders has contributed to the company's success, the credit is mainly due to the team that has executed on the vision with utmost precision and passion," says Edward Shenderovich, Managing Director of Kite Ventures, a technology venture fund based in Moscow. Shenderovich is on Delivery Hero's board and is the company's largest investor.

Profitability for a company growing at their pace is not a priority, although an important factor in the future, Shenderovich says. "If Delivery Hero stops investing in marketing, the company will be immediately break even. However, we believe that right now is not the time to do so." he says.

"What helped us grow was making sure that there is a large variety of restaurants on the site, and smart marketing," Östberg says. According to the company, 20 percent of the approachable population in Sweden (people aged 15 to 60 years old), have used the service. In Germany, 25 percent of the approachable population knows Delivery Hero and 10 percent have used its services, according to the company's research.

Delivery Hero's biggest competitor is Just Eat, an online delivery website active in 14 markets, some of which are identical to Delivery Hero's: India, Switzerland or the U.K. Pizza.de in Germany, for example, has been active for a while in Germany, but is not innovative, according to Östberg. "We have better mapping systems," he says. In addition, Delivery Hero was the first to market its service with a solid mobile solution.

The plan is to keep growing within its current markets and to become the leading online-delivery site in the German market, rather than going into new ones. "We are looking at other markets. However, Europe is quite important, as we are first and foremost, a European company," Shenderovich adds.

Even though it's still common to order pizza in Europe, "users are starting to order more diverse food now," Östberg says. Delivery Hero may be a super way to start trying out new places. RH

DEM Solutions

www.dem-solutions.com

John Favier

Software

UK

Yes

» Computer aided engineering has been around for a very long time. But breakthroughs are still being made in a field where computers are used to aid and optimize the engineering process through programs simulating real life scenarios.

One area where these programs have not been able to work in effectively, up until recently, is bulk material sector. In the mining sector, pieces of coal or ores would be the bulk materials, in the construction industry it is more likely to be rocks from drilling, and in the pharmaceutical manufacturing space, bulk materials could be tablets or pills.

All of these sectors use machinery which works closely with bulk materials, which creates a challenging working environment for the machinery. DEM Solutions specializes in this exact space. The company provides scaled and modelling simulation software for engineering and performance analysis in almost every industry sector. It primarily works in the mining, coal power, manufacturing and process industries. In the mining sector for example, the company can simulate the grinding up of rocks, a very energy expensive process, which will tell the client where the process is failing in terms of efficiency.

The technology to do this has been present for a long time, but it has been held back by a lack of computing power. The arrival of more powerful computers has led to a surge in the capabilities in this type of software.

"There's never been a simulation solution for bulk materials. This is transformative technology but of course relatively new to the market so it's pretty early days," explains John Favier, CEO of DEM Solutions.

The benefits of using the DEM Solutions software are clear – it can reduce dependency on physical prototyping, which means building prototypes and physically testing them. With the DEM Solutions software this can be done virtually. As would be expected, this greatly reduces costs, and also reduces the time it takes to design new machinery and equipment. This type of software has been available in engineering for some time, but it is unique in that it deals with bulk materials.

"In the case of bulk particles, they are very difficult to measure anyway, so the level of understanding of what is actually happening to these materials and how they are reacting with equipment is already quite low. So by simulating you get a lot of new information," says Mr. Favier.

The problem which DEM Solutions solves, is the lack of efficiency in the manufacturing machinery of their clients, and Mr. Favier explains that it is a particularly prevalent problem in any industry that handles bulk materials. "There is a lot of room for improvement. The efficiencies can be as low as 50-60%, so if we can achieve a 5-10% increase in efficiency then that's a huge increase. There's a lot of room for improvement in those industries where bulk solid materials are a primary raw material that is used or they are the end product."

The firm recently was awarded the 2013 Global Frost & Sullivan Entrepreneurial Company of the Year Award. Naveen Kumar Ramasamy, Senior Industry Analyst at Frost & Sullivan, said at the time of the award: " In addition to servicing its industry customers with state-of-the-art DEM software and support for commercial applications, the company uniquely also provides a range of options to meet academic research and teaching needs. Its EDEM Academic Partner Program

(EAPP) fuels innovation and helped keep the company afloat during the economic downturn."

The company's goals for the next 18 months are primarily to grow on its core base. DEM Solutions has suffered in the past few years as the manufacturing industry has gone through a recession. One of the biggest industries that the company works in is the mining sector, which is currently in a down cycle. When the mining industry recovers, DEM Solutions expects a large upturn in fortunes.

Although there are one or two companies with a more simple version of the software DEM Solutions offers, the solution is largely out on its own in the market. However, that could change in the future, something which Mr. Favier is aware of. "One of the larger players in engineering simulation got into the market a couple of years ago so we now have the beginnings of competition from one of the established players of CAE. But their capabilities are still quite far behind ours."

Right now the future looks good for a company exploiting a gap in technology in one of the biggest markets on the planet. "We are at the forefront of this technology and it represents the next wave of computer aided engineering. The structures have been addressed, the fluids have been addressed but until now bulk materials have had no solution. Now they do," concludes Mr. Favier. RH

Dream Broker

www.dreambroker.fi

Mika Ahokas

Cloud Computing

Finland

N/A

» A recent report from Informa Telecoms & Media forecast that the online video market will be worth $37 billion in 2017. The online video boom has been a long time coming, but many smaller companies have been swept away by the big players, meaning start ups which have been successful, have been the ones which have targeted key areas that the likes of YouTube, Skype and Netflix have stayed away from.

One company which has found a profitable pocket of the market to operate in is Dreambroker. The firm's main offering is a cloud based software for creating, editing, managing and publishing online videos. The company was founded in Finland in 2007 and has been financed almost entirely by its own income. The Finnish Government gave Dreambroker some grants, but aside from that the company has funded its own growth up to this point.

The company was founded at a time where technology had enabled the widespread use of videos. "The main idea came that we really believed that online videos in general was a potentially lucrative market," says Mika Ahokas, CEO, Co-Founder and Chairman of the Board at Dreambroker. "We really thought that online videos was something that was picking up back in the beginning of 2007 and we saw that major companies were starting significant operations and acquisitions in that market."

"Technology had come to the point that I was really feasible and possible to move a high amount of data in the form of videos over the web. It really started to be possible to use these type of solutions globally within different organisations," he adds.

But the firm had no intention of taking on the giants like YouTube head to head, and instead identified the business to business segment of online videos as its core target market.

"Lightweight, easy to use, organisation-wide solutions, did not exist in the business to business segment and we saw that sooner or later companies and technology providers would focus on that segment between the consumer side and old fashioned corporate and try to open its potential market," recalls Mr. Ahokas.

"At the beginning of 2007 there were not so many business to business solution providers available but we knew there were other players, but they focused on online video platforms only providing very vertical solutions," he adds.

The video market did evolve rapidly from 2007, and it shows no signs of stopping, although the majority of the revenue is going to the major players. Giles Cottle, principal analyst and author of "OTT Video Revenue Forecasts" at Informa Telecoms & Media says, "It's clear that online video, today, is worth much more than the digital cents and dimes of yore, and is attracting real, and growing, revenues."

But this value is concentrated around a select few players. We estimate that Apple, Google, Netflix and the global broadcasters (including Hulu), combined, account for about 70% of all online video revenue today– so if you aren't one of these players, then the chances are you aren't making a great deal of money from online delivery today."

But Dreambroker appears to have carved out its own segment of the industry, and has ambitious targets for the future. By the end of 2014, the company is expecting to exceed 10 million euro in revenue, and by 2018, to exceed 100 million euro.

A typical customer is a top 500 company in each global market. They represent HR, IT department and communications. Companies typically use the platform to create, edit and share videos both internally and externally. The platform enables better communication between employees and enables departments such as human resources to make induction videos, presentations for shareholders and sales videos.

In the next few months Dreambroker is to release a number of applications that can be used on mobile devices, and it will make these apps available to the regular consumer as well as businesses. "Anyone all over the world can use our solution free to some extent. So anyone can try and create online videos with mobile phones and tablets and computers and they can share it with other people and colleagues but to some extent it will be changed so you have to pay for it," says Mr. Ahokas.

This does not mean the company is looking to take on YouTube, and indeed the whole process is designed to attract more customers to the corporate solutions it offers. "Hopefully that general interest and awareness can be turned into paying customers on the business to business side. That is the idea," concludes Mr. Ahokas. RH

Ductor Corp.

www.ductor.com

Ari Ketola

Clean Tech

Finland

Yes

» Finnish biotechnology company Ductor Corp. produces ammonia and phosphates from recycled materials and makes production of green crude oil from algae commercially viable. Licensed manufacturers can use the company's technology to make green crude oil for the biofuel industry, as well as organic fertilizers.

"I was at a coffee shop, talking with my associate about global issues, when I realised that food is running out and in a decade or two we'll face serious problems", says Ari Ketola, Ductor's CEO. All the major components for food come from oil, while the technology for natural gas production has been around for hundreds of years. Producing one ton of ammonia releases 2 tons of CO2 into the atmosphere, while the mining industry also hurts the enviroment.

"Any commodities out of fossils are still relatively cheap, that's why we don't have methods to compete with them. In the beginning we tried to produce competitive pricing for ammonia and later on we realized that our method is working with bio-gas production," Ketola says.

Ductor's technology extracts nitrogen before biogas production and reduces the amount of areic water created, improving the yield. "We can minimize the areic water handling cost and boost the revenues for any biogas plant," say Ketola. According to Ketola, the company manages to improve production by 10 percent to 20 percent.

The company is currently negotiating with several biogas producers (it didn't disclose which ones) and expects to sign a deal within one year. "These are existing producers that already have a problem with areic water," Ketola says.

Ductor currently plans to sell an add-on form of product, that will cost $3 million to $4 million for each plant. The company does not operate its own factories or plants. However, Ketola believes that this business model can make the company profitable quickly. "I believe that as soon as we have the market penetration and show the business what we are able to make, I'm sure that revenues will go up. Three to five years and we will be able to reach $200 million by selling only these add-forms for existing biogas producers", he says.

Ketola has been the main investor in the company since it was founded in 2009, and invested €2 million in the company. The latest funding rounds have been underwritten by the company's founders, as well as Lifeline Ventures and the Finnish Funding Agency for Technology and Innovation.

The European Union is currently the leading continent when it comes to biogas production, with roughly 1600 biogas producers. This makes a great starting market for Ductor, which targets Europe first. In addition, regulations and laws in the European Union limit the amount of waste produced by biogas producers, which indicates a potential entry point for Ductor's products.

Reaching the rest of the world is the next step. "China is polluted now, but in a few more years the Chinese will also regulate the pollution, and this gives us better possibilities," Ketola says.

In terms of waste water treatment in biogas, Ductor faces technological competition from companies that use stripping methods to treat nitrogen. Other than that, there are no specific competitors that use the same exact technology Ductor uses.

Ductor Corp. is finalizing its patented technology for producing green crude oil from algae, and ammonia and phosphates from food industry waste streams using 100 percent biological processes. The company already filed six patents, and 16 more are on the way.

The next challenge for Ductor is selling its technologies to companies that will own and commercialize them globally. With only 13 engineers, all based in Helsinki, Ductor has managed to develop a technology that aims to improve biogas production in the region and beyond. The company plans to create a larger team in the future, as more deals close. RH

Evmanya.com

www.abc.com

First Lastname

Blahblahblah

Country/State

Yes/No

» Ecommerce is rapidly changing the Turkish economy. In an accelerated turn-around from just a couple of years ago, Turkey now has 45 million people using the Internet. One in five Turkish citizens did their first online order last year. Home decoration in Turkey is expected to reach $1 billion over the next four years.

Leading that movement in the home furnishing space is Evmanya, Turkey's first home decoration site, featuring over 25,000 different products handpicked for their style, fashion and utilization. The site features over 20,000 different pieces of furniture.

"We are living in the individualization era of people. They want to see a product that reflects them, reflects their favorite colors and styles, who they really are," said Asli Gokdere, Founder and CEO of Evmanya. "People are focused on functional products that are also an identity statement. The ability to choose designs helps our customers feel great about their homes."

In addition to an ecommerce store, the company also publishes a home decoration emagazine featuring the latest products and trends.

As the leading home decoration ecommerce site, the company is currently focused on Turkey due to the size and growth of the Turkish market. It plans to next expand to Europe, starting in Eastern Europe and expanding through the rest of the continent as its capacity for the market allows.

"Turkey is a really big market, and it's our biggest potential," Gokdere said. "We will show our leadership in Turkey and maybe expand our footprint in the next two years."

The company handpicks products from over 512 suppliers from Turkey and other parts of Europe. Though Gokdere declined to share revenues, she disclosed that the company orders grew by 6x over the last year, and the average order size has increased 20 percent. The site has tripled its unique visitors over the past year.

The company currently has 250,000 members, typically ages 20 to 45. About 65 percent of its customers live in big cities.

Gokdere previously coordinated business and finance development on a number of Turkish ecommerce, gaining insight into online content and decoration. Her family also has a 20-year history in retail with a focus on home electronics. Bit by the entrepreneurial bug, Gokdere started Evmanya in October of 2012. It landed $500,000 in angel funding within two months, and raised a Series A of $2.2 million in April of 2013. The company has reached its breakeven point, but reinvests its profits back into marketing and operations.

Gokdere is currently looking for new VCs with experience in ecommerce and home decoration. "Experience and smart money is essential," Gokdere Said. "We have a lot of opportunities for growth, and we need a strategic investor to help us realize our potential."

Gokdere hopes Evmanya will be a $100 million company by next year. She envisions taking the company public in the next ten years.

The company competes against eBay and Amazon. RH

Ezakus

www.ezakus.com

Christophe Camborde

Big Data/Storage

France

No

» Ezakus, the Paris-based data management company, challenges producers with the slogan: "Can you read minds?" In analyzing big data, Ezakus helps enhance clients' understanding of their respective consumer bases, enabling publishers, media agencies and advertisers to serve specific content to individuals and target audiences.

Today, the market around big data is well-tread territory. Publishers and advertisers understand users create information goldmines when customers go searching around sites, pointing out with their clicks their interests and buying patterns. And yet, in many cases, analyzing all the data generated when visitors head to web pages, and even collecting information in an organized and consumer-sensitive way, sends media producers out of their depth.

Founded in 2011, Ezakus fills a need for guidance left wide open in ad landscapes unfamiliar to all the space's players. "[The company was] created ... to provide data expertise to the digital advertising business. At that time, RTB (Real Time Bidding) was only emerging, programmatic ad serving was very new," write co-founder and CEO Christophe Camborde and Jean-Michel Gobet, marketing director at Ezakus in an e-mail.

Ezakus gives marketers and advertisers a window into the worlds of their customers, from which they can view how the other half, the target audience, behaves. With these insights, they'll shape messaging to specific segments and afterwards, evaluate success of campaigns using the Ezakus'

DMP (Data Management Platform). To monetize, Ezakus sells its DMP "called AMP (Audience Management Platform) in SaaS mode and we also get a technical fee from the exposed data in CPM," write Camborde and Gobet.

"The mission of Ezakus is to provide ... [a] DMP to the full ecosystem, [advertisers], agencies, sales houses or publishers," they write. "A DMP is a platform that collects, understands all the visitors' behavior (website or mobile app) and creates behavioral or socio-demographic segments."

In the bargain, consumers get ads that appeal to them, or content in line with their taste preferences from publishers using the service. On its website, Ezakus claims 18 percent of the French population considered digital advertising both useful and pleasant. The company wants to ramp up ad appreciation through its technology. "[Ezakus'] ambition is to increase those numbers with a really targeted advertising that matches aspirations and behaviours of each individual," the company writes.

But as Ezakus mines data to achieve those ends, it faces consumers upset at and unsure about how much information they've inadvertently volunteered online. "[Our] biggest challenge is to face end customer request for privacy and control," writes Camborde and Gobet. "We are developing a new service to give back power to the people."

Though Ezakus tracks customers' actions, the company insists it does so without invading their privacy. The company's tools create user profiles that preserve anonymity, deploying "a collection of over 600,000 words and concepts cover all of your web visitors' main interests in order to analyze their reactions to your content," the company says in a video illustrating their publishers profit from the platform.

Ezakus uses cookies to obtain certain information from visitors; specifically: URLs visited, time, IP, searches made, the company reports on its privacy policy page.

And according to a blog post, their network of cookies reaches 25 million computers, tablets and smartphones through their partners. However, Ezakus distinguishes between you the consumer and the "anonymous you," who they guarantee will stay as faceless and unidentifiable "as a number," according to their privacy policy page. To make a long story short, the company writes: "With all these facts you can feel confident, we don't know who you are!"

Regarding market opportunity, Camborde and Gobet report Ezakus may soon address a small but substantial subset of the total advertising industry. "[The] ad market size is €600 million in France, double in UK and ten times bigger in USA," they write. "[The] data part is very marginal so far, but we estimate that it could reach up to 10%, i.e. €600 to €800 million in 2015."

Camborde and Gobet write Ezakus will reach break-even/profitability in 2016. Most recently, the company raised $3.4 million from IDInvest, up from the firm's original $3 million investment in 2011. According to a blog post about the funding, the new money will go towards enhancing Ezakus' international presence; already, the company has opened a London office and plans on another coming soon to New York. Right now, Ezakus employs 30 people, and will add 10 more to its team in the next year.

Meanwhile, the same post says Ezakus will continue to develop its technology at home, concentrating on delivering their product and putting customer privacy concerns first and foremost. According to Camborde and Gobet, Ezakus' transparency, trustworthiness, focus on and relationship with data, as well as their current status as an independent company distinguish them from others — crucial in an industry beginning to pick up speed. RH

Falcon Social

www.falconsocial.com

Ulrik Bo Larsen

Social Media

Denmark

Yes

» Social media has fast become an integral part of almost all consumer facing businesses. That's why companies serving this requirement are saying that social is the newest enterprise software category.

"It's a multi billion dollar market opportunity both in Europe and the U.S.," says Ulrik Bo Larsen, Co-Founder and CEO of Falcon Social, a Danish social media management firm. "It's potentially even bigger. We believe that this is a new enterprise software category just in the early days — in its infancy."

Mr. Bo Larsen previously worked in the margins between technology and marketing, and has applied that experience in the creation of Falcon Social. "I co-founded an agency where I worked in a more bespoke and consulting style, with a lot of big brands on their international campaigns. And we saw there were a lot of recurring patterns and challenges for those guys — that's really what led to the inception of Falcon Social," he says.

The firm works in many verticals. One of its most prominent clients, Danish beer maker Carlsberg, highlights how the company can work with its customers. Carlsberg has carried out a 44 country roll out with the Falcon Social platform, and has more than 300 users working with it every day. The regional marketers and local agencies typically use the platform to produce content and optimizing the reach of that content, while the group marketing and executive level of markers use it to gain an overview of what is happening locally.

Some of the bigger enterprise software companies have made moves into the social media market, mainly through acquisitions. "We have a broad offering in our platform but they have tried to reach that breadth by acquiring a lot of one trick ponies and creating what we rather mockingly call 'Frankensuites'," says Mr. Bo Larsen.

"Marketers can see that those suites are not very coherent. There are a lot of different disciplines that need to work in unison to handle social well," he adds.

Some of these disciplines which need to be handled by a social media management platform include engaging and answering incoming messages from consumers, in an efficient and consistent way. At the same time there needs to be compelling content outgoing which will gain the maximum traction with consumers. Brand management is also an important factor for a platform such as this, as is speed of use.

Falcon Social recently announced it had raised $8 million in its latest financing round. Target Partners, A German venture capital firm, led the round, supported by existing investors NorthCap Partners. Kurt Müller, Partner at Target Partners says: "We have been tracking the enterprise social media management space for some time and we believe that the team at Falcon Social has the vision and leadership to build upon the success of its flagship clients and become a leader in the emerging category of social media management platforms for enterprises. Falcon has demonstrated that it has a scalable sales model winning over 70 new customers in the first half of 2013 alone."

The social media management market offers some stern challenges. One of these is the breakneck pace at which is moves and evolves. In this respect the market can sometimes be more suited to smaller, more agile firms which are able to shift their innovation focus at short notice. Falcon Social has placed a lot of its resources into staying ahead of the market evolution. "We're scaling our innovation quite a bit. We are certainly scaling up sales as well. But with the new investment that we just got here, we're using a lot of that capital to invest in R&D because we believe that there are a lot of hard problems that are not very well defined in the market yet, that we aim to be the first ones to solve," says Mr. Bo Larsen.

Falcon Social is now aiming to solidify its presence in continental Europe before creating the beginnings of a strong footing in the U.S. The future of the company seems to be tied with that of the exciting, evolving and gigantic market it operates in. RH

FeedHenry

feedhenry.com

Cathal McGloin

Mobile

Ireland

Yes

» The success of consumer facing mobile apps has led a host of developers, marketing agencies and businesses to rush to roll out their own suite of applications. But mobile apps are not just being used for consumers, so how successful can they be as enterprise solutions?

Analysts of the industry believe this way of using applications is a growth market. "I think we'll see packaged applications become more and more important, particularly in these areas like sales force automation where you're putting a mobile device in a salesperson's hand and you're connecting that up to a back end sales force automation system," says Ian Finley, research VP at Gartner.

FeedHenry, a mobile application development platform provider, is looking to exploit this opportunity. The firm began as a research project at the Waterford Institute of Technology in the Republic of Ireland. The original project was research into cloud based delivery platforms, dealing mainly in HTML 5 and Javascript. In 2010, Cathal McGloin, who would become the founder and CEO of FeedHenry, got involved in the project while it was still in the college.

"It seemed like very good technology but it was targeting the wrong business space," recalls Mr. McGloin. "They were doing interesting things with mobile but it wasn't specifically targeting the current trend. So we took the technology, we raised some capital and we spun it out of the college at the end of 2010, and then we started targeting helping enterprises come to grips with all these mobile apps that were beginning to emerge at the time."

The newly formed company took 10 staff from the college and began trading in 2011. The firm really began to take off when it partnered with Telefonica in the UK and Republic of Ireland, and began to win big contracts against some of the more traditional enterprise mobility players such as SAP. A few months ago FeedHenry raised money through Intel Capital, which led a $9 million investment round. That cash will be used for international expansion.

FeedHenry's success story is one example of the changing attitude towards enterprise mobility. "The traditional enterprise mobility space was until recently a well defined market, it was called the MEAP space by Gartner and it was designed for companies that had 5,000, 10,000 or 50,000 field service workers or 10,000 sales guys or brokers in the field," explains Mr. McGloin.

"But today that definition of who is mobile has changed completely. Today everybody is mobile. Today the finance director who works a day a week from home or the accounts person who wants access — everybody is mobile," he adds.

The companies that have traditionally used mobile solutions, such as those with large numbers of workers in the field, have until now used the offerings of companies such as Oracle and SAP, but new firms like FeedHenry offer a different way of doing things.

"We help companies who want to build and deploy mobile apps for their business, do it fast and quick and do it from the cloud as a SaaS based offering. So information is going to be consumed on these smart devices, these tablets and these smart phones and information frequently is coming from a cloud type of environment with more and more applications moving to the cloud," says Mr. McGloin.

FeedHenry has positioned itself between the world of mobile, smart phones and tablets and the world of cloud and back end enterprise IT systems, offering companies the platform to build apps for their businesses through the cloud. The company acts as mobile middleware between systems which were never designed to be accessed by mobile devices and the employee or user with the smart phone or the tablet.

Many firms are now using mobile apps and the cloud in order to make their workforce mobile, and the industry is growing rapidly as a result. "Those types of applications are already out there and I think we'll see them get stronger and a lot of people invest in those too. In which case the services market around that is not building the application but it's maybe integrating that application and customising it for a specific customer."

FeedHenry has successfully placed itself in the right area of a major market disruption, and is now targeting the bigger firms on its way to international success.

"Some of the big dinosaur companies like Oracle are very slow to wake up to the fact that their traditional enterprise software is being challenged by apps delivered quickly on smart devices and downloaded through app stores, integrated through the cloud – that's the future of technology and it doesn't need to cost millions and take 18 months to roll out," concludes McGloin. RH

FlatFrog

www.flatfrog.com

Dhwani Vyas

Consumer Electronics

Sweden

Yes

» FlatFrog's Multitouch 3200, an interactive display that the company says is the slimmest true multi-touch system on the market, offers a technology reminiscent of that seen in science fiction movies. Responding to up to 40 different touches at once, the system delivers multi-touch at an unprecedented accuracy. It's the first system of its kind to detect pressure, which can avoid accidental touches or provide deeper shading for digital drawings, for example.

Now FlatFrog has adapted its large screen approach to the consumer tablet and computing markets, recently raising $26 million in partnership round from Intel Capital. The company plans to release a 23 inch model screen by the end of 2013, followed by 27 inch and 32 inch screen versions and is working with several of the top 10 consumer electronics manufacturers.

FlatFrog offers an optical, in-glass technology. Light is transmitted into a sheet of glass on top of the LCD screen. Touching the surface scatters the light, which is then digitally measured for response. Because only a sheet of glass is used, there is nothing to obstruct the image clarity, unlike more common projector capacities that require multiple layers. FlatFrog's approach results in greater accuracy, higher performance and lower latency.

"If our prices were not competitive, this wouldn't be so interesting," said Christian Johnsson, Director of Sales and Marketing at FlatFrog. "We have a simple manufacturing approach. We can take this superb user experience into the consumer electronics space. It all boils down to the touch experience. We provide a premium touch experience in larger form factors with the accuracy and friendly user experience that people are used to in a small handheld device."

Founded in 2006, FlatFrog's technology to took time to buld. Ola Wassvik and serial entrepreneur Christer Fåhraeus launched the business from their own experiences developing touch technology for a separate company. The company spent a year building a prototype and several more years honing the technology to get it right. It released its Multitouch 3200 in August of 2012.

"The cornerstone of this technology is single processing and optics, and we have a very strong engineering team in both of those fields," Mr. Johnsson said. "It's amazing to see the evolutionary steps as the technology becomes smaller."

In addition to Intel Capital, FlatFrog has also received investment funding from Invus, Sunstone Capital, and Fårö Capital.

Though only about 1 in 10 computers currently use touch screens, Mr. Johnsson expects the majority to do so in the next several years. FlatFrog aspires to be a dominate player in the larger screen sizes for the PC market as well as an important player in the laptop space, combined markets worth $1.5 billion. It also strives to address the $4 billion tablet market. Further potential markets include the automotive industry, gaming and education.

If successful, Mr. Johnsson expects FlatFrog to have a bottom line in the range of tens of millions of dollars.

"This is a great opportunity," Mr. Johnsson said. "As the prices of LCDs Have been coming down rapidly, I think we'll see many more touch screens in the retail and consumer markets in the very near future." RH

Frafos

www.frafos.com

Berthold Butscher

Telecommunications

Germany

No

» In a world where hackers can reach every piece of data, a secure cellular network becomes the most important thing for every business.

Frafos GmbH is a manufacturer of Voice over Internet Protocol (VoIP) solutions for the delivery of voice and multimedia sessions over the internet, rather than the telephone network. "When you have a VoIP network, a border controller is your security against malicious users," says Berthold Butsher, founder and CEO of Frafos.

Back in the nineties, the founders of Frafos were the among the first to develop open source solutions and standards in the German public R&D institute Fraunhofer FOKUS. This was the begining of the VoIP era that we are experiencing today.

Incorporated in May 2010, in Berlin, Germany, the company also runs an office in Prague. Frafos offers Session Initiation Protocol (SIP) session management and security solutions, for voice and video calls over Internet. The ABC SBC, the company's flagship product, offers open interfaces and built in multimedia applications such as recording and announcements. It has special media features that allow cloud deployments and open interfaces, and can scale from a small business to a carrier-grade solution, supporting up to 7000 parallel calls.

The ABC SBC solution caches successful registrations. The registration information at the operator's registrar will be refreshed by the ABC SBC at much lower rates than the subscribers refresh attempts. This reduces the load on the operator's infrastructure and protects it from misbehaving subscribers or malicious users that try to attack the network by sending large numbers of registration messages.

An application service for voicemail and announcements, installed on the border controller, reduces the load from a company's network, and thus reduces the expenses. A capability that is beyond what a traditional border controller can do.

Frafos has customers from the U.S., UK, Indonesia, Australia and more. Some of which are big companies, such as Deutche Telekom.

"We had a good experience with the customer oriented approach that Frafos gave us we value the fact that Frafos spent more time on resolving the issues than trying to find accountability for the problems," says Pavel Chlupáček, CEO of Spinoco Czech Republic. Spinoco uses the ABC SBC solution and cooperates with Frafos on their new platform for next generation CRM system.

The ability to control the behavior of the network from a web platform — we are coupelling our product with their test form- so an operator can implement.. if an operator wants a new service ... We're trying to simplify this by providing the operator to program its on services. So he can program his infrastructure- You might have heard about SDN- we take it level above to SDCN.

The company is funded by its owners and has no outside funding. frafos is found at the break even point, according to Butsher. It is not losing money and is not dependent on more funding from the owners anymore. "We're trying to break the $1 million in revenues by the next year or two," says Butsher, adding that the company is not looking for investments, but is willing to consider investment offers.

Today the market is estimated at $700-800 million dollars.

The largest competitors for Frafos are global providers of session border control technology like Acme Packet, acquired by Oracle in on February 2013, or Sonus, which has customers in over 50 countries across the globe. "Our major advantage is that we can do exactly what the customer wants faster, whereas a big company's products don't necessarily have the same flexibility," Butsher says. Frafos serves many small and mid-sized companies, while scaling is not an issue, according to Butsher. "Smaller companies are the ones that have more complicated requirements since they serve certain customers," he says, and this is what makes Frafos strong. "The software has been open source for a couple of years and we can react fast. This is a big advantage compared to the big players in the market," he adds.

Frafos's main focus these days is increasing the number of customers. "We're trying to grow carefully, so we're adding 2-3 customers each month," Butsher says. With only 10 employees now, he attempts to grow to at least twice the size in the next years. However, as a small company, they all fit in Butsher's boat. "We all went sailing once, and I'm sure that we will make that a tradition," he concludes. RH

Global Business Register

globalbusinessregister.com

Ben Cronin

Internet/Online

Ireland

Yes

» For any business, the last thing the accountants want to see is a written off debt. Yet this happens all over the world every day, when companies service clients which are either not the company they say they are, or don't exist at all. A small start up with just nine members of staff based in its headquarters in the Republic of Ireland, has come up with a solution to verify businesses in real time.

Global Business Register was founded in 2006, when a small team of technologists responsible for building the infrastructure of business registries, approached businessman and property investor Ben Cronin, to explain the potential in the commercialization of the data which makes up business registries. Mr. Cronin, saw the opportunity in the idea, and took it to Rob Leslie, the brother of an associate, who had over 30 years of experience in technology. After discussing the project, the two formed Global Business Register.

Like every good business idea, the company solves a problem. And this problem is a big one. The UK Cabinet Office revealed that Value Added Tax (VAT) fraud cost the government £5 billion in 2012. The Governance, Risk and Compliance Technology Centre has reported that regulatory compliance to prevent fraud will cost 5 billion Euros globally in 2013. Global Business Register aims to ease these losses by validating the legal identity of companies by connecting to global companies registries.

Mr. Leslie explains that the technology behind the company's core offering is not complicated. "It's essentially all web services, its APIs that we use to connect to the business registers. They're all different so we're taking a lot of very diverse data and reformatting it essentially into a single structure so it makes integrating that single structure into your systems very easy. The technology itself is quite simple actually. With the internet as it is today and the speed that it operates at, it makes it work really well."

The company's service is used on occasion by the Internal Revenue Service (IRS) in the United States and HM Revenues and Customs in the United Kingdom. But the main sector the firm is targeting is finance. "Our primary target would be banks and finance because they have the greatest regulatory need. They have to identify every company they do business with. What we're trying to do is automate that process," says Mr. Leslie.

A typical high street bank has hundreds of thousands of corporate customers, and every so often these banks need to verify that the details of those customers are valid. This is a long and time consuming process, and one that Global Business Register hopes to eliminate, by providing the banks with a live, constantly updated version of their records. The company either charges banks a fee for each record they check, or sells them a monthly or annual subscription which keeps the records updated periodically. In today's fully connected business world, it's easy to see why banks would benefit from having live information regarding their clients.

The goal of the company is to offer its service in 150 different companies. However, this is more difficult than it sounds. First the firm must convince governments of the countries to grant it's staff access to data from its business registry. "Some countries will have APIs and some won't," says Mr. Leslie. "We'll have to build those APIs come to an arrangement with them as to how that will all work. Some countries are very protective over their data so again it's about taking time to make them feel comfortable that what we're doing with their data is good and we're not using their data in an inappropriate way and that they come to trust us."

Mr. Leslie believes that once the company reaches 150 countries, it will have reached "critical mass" where no other company would be willing to attempt to repeat what they had done, and instead would rely on the information gathered by Global Business Register. The problem with this strategy is that it will take a lot of time, effort and money to reach that goal, which makes financing an important factor in the company's success.

"We're taking two approaches – one is we've been working with a specialist financier in London who really likes what we're doing and would be used to operating in this space, so we've asked him would he represent us and see if he would go and help us raise the capital," explains Mr. Leslie. "In parallel with that, we've been meeting reasonably regularly various VCs, investors, large corporates who would have venture type funds as well, with a view to seeing if they would like to progress things."

The company has had a good amount of interest so far, despite the nature of the project, which could mean a slightly slow return on investment. For those willing to wait it out, it could be well worth the patience. RH

GlobalOrange

www.GlobalOrange.nl

Yvo Gortemaker

Internet/Online

Netherlands

No

» In recent years, companies that didn't have websites didn't exist. Today, you can almost say the same thing about companies that don't have a mobile or web application. The IT market is expanding fast, and for some companies, the need for a custom approach is crucial. The Dutch company Global Orange enterprises custom application development in a competitive market.

The business plan for Global Orange started in different coffee shops in Amsterdam, as Yvo Gortemaker was working for IBM and Erik Seveke was working for a large bank in the Netherlands. "At some point Eric said 'Let's give this a month and decide.' Two days after we quit our jobs and went with it," says Gortemaker. Both of them were the first ones to invest in the company and serve as its managing directors.

In 2006, Global Orange moved to an office on the Keizersgracht Canal in Amsterdam. Keizersgracht, meaning emperor, may be what Gortemaker is aiming for when it comes to the company's goal in the local custom software market. The total market for custom software development in the Netherlands is estimated at $5.5 billion per year by the Information and Communications Technology (ICT) Office. The total ICT market in the Netherlands is estimated at $25 billion per year of which approx 50 percent are telecom companies.

What makes Global Orange different, according to Gortemaker, is its team. Global Orange has 25 employees in Amsterdam who deal mostly with customer interaction, while 30 developers are employed in the Ukraine. "It's easier to find developers in the Ukraine compared to the Netherlands, and it's cost effective too," says Gortemaker. "Because we split up the work, we can do the complex customization job in Amsterdam and attract a strong local team."

The company focuses on the Netherlands and Belgium, so much so that its website isn't even translated to English. "There is enough market in these two countries, but we are launching an English site soon," Gortemaker says.

"We used to have more customers than we do now, but we decided to focus on bigger companies in the Netherlands," Gortemaker says. Global Orange has developed applications for various local companies, such as the insurance company, Aegon, the second largest paper manufacturer, SCA and Johnson & Johnson in the Netherlands. In addition, it also developed applications for the Rijkswaterstaat, which is part of the Dutch Ministry of Infrastructure and the Environment.

The tax system for companies in the Netherlands is attractive. On the other hand, the competition between IT companies makes it harder to survive in the market. Large IT companies like Cap Gemini and Atos are harder to compete with since they have expanded throughout Europe. Global Orange's small size lets it keep its personal approach and allows for more flexibility and innovation than other software or application companies, Gortemaker says.

Marnix Zwart, CEO and co-founder of Kroodle, a digital insurance company in the Netherlands, describes Global Orange as fast and responsive. "They have short delivery times and their knowledge about the latest developments in the online and social market is important," he says.

The company did not disclose its actual revenues, but claims it has reached profitability in the last three years. "This year we will double in size and I think we'll double again by 2015," Gortemaker adds.

In a competitive IT market, the road is long for a company such as Global Orange. However, its smart business model can help speed up growth in the future. RH

Greenclouds

greencloudsonline.com

Peter Zonneveld

Cloud Computing

Netherlands

Yes

» Less than five years ago Peter Zonneveld was working for HP, in a division responsible for utility computing, when he realized a huge pool of IT resources was going to waste. He took his findings to Hewlett Packard, and explained how the company could profit from this, but they weren't interested. Unperturbed, Mr. Zonneveld took matters into his own hands.

Mr. Zonneveld was working on the early stages of cloud computing, when big companies would go to HP and ask for IT support but only pay for what they used. He developed a utility model around this,

which became the global standard for HP, but soon Mr. Zonneveld noticed a strange pattern in the behaviour of the customers.

"I was working with the big corporates across Europe and they were asking for more IT capacity, more computing and more storage capacity, but I noticed that they were only using a couple of percentage of the capacity," explains Mr. Zonneveld. "I though that is strange, on the one hand they are wanting more and more, yet they are not using it all completely."

After conducting some research, Mr. Zonneveld, found that the reason they were only using a small percentage of this capacity, was due to the unpredictability of peak demand. Major companies, he discovered, were unable to predict how big the demand for their IT capacity would reach, and when this peak would arrive, so they were forced into over buying storage and computing capacity in order to properly ensure they were not caught short.

After his idea was rejected by HP, Mr. Zonneveld quit his job and teamed up with Michel Korpershoek, who was then working for CapGemini. The two formed Greenclouds, a company which aggregates this wasted IT capacity and offers it to its clients at a discounted price.

The partners attracted venture capital firm ICOS Capital to invest in the company early on, and also received a significant grant from the Ministry of Economic Affairs in The Netherlands.

Greenclouds has already attracted major enterprise customers as clients, and some of the big telecoms players as suppliers, on its platform. "On the one hand we have suppliers of capacity which most of the time are telecom companies," says Mr. Zonneveld. "On the other hand we have companies who want cloud capacity and these are all enterprise customers."

One of the firm's latest partners is managed hosting provider i3D.net, which recently announced it is to supply excess I.T. capacity to the Greenclouds platform. Bas Kling, Director of Sales at i3D.net, says: Providing excess IT capacity to Greenclouds enables us to optimize available capacity and resources even further."

The firm is now aiming to expand internationally, particularly into Switzerland, the UK, Germany and Russia. The target is to be in at least three international locations by the end of next year, and after that to open operations in six locations per year. In order to do this the company must find more financing, but Mr. Zonneveld is confident it will come through. "Funding is always a challenge, we are currently in the assessment process with a couple of VCs and we're hoping to finalize that in the coming weeks, and then there is enough funding to do this expansion. What we are doing is setting up local hubs together with big telco players and basically we always aggregate capacity locally and also deliver it locally within a country."

Greenclouds operates in a very competitive market, but an extremely profitable one as well, and there are few, if any, companies which are doing anything similar to its model and platform. The company channels this unique position into a positive philosophy that runs throughout the firm.

"The philosophy is really to make use of all that there already is. The whole IT industry is about over delivering, over selling and our goal is just make use of what there already is. Don't make a new investment but try to use what there is. 90% of the global capacity is not used at the moment and that is not a sustainable model. And that is what we try to do with every aspect of our company — make the best use of the resources available," concludes Mr. Zonneveld. RH

ID Checker

www.idchecker.com

Michael Hagen

Cloud Computing

Netherlands

N/A

» Michael Hagen, CEO of ID Checker, founded the company in 2005 after experiencing a major problem with his previous business. Since then, the company has moved on to solve many more problems surrounding online identification.

Mr. Hagen owned temp agencies before he founded ID Checker, until one day he was visited by the IRS, which came to look at the files and identification documents of his temporary employees. Upon discovering that some of the documents were not properly copied, the IRS imposed a series of fines of just under 1 million Euros on him. Fortunately they gave him the time to get the files together and in line, but Mr. Hagen realized that due to the nature of the problem, this could happen again.

Mr. Hagen went out into the market to find a solution to the problem, and couldn't find one. Therefore he went to Pierre De Boer, who owned an well established internet company at the time, and is now CTO of the firm. The two solved the problem in a couple of months, and their company, IDChecker, became the market leader in the Netherlands within three years.

"We have 8 out of 10 of the larger employers in Holland using ID Checker and using our systems," says Joe Bloemendaal, Business Development Director at IDchecker.com.

Mr. Bloemendaal arrived at the company shortly after its creation, with a vision to take the technology down an additional revenue route. "I wanted to be able to use an ID document as input for electronic

verification — so database lookup. “We set up another company called Data Checker which is still around, we sold it about a year ago. And that set us on another course and it brought us the international expansion that we’ve seen, where we now service not only HR related issues but also financial institutions, gaming and gambling companies.”

The company is now preparing to go into hyper growth due to two drivers. One is the shift to mobile. If a consumer is on his laptop, phone or tablet and wants to buy a product which requires identification, previously they would have had to send it physically. But with the technology that IDChecker offers, they can take out their phone, take a photo of the ID document and send it over and it gets integrated into the process.

Another driver of growth is the increase in business done on a peer to peer basis. For example, if someone is renting a user’s apartment on AirBnB, they would want to know who that person is and verify that they are who they say they are. And further innovation could create many more revenue streams in the future.

“We can bridge the gap between online and offline as well,” says Mr. Bloemendaal. “In the offline world the best way to verify somebody is to look at them and ask to see their ID and connect the dots. One big innovation is we have linked in face recognition into our product suite. Some clients have called it the Holy Grail because before there was always the question – how do I know that I’m actually receiving this ID document from the legitimate holder of it? If we can capture the face and compare that to the image on the ID document with a high level of trustworthiness, then we know that that’s the holder of the document.”

A recent report by MarketsandMarkets claimed that the facial recognition market alone is to reach $6.5 billion by 2018, at the current annual growth rate of 27.7%. “Over the past few years, Facial Recognition Market has crossed the chasm and has become more accurate, less costly and significantly mainstream. This has helped the technology to gain traction and investment from commercial sector,” the report stated.

The company has a busy time ahead, especially as the market is not without heavy competition. But it has set itself ambitious targets. “One is further developing our mobile solutions, that’s an important one. Another is building our presence in the U.S.,” says Mr. Bloemendaal. “And then probably more what we expect that will happen, we will keep growing at a double digit rate every month. We’re going to have to push hard and keep ahead of the competition and grab the opportunities that are out there.”

iData

www.itrack.hu

Lajos Szabo

Software

Hungary

N/A

» Most managers overseeing mileage and fuel consumption on a large fleet of vehicles have to take the driver’s word for it. iData, on the other hand, takes only the data for granted. The company provides a fleet management solution based on real data, not good faith or guesswork, that minimizes fuel and vehicle costs while optimizing driver behavior.

iData provides satellite-based tracking systems, route and fleet management and vehicle theft control. One of the leading fleet tracking solutions in Hungary, the company’s iTrack GPS Tracking System provides an adaptable, versatile and user-friendly approach to GPS vehicle control and fleet management. It takes a much more complex approach over competitive options that merely scrape the surface, explained András Szabó, Co-founder and Director of Company Development for iData. As the needs of its clients can range from the very simple to the very complex, providing a sophisticated system that covers every detail of fuel and vehicle management is key, he explained.

“There are a lot of providers in every country who can locate cars using GPS and use mobile to deliver some level of control or functionality, but it’s really basic,” Szabó said. “Our system is easily customizable, complex, and hard to reproduce. Our competitors have tried to react these last three years, but cannot make anything nearly as good.”

One of its pillar features, iTrack Vizsla, serves as a framework for implementers to make effortless customizations. The company’s Total Fuel Control function that helps fleets optimize their fuel use is one of the few of its kind in the industry. iData’s own customers say the return on investment is less than three months.

“We strive to understand our customers deeply so we can design a solution that’s uniquely applicable to them,” Szabó said. “We have great engineers who can solve problems with solutions difficult to replicate. We give our customers free customization, while most of our competitors will charge thousands of dollars for customization.”

iData is used to help track vehicle energy consumption at E.On, the largest energy company in Hungary. The company has 2,100 vehicles installed with iData tracking. Fuel consumption dropped 7 percent its first year. This year, E.On expects to cut fuel costs 14 percent. “We liked that iData is a fully Hungarian owned company, and every owner has a function in the firm,” said Horváth Gábor, who oversees iData’s project for E.On.. “And last but not least their prices were the best, and it’s all cost, we don’t need to invest anything. They promised a custom system. All of our needs have been met, despite the fact that we made a lot of development requests.”

The company’s founders András Szabó, his brother Lajos Szabó, and Balázs Póka previously worked for the GPS tracking management company Sat-Markt kft, and founded iData in 2006 based on that experience. They developed the device and software solutions internally, tweaking the system in response to customer input. Since its first day of business, iData has enjoyed exponential growth, fueled by the 2009 release of the fuel control system that “essentially sells the whole platform,” Szabó said. Its original team of three engineers has since grown to 15.

Acquiring more than 300 customers last year alone, iData has grown to over 1,000 customers, including Toyota, CIB Bank, and HBM. It earned about $4 million in revenue in 2012. More than 25 percent of its clients are outside of its home base of Hungary, with a high concentration in Eastern Europe where fuel control is a big problem. It plans to expand into Africa in the next year or two.

Bootstrapped, the company invests in R&D from its profit margin. It is considering raising a VC round in order to help facilitate its expansion into Europe.

inbenta

www.inbenta.com

Julio Prada

Software

Spain

No

» Inbenta wants to help businesses build platforms that allow users to talk to search engines like they would to friends. The company specializes in Natural Language Processing (NLP) and semantic search and attempts to help computers understand the human language the way people do. This lets information seekers present their question the way they want, instead of restricting them to specific keywords.

Inbenta started in 2005 in Spain. It was founded by Jordi Torras, who now serves as its CEO and U.S. operations manager. According to Inbenta’s blog, Spain’s Center for Industrial Technology Development bestowed a €420,000 grant on the company in February of 2011. Though Inbenta first specialized in online customer care, in late 2009 they transformed from a service company into a software company. “We had to learn the problem first, and then established a software company,” says Torras.

The company has more than 30 significant clients, including Groupon, Ticketmaster and Deutsche Bank. Its market in Brazil includes five big customers including Oi (the biggest telecom operator in Brazil), Lojas Renner and Porto Seguro. “It started with one customer in Spain that needed to use Portuguese, and from there it was easier to enter the market,” Torras says.

In coming months, Inbenta intends to expand its reach to the Netherlands and Northern Europe, as well as head deeper into current markets. Apart from languages such as English and German, Inbenta plans to support to Dutch, Turkish and Polish in 2 years, and later on Russian, “but at this point we are staying with European languages,” Torras says. The company’s management intends to create a self-serviced software, with 200 small customers and 100 big customers.

Inbenta uses the same core software in every segment. But each new language demands a specialist’s help. “Because we use specific theoretical frameworks, in order to have a new language we cannot use standard available dictionaries, so expanding to new markets requires hiring linguistics,” Torras explains.

Search queries are answered by way of syntax analysis. Traditional platforms don’t always get what humans write on the internet, as sometimes people use the wrong words in the wrong ways. “If I say ‘somebody spent a joke on me’ or ‘I spent a mosquito’, it sounds perfect from a syntactic point of view, but in English it doesn’t make sense. We are actually very limited by lexicon,” Torras explains. Inbenta puts common sense into software so that similar questions submitted by users generate matching answers. For example, the phrases, “I want to buy this product” and “I’m interested in purchasing it” will get the same response from a Virtual Assistant.

Inbenta’s software is based on the Meaning-Text Theory (MTT), a theoretical linguistic framework for the construction of models of natural language that originated in Moscow. “The software translates text into lexicon functions,” Torras says. “We take the contents from our customers and transform them to lexicon functions.” Inbenta’s software redefines phrases so that “close an account” can mean “cancel an account,” while its competitors can’t.

“VoIP is a pretty new technology to most of our users, and one of our biggest challenges is to educate our users about Line2’s capabilities with language that is easily understood. Inbenta helps us bridge the gap by helping users find the technical help they need without having to know all of the telecom jargon we use,” explains Sam DeMello, Customer Service Manager at Line2, a company which adds a second line to your smartphone, dividing work versus personal-life profiles. Inbenta provides Line2 with semantic search functionality, employed in conjunction with their help-desk service. Inbenta allows Line2’s consumers to use their own language when searching Line2’s Help Desk (provided by one of Inbenta’s competitors, ZenDesk).

While quality of search is very important, Line2 chose Inbenta for its quick service. “The day after signing-up for their 30-day trial program, I was on the phone with one of their linguists who had already completely indexed our help desk," DeMello says. Within 24 hours, semantic search was up and running. According to DeMello, since implementation in January, Inbenta has deflected well over 35 percent of the total ticket volume. "They have helped us improve the quality and functionality of our Help Desk resources to the point where we are now able to conduct 90 percent of all customer interaction via email and self-help," he says.

Inbenta's business model is based on monthly subscriptions. But revenues increase at a different pace that sales. "Even with 100 percent growth in sales this is only 50 percent to 60 percent growth in revenue," Torras explains. However, Inbenta has been profitable since the first quarter of 2013, with €2.6 million in revenue, according to the company's management.

Inbenta faces three kinds of competitors. In the enterprise space, Inbenta goes up against companies like Google, Oracle-owned data analyzer Endeca and and Autonomy (an HP-owned company which develops enterprise search and knowledge management applications). More competition comes from international customer care softwares, developed by companies such as eGain, Zendesk and RightNow Technologies (owned by Oracle). Lastly, virtual assistant competitors like Next IT, Virtuoz and Artificial Solutions, also serve as challengers to Inbenta.

"We are in the middle of these three spaces," says Toras, "We are as good as the virtual systems but easy to implement as the enterprise systems, and the cost is similar to the customer care price."

Since Inbenta is smaller than enterprise companies, the difference shows in customer service. "We felt that they were just as interested in seeing the service to our customers improve as they were about landing another account," says R.J. Salow, director of customer service operations at Groupon, which uses Inbenta for customer service.

"The biggest challenge is how to make the company international and find the right model to do that," says Julio Prada, who manages Inbenta's operations in Spain. The business has representatives in several countries in addition to Barcelona. "We want to expand to more countries, but if we are able to get new projects in the USA the biggest challenge is how," Prada concludes. RH

Indisys

www.indisys.es

Pilar Manchon

Other

Spain

Yes

» Taking its name from intelligent dialogue systems, Indisys specializes in machine-human interactions through natural language and dialogue management tools. The Spanish company uses multilingual technology to create what it calls a "functional, social and emotional virtual intelligence" to automate customer interactions in a call center. The company claims to provide a human-like conversational experience.

Indisys claims its Virtual Assistants are the "the most intelligent automated online solutions for online customer service." The service is completely customizable, and can be integrated with pre-existing infrastructure or platforms. The assistants feature a powerful AI engine and 3D graphical interfaces. The company also enables Intelligent Virtual Operators. All services are available on mobile devices.

Other services include a semantic search engine that relies on natural language rather than keywords, Live Chat, Tweets, automated email management and Facebook posts with Virtual Assistants.

The company claims that its virtual assistants lower costs while providing 24/7 availability. Other products include social media tools, ERM and live chat products.

The company's customers include large corporate banks, telecommunications and retail companies. It serves Europe, Latin America and the US. Clients include PhilipMorris, Intel and BBVA.

Founded in 2005, Indisys is headquartered in Seville, Spain. It has raised money from around $7 million from Intel Capital and the Inveready Technology Investment Group. Last September, Intel acquired Indisys.Last September, Intel acquired Indisys.

"Indisys has a deep background in computational linguistics, artificial intelligence, cognitive science, and machine learning," said Erik Jorgensen, Investment Director, Intel Capital, in a statement. "We believe that natural language dialogue will be playing an increasingly important role in the way people communicate with their devices." RH

Innotech Solar

www.innotechsolar.com

Jerry Stokes

Clean Tech

Norway

Yes

» Innotech Solar stands out among other green energy projects in the sense that it is truly green, in cash. Unlike most solar efforts in the world, the company actually turns a profit. in an industry where many have struggled to actually make any money.

Innotech Solar's strong business model separates it from most in the industry. Focused on quality throughout the value chain, Innotech Solar optimizes solar cells through a laser-based testing process that identifies dangerous defects and hot spots, saving up to 90 percent of the energy generated for traditional crystalline modules. Providing a high price performance ratio, the company strives to use 100 percent of the raw materials for energy generation.

"We are making the green industry even greener," said Håvard Lillebo, Chief Commercial Officer, CFO and Founder of Innotech Solar. "We are first movers in this industry and basically developed our technology from scratch. Our intent is to create as much value for the solar industry as possible."

A former finance manager for the European cell manufacturer REC ScanCell, Lillebo saw the need for Innotech Solar's approach first hand. He had a problem with faulty solar cells and did not know what to do with them. He realized this was a universal dilemma for the solar industry, and teamed up with a number of technology experts to find a solution to adequately test and fix the cells. The team convinced Northzone Ventures to invest $1.3 million in seed financing. Its Series A round of $2.5 million was raised in 2008. In total, nearly $60 million in equity has been invested in the company.

"We had an extremely strong business model because the solution was cost competitive," Lillebo said. "In the last five years, we've realized it's clearly possible to solve this problem technologically."

The company sold 38 megawatts of solar energy last year, earning $42 million in revenue. Anticipating massive growth, Lillebo expects the business to produce 50 to 70 megawatts this year. It expects to double or triple its take this year, earning $130 million in revenue within the foreseeable future.

"It still remains to be seen if Innotech Solar can produce a sufficient return on our investment, but being one of the few surviving solar photovoltaic companies in Europe, being able to deliver niche products at competitive prices, puts it in a unique position to build values going forward.," said Tellef Thorleifsson, General Partner at Northzone Ventures.

Based in Norway, the company sells to Italy, Germany, UK, the US, the Netherlands, and China. It has offices in Sweden, Germany, Hong Kong, Shanghai and California.

Achieving profitability in the first quarter of 2013 required several strategic maneuvers. The company had a CEO change, hiring David Hogg, former COO of the largest Chinese solar giant Suntech. Under Hoggs' leadership, it streamlined processes to cut costs by 50 percent and enable profitability on a much higher level while still improving the customer offering. "Our CEO change proved pivotal," Lillebo recalled. In June of 2013, the company recruited Jerry Stokes, former president of Suntech in Europe, to be CEO, while Hogg continues to sit on the board.

Growing from 1.6 gigawatts in 2006 to more than 30 gigawatts in 2012, the solar industry has been growing at a rapid pace of 65 percent annually.

"The future potential is enormous," Lillebo said. "More and more countries are able to provide a lower cost of electricity through solar than from standard sources. It's clearly not stagnating. As the solar industry becomes more competitive, things get extremely interesting." RH

Intune Networks

www.intunenetworks.com

Ian Jenks

Telecommunications

Ireland

Yes

» Networks are extremely complex systems, based on a simple concept. Network operators are constantly trying to improve the efficiency of their networks, and this too can be hugely complicated. But an Irish company called Intune Networks believe they've made one of the biggest breakthroughs in network technology in recent years.

Intune Networks was founded in 1999, and developed an idea which it put to use in what would turn out to be the wrong problem entirely. In 2007, after investment from a number of venture capitalists, the company applied its solution to telecoms networking, and Intune Networks was reborn.

Last year the company shipped its networking solution and has already won its first customer – a Tier 1 service provider in North America, which currently cannot be named.

In order to explain the premise of the Intune Networks solution, it's necessary to first understand the basic concept of networking. There are two main types of technology used in networks — transport and switching. In the context of a road network, the transport element of the technology would be the roads themselves, which take traffic from point A to point B. However, these roads only go from one point to another, therefore it's necessary to build road junctions, which connect up different roads. The junctions are similar to the switching technology found in networking. In order to build a network, transport technology is connected to switches in a mesh type system. If it weren't for the switches, the road network mentioned before would need a road from every house in the world, to every other house in the world. The switches are necessary to reduce the number of roads needed.

Intune Networks has built a networking technology that improves the efficiency of the switching process considerably. The concept is both switching and transporting at the same time, which makes it similar to building a high speed ring road around a city, and using it as a single junction for every house inside that city.

This type of switching has not been done before. Other network solutions use an electronic switching method, which switches pulses of digital 1s and 0s across an electronic cross switch. Intune uses optical switching, which means different colors of light are sent across a piece of fibre. Light on optical fibre travels much further before it runs out of steam, meaning Intune is able to build a local switch that is spread over a large area.

The market which is being targeted by Intune Networks is huge — and potentially extremely profitable for the company. "This is a product that plays into an equipment market that's worth about $19bn per year," explains Richard Brandon, CMO at Intune Networks. "It's a huge market and any one big carrier would be spending north of $100m a year on equipment at this time. We've got aspirations to expand our footprint in our first customer: we're already in two different divisions of that customer."

Back in 2011, the company's last round of funding raised 17.5 million euro, which raised the total amount of investment raised to more than 60 million euro. At the time of the funding, Barry Maloney, partner at Balderton Capital, one of the lead investors, commented: "It's a testament to the strength and potential of Intune Network's technology that it has successfully raised funds in the difficult economic climate of the last five years."

The firm has also sold its product to the Irish government, which bought a test bed, and the company is expecting to see more sales now it is expanding its sales force. "I think 2013 will be a year mostly of tests and pilots, we've been through the labs successfully at Telefonica in Europe as well. Next year our aspiration is to start expanding at volume," adds Mr. Brandon.

Although the firm does not release financial targets, the company has stated its ambition to emulate other start ups in the same space, which become multi-billion dollar companies in their first decade. RH

i-Optics

www.i-optics.com

Jeroen Cammeraat

Medical Devices

Netherlands

Yes

» Few other sectors highlight the vital work that technology start ups are doing for the world than the healthcare industry. The leaps in innovation in this field can save lives, improve quality of life, and give hope to those in the most challenging of circumstances. One area where tech start ups are making huge strides in, is the field of eye healthcare, through diagnostic tools that are more accurate than anything previously used in the sector.

Based in the Netherlands, i-Optics was founded in 2007, with the goal of developing state of the art technology to provide a fast, easy to use, patient friendly and affordable eye diagnosis system for retinal diseases. The first product offered by the company, EasyScan, came out of the University of Delft, in the Netherlands.

"Current solutions can both be expensive and complicated. In terms of patient friendliness and affordability they really lack some functionality. The need for early diagnosis of eye diseases is growing rapidly because of diabetes and ageing populations," says Jeroen Cammeraat, CEO of i-Optics.

The early years of the company were spent developing a prototype of the EasyScan technology. In 2010 Mr. Cammeraat joined the company as an investor and CEO and the following year the firm rolled out EasyScan into the market. Since i-Optics entered the commercial stage of its existence, it has expanded rapidly and now has offices in Germany, the Netherlands and the United States. The U.S. is the company's most important market, according to Mr. Cammeraat.

EasyScan is being sold into two main markets. One of these is the disease management programs, which use the technology for early diagnosis of eye problems related to diabetes. i-Optics is also selling the product into the optical retail market, where it gives optician stores a fast and easy solution to offer to customers for eye health and wellness scan.

The company's second product, Cassini, measures the filament of the eye, the cornea and the refractive properties of the eye. This diagnosis is used for cornea surgeries. Cassini is used in two different cases, one in preparation of Lasik Surgery, and the other is a huge market – planning for cataracts surgery. The product was developed in conjunction with the VU Medical Center in Amsterdam and is set to be launched this year.

"What makes [Cassini] unique is a far superior accuracy and precision to measure the cornea," explains Mr. Cammeraat. "The big benefit will be in surgical outcomes, you will get a much better outcome when determining which lens implant you need to select for the procedure."

"When you look at the success rate today of cataracts surgeries, you have a 40% failure rate where the patient can see clearly, but they still need glasses to see properly. So that's a high number, a 40% failure rate. If you can do a much better measurement of the cornea, you'll be able to lower the failure rate of 40% to maybe 10% or max 15% ,so that's a huge benefit," he adds.

The company has attracted investment and recently raised 11.8 million euro from its D round of financing. The second phase of the D round saw a total of 5.1 million euro of funding provided by new investors, Swiss healthcare investment firm HBM Partners and Netherlands based NIBC Bank. In the first phase of this investment round lead investor Aescap Venture increased its stake in the company, as did family fund De Hoge Dennen.

Patrick Krol, chairman of the i-Optics board and representing leading investor Aescap Venture, sais after the investment round: "i-Optics enjoyed a successful first year of sales in 2012. This shows the market and business potential of smarter eye diagnosis solutions offered by i-Optics. We expect substantial acceleration of revenue growth in the coming years, making i-Optics a global success story in the eye care market."

In the next 4-5 years, i-Optics is aiming to become a 100 million euro revenue company. The goals of the company for the next 18 months all surround the successful commercial roll outs of both of its products, EasyScan and Cassini. The focus for the latter will be in the U.S. "We're really focusing on the US, that's where the really big market is, there are more than 3m cataracts procedures a year, it's huge. So we're focusing on the United States through our sales office in the US," says Mr. Cammeraat.

The market that i-Optics operates in has high barriers to entry, and the company has had to go through clinical trials and other regulatory procedures in order to make sure its products are CE labelled and FDA approved. The early stages of development also requires a large amount of cash, but for the right company, it can all be worth it. "Typically it makes the investment higher risk, but the rewards are also high once you pass all these hurdles, you're into the market, and the benefits can be very substantial," concludes Mr. Cammeraat. RH

Jinny Software

www.jinnysoftware.com

Maxwell Wilkie

Telecommunications

Ireland

No

» Sometimes companies can target the right industry, but the wrong regional market. Jinny Software, a mobile network solutions provider, has been in existence since 1999 but only achieved success when it switched its focus from Europe to the emerging markets.

Jinny Software was set up in the Republic of Ireland offering platforms to the likes of Vodafone Ireland to provide value added services in SMS. However, the company was small, and only served around eight customers, until a switch of leadership led to a change in fortunes. In 2004 the firm appointed Max Wilkie as CEO, and he ushered in a new era for Jinny Software.

"I took the company and said listen, the competitive space within Europe is pretty tough, so let's focus on emerging markets and move the company that way," recalls Mr. Wilkie. "What we've done over the last nine years is grow the company by focusing on emerging markets, focusing largely on standards defined mobile network value added service infrastructure and we've grown."

"To give you a sense, only about 11% of our business last year was in Europe. Africa counts typically for 30-40% of turnover every year. The balance is split between Latin America, North America, the Middle East and Asia, mostly South East Asia," he adds.

The company's strategy has ensured it has avoided markets such as India, Russia and China, which Mr. Wilkie describes as potential pitfalls. Jinny Software now boasts more than 70 customers globally and a vast portfolio of products. However, there are challenges on the horizon for the firm, most notably the massive industry disruption caused by over the top providers such as Skype and WhatsApp. This has affected the mobile network operators that Jinny Software serves greatly, and the firm has had to adapt.

"There are new opportunities in this space, so we're building the company to be focused on three key challenges for mobile operators," says Mr. Wilkie. "One is to ensure the profitability of existing core services. That means finding ways of producing capital expenditure and reducing operational expenditure, which increasingly means providing services from the cloud. Staying relevant in the changing value chain is the second challenge for operators."

The new services which have entered the market over the past few years have led to mobile network providers scrambling to keep up. One of Jinny Software's products is similar to that offered by Skype and WhatsApp in that it is an over the top services that the network providers can offer as part of their own brand.

company url ceo sector country vc$

The final challenge for operators is the transition to fourth generation networks. The roll out of 4G services has long been heralded as a major step for mobile technology. But the majority of geographies still have little 4G coverage. "The reality is that today 80% of access to mobile phone networks is still globally through second generation technology, what is called GSM and Edge in most instances," says Mr. Wilkie. "There is a growing presence in 3G particularly in the markets we're focused in. And 4G becomes another radio access network through which customers can, depending where they are but typically in urban areas, access the network."

This means the operators need to do two things – one is make the experience of the mobile user the same regardless of what speed network they are using. The second is to ensure that the customers are always accessing the best possible network they can be. For example, they may begin speaking to someone over a 2G network, then move onto a 4G network and later onto a 3G network as they move around. Jinny Software has attempted to position itself to provide solutions to these problems.

Despite primarily targeting emerging markets, Jinny Software has also made progress in North America, by targeting the smaller scale markets. "We've grown into the U.S. by deliberately not targeting the big players," says Mr. Wilkie. "Our space out there is in the tier 2, tier 3 players. A lot of mid-western operators that lump themselves together in a grouping called the Competitive Carriers Association."

One of the companies more recent clients in North America is C Spire Wireless, a wireless provider. Jinny Software provided its MMSC picture and group messaging product to the firm.

"Jinny delivered exactly what they said they would – a service infrastructure which met our needs, the needs of our customers, and a solution that would grow with us. We have had an excellent experience working with Jinny and feel we are in a strong position to expand and explore different ways to enhance our services," said Charles Watson, Sr. Technical Infrastructure and NOCC Manager for C Spire.

Jinny Software is targeting 20% growth in revenue this year, and is aiming to continue to make a profit. The other major goal of the firm is to start winning contracts in the new areas of the market it has been targeting. Jinny Software has also made a move into the cloud and has secured its first win in the infrastructure as a service space already. With the major disruption in the market, the company is looking to stay ahead of the curve in a fast changing landscape. "Our ambition for the next 18 months, aside from growth, is to strategically reposition the company away from our existing cash cows into new growth areas," concludes Mr. Wilkie. RH

Jongla

www.jongla.com

Riku Salminen

Mobile

Finland

No

» Mobile messaging applications have improved drastically with performance in smartphones and mobile broadband. Yet big players in mobile like Apple, Google, and Samsung have not been able to establish themselves fully in the messaging market. Why are startups better positioned for success?

One reason is differing attitudes and goals. Industry giants have multiple objectives to consider that startups do not, such as promoting the use of their own devices. Mobile messaging developers at startups are allowed to freely pursue cross-platform messaging, something which is essential to a modern day messenger.

Riku Salminen is the CEO of Jongla, a mobile messaging firm based in Finland. He is not surprised by the struggles bigger players encounter in the messaging space. "The more successful, for once, are startups because of their entrepreneurial mindset and their mission of changing how people communicate in the future," Salminen says. "You are not obliged to follow some agenda which is coming from the corporations; you look at the big picture."

Jongla was founded in 2009, which makes the company a relatively experienced player in the mobile messaging market. Originally the company offered a free messaging application. Monetization came by way of advertising. Jongla's service leveraged existing technologies such as SMS combined with the latest trends in mobile interactivity, and was released in 2010. However, the firm soon made a change in strategy.

"We understood that the world was actually changing very fast and people were willing to find alternative tools for SMS and MMS messaging," Salminen says. "We saw that we were on the right track but the angle was not right for the consumer point of view. At the same time the whole global market changed drastically. The iPhone took off very well and they got a nice market share in a very short period of time and then Google was coming up with the Android." In May of 2012, research provider Informa Telecoms & Media predicted that in terms of traffic worldwide, users will send 7.7 trillion mobile messages a year in 2016.

Jongla witnessed the runaway success of WhatsApp, today one of its main competitors, and the firm adapted its strategy to move into mobile instant messaging. The company optimized its approach by taking all of its development in-house and recruiting workers of 10 different nationalities. The latest version of Jongla was released in December 2012, but the company is already working on an update, Jongla 2.0.

Analysts within the industry believe instant mobile messaging services will impact both consumers and businesses. "With the release of push-based notifications by mobile operating system vendors in 2011, eBusiness professionals got their first glimpse of next-generation messaging services. Third-party application developers, OS vendors, and wireless service providers are rolling out new IP-based messaging services that offer enhanced feature sets and improve upon the user experience," Forrester Research analyst Julie Ask stated in her report on the mobile messaging sector last year.

Jongla no longer uses advertising revenue to monetize its mobile messaging offering. Instead, the company has moved to an in-app purchases business model, which means users are encouraged to buy items such as interactive stickers to use with the app.

"This is something which we are developing right now to make this even better, we are going to introduce more payment options and building our in-app shop as a totally new ecosystem where we can not only sell stickers but any type of digital content that will enrich the user experience," Salminen says.

The firm is currently in its second round of financing, after it initially attracted investment from the Finnish government and some angel investors. Financing remains a challenge, and one Salminen would rather not face, as it distracts him from the work he would rather be doing on the app itself. The cash raised in this latest round will be spent on international investment, as the company looks to expand its presence into countries where the Jongla app has taken off in a big way.

"We are in the middle of a transformation. Right now we can see that there are a couple of countries that are doing particularly well. Thailand is our number one country and it's growing fast," Salminen says. "Indonesia is also waking up and Philippines is doing very well."

Where Jongla moves, the company looks to build relationships with telecom operators to target consumers, as it does through app stores as well.

It was recently reported that WhatsApp rejected a $1 billion acquisition offer by Google. The behemoth's attempt to buy its way into the market reflects the opportunity at stake. And for once, startups have the advantage. RH

LiTHIUM BALANCE

www.lithiumbalance.com

Lars Barkler

Clean Tech

Denmark

No

» Electric cars may save at the gas pump, but it's the price of the battery that zaps a consumer's wallet. The battery is by far the most expensive part of a vehicle, and the owner's biggest liability and its quality and performance determines the performance and lifetime value of the automobile.

Lithium Balance, a supplier of Li-Ion battery management systems for industrial applications, optimizes battery lifetime performance through cell balancing technology. Battery packs, which can have as many as 100 to 200 cells, are only as strong as the weakest cells in the pack. Lithium Balance's technology manages all the cells to work together identically so that the full capacity of the battery pack is always available, increasing the lifetime of the battery pack with a longer charge range and improved durability. It essentially gets all the cells in a battery pack to work together as one.

Placing the system in an electric car improves battery lifetime and range by as much as 40 percent, according to the company.

"The cost of the battery is what is holding back the electric car," said Lars Barkler, CEO of Lithium Balance. "Our goal is to continue to decrease the price of battery management."

Lithium Balance is currently focused on the industrial segment, which provides a more viable business case as it waits for the consumer electric vehicle market to mature. The company has performed a number of pilots with OEMs of electric cars, which are soon expected to hit the market. Its customers are primarily lithium ion battery producers for industrial forklifts, cleaning machines and other industrial vehicles. It also sells directly to battery manufacturers, providing only the battery management system and not the batteries themselves,

About 15 percent of the $15 billion US market for lithium ion batteries are large applications such as vehicles or industrial equipment, but it is expected to grow to reach $6 billion over the next 10 years as electric vehicles become more popular.

The company took a modular approach to its design that provides a more simple but scalable manufacturing process. It uses a few standardized pieces that are combined together into a complete system, allowing volumes to be scaled very quickly, from 12 volts up to 1,000 volts. The system is completely configurable with no programming knowledge required. The system works across a wide range of modules. Its modular approach that enables elastic scalability differs it from competitors, Mr. Barkler explained.

"Our advantage has always been fast cell balancing and our product design that enables mass production," Mr. Barkler said. "We have low cost at high volumes. When the order requirement is high, our quotes are always much cheaper than our competitors."

Lithium Balance's scalability saved it in its early days when demand suddenly spiked, Mr. Barkler explained. Founded in 2006, the company spent a number of years building the platform before landing a customer or two in 2009. In its first month the company landed 15 customers. Now it typically adds 25 new projects per month.

"The key to the long life, safety and performance of any lithium system is the battery management system," said Alastair Johnston, Director of Business Development at Exide, which has been a customer of the company for about 18 months. "Lithium Balance helps us ensure that we deliver the highest quality systems. Without that quality we cannot launch our new lithium business and this is fundamental to growing market share. They are a company that has a solid reputation in the lithium world."

To date, Lithium Balance has implemented systems in over 200 customer applications, half of which are live customers. Though its first couple of years were dedicated to product development, it had 40 percent growth last year, a trend Barkler expects to continue this year. It earned $1.6 million in revenue last year. Based in Denmark, most of Lithium Balance's sales are in Europe, though the company recently focused on building out sales in China with a Chinese sales team. It soon expects to launch a physical presence in the US as well. It has raised $6.5 million in investment.

Lithium Balance also recently landed project of 500,000 systems from an unnamed manufacturer. Barkler expects the company to soon be earning revenues of $100 million. RH

Magine

www.magine.com

Erik Wikstrom

Entertainment & Media

Sweden

No

» Magine releases TV viewers from the ties that bind them to set-top boxes. The Swedish cloud-based TV platform hooks customers up to programming delivered in real time, wherever they are on and on whatever device they choose — so long as the service senses an Internet connection. With its portal and subscription model, Magine solves a self-posited thought problem: "What would TV look like if it were invented today?"

Faster than a speeding buffer and able to leap time gaps in a single finger scroll, Magine plays Superman to mere mortals like cable and satellite. If users miss the beginning of their show, they drag playback to the start, just like DVR. Live TV takes an instant to load, and in demos, CEO Mattias Hjelmstedt shows how easily consumers hop between channels, and between real-time and the past.

The company's marketing messaging depicts traditional TV access methods as out-of-touch and annoying. It paints satellite TV as tough and time-consuming to set up, and torrenting as risky.

According to a 2012 beta user survey conducted last year, cloud-based Magine led more than 800 participants out of 2,000 viewers studied to increase television consumption. Eighty percent reported Magine "has changed the way they watch TV, by enabling them to watch TV in new places," a company release states.

"The regular problems of play services and services that have Internet as a distribution is that you get bandwidth limitations," Hjelmstedt says in a Magine introductory video. "When watching something, you get buffering and problems in watching the screen." Hjelmstedt claims Magine's system leverages tech that serves users better. "We have recreated how we distribute content over Internet as a whole," he says in the clip. "We're not really doing regular streaming; we're using the core of the Internet infrastructure to be able to send to everybody at the same time."

Highlighted features of the service include its Netflix-like search and content storage capabilities. All seem targeted towards on-the-go, flexible twenty-first century viewers who most likely missed their favorite show's season opener last night. Look up a program and Magine lets you watch every associated episode aired in the last 30 days.

Founded in 2011, Magine has not so much crawled from first deployment as sprinted. The company delivered cloud-based TV to Sweden with its "first edition" implementation in April 2013. Three months later, its mobile app beat out all other entertainment apps for the top spot in Apple's Swedish iTunes store.

Summer 2013 saw Magine moving quickly into new markets. In July, their beta product went live in Spain; the following month, the company headed north to Germany, where customers can access Magine in beta as well. Depending on the market, their service provides programming from channel partners whose names Americans would recognize, like Nickelodeon, Comedy Central and BBC.

A recent funding injection will help springboard the company's international prospects. An unnamed group of investors (Swedish and otherwise) raised $19 million for Magine this past July. "On the strength of this fundraising round, Magine predicts that the service will be available to viewers in at least five further markets before the end of the year," a release states.

Those nervous that the service — which stresses maximum mobility while limited by the constraints of Internet connectivity — will make TV-viewing a solitary activity should know Magine plays on TV boxes, too. Depending on the make and model, Magine connects to televisions by cable or wireless means. Displaying, then snapping a QR code on the TV establishes a link between devices and the box, now allowing for smartphones and tablets to be used as remotes.

Magine has told the press broadcasters love their product. The platform plays out like a new trick for old dogs, i.e. broadcasters sick of losing customers because their model's broken for the modern viewer. "Magine is ... devised to make viewers come back to watching TV and this is why broadcasters and content providers are very keen to adopt the service," says Michael Werner, Magine chairman, in a July press release. "Magine helps them create new forms of monetizing whilst respecting the current rights chain." Most recently, news sources and the company report they've paired with smart TV providers in Europe like LG and Panasonic.

For now, Sweden remains the sole stronghold for widespread access to Magine's service. However, in the coming year, the company will move its way across Europe, bringing cutting-edge tech to a cultural institution. RH

Modelity

www.modelity.com

Ayal Leibowitz

Software

Israel

Yes

» The recent economic crisis created a market need for better explanations to clients of how financial tools work. Modelity Technologies Inc. provides financial modeling and analytics platforms for banks, insurance companies and other financial institutions, aiming to help both them and their clients manage their financial products. "Our program shows different scenarios to the client and lets them 'play' and 'feel' the financial product before they buy it, just like you can play with a phone or a tablet before you buy it in a store," says Ayal Leibowitz, Modelity's CEO.

Back in 2000, Avi Ben Moshe, one of Modelity's co-founders, built a computerized engine for a hedge fund in Geneva. Ben Moshe partnered with Leibowitz, who was a program developer with a strong passion for finance. "Programing financial logic, using a business person and not only a program developer, was innovative in the beginning of the 2000," Leibowitz explains.

The two tried to sell their product to international businesses, but the financial crisis in 2008 forced them to focus on the local Israeli market, which was not as severely hit by the downturn. One of their first products was a model for asset allocation and portfolio administration, used by most of the big banks in Israel to this day.

The close-to-home business in Israel is also used as a field for "experiments" with new technologies,"since the Israeli market is always open for new ideas," as Leibowitz describes. Modelity debuted a beta-version technology at Leumi bank. With it, the company tackles one of the biggest market challenges — expanding into unstructured territory.

"Israel is not well known for its financial products market, and I used to get surprised responses asking 'What do you guys have to do with financials? I thought you only deal with security technologies,'" Leibowitz says.

In addition, the relatively low salaries that financial experts receive in Israel (compared to the US or Europe) allow the Israel-based company to keep its costs low, Leibowitz says. With 75 employees, 95 percent of them based in Israel, the savings are significant.

The company entered the international market in 2006, creating financial models for Danske Bank, headquartered in Copenhagen.

"The Scandinavian market was very open to solutions from abroad back then, and relatively developed," says Leibowitz . From that point, Modelity expanded to European markets such as England, Sweden, Italy, France, the Netherlands and more.

Banks get models from Modelity's platforms. The bigger the bank, the greater the usage of the platform, and the larger the profits for Modelity.

"It's funny, but even the largest banks still run a lot of databases on Excel files," Leibowitz says, describing a meeting with one of the largest banks in the US. "The management team took me to the top floor and showed me ten computer screens, lined up in a row, all showing one huge Excel file. They asked me- 'can you help us get rid of this?'," he says. And he did. In fact, the company started to work with large banks such as Citibank, HSBC, Barclays and more, expanding to the U.S. and Canadian markets.

On the other hand, big banks also have their own units creating models, which means more competition for Modelity coming from within their potential customers. The recent crises left the global financial-instrument industry (a sector in which innovation is carefully overseen by regulators) in an unstable position. Financial institutions and banks review their products constantly and often would rather have their own IT segment build a program, rather than use an external company like Modelity.

Starting in Europe may have been a good decision for Modelity. According to Euromoney magazine, about 50 percent of the market for structured products is based in Europe today, compared to 35 percent in Asia and only 15 percent in America. "In fact, developed financial markets that invest mostly in equity and the stock market are precisely not as open to structured products, unlike some classic markets for private banking in Europe, Switzerland for example," Leibowitz explains, "But the United States is getting there, slowly, even though the current structured products there are not as complicated, so our product is not as needed as in Europe."

Even though the company is generating revenue, research and development costs are still very high and comprise most of the company's expenses. "We need to work harder on sales," attribution says.

Most of the initial investments in Modelity came from Eliezer Fishman, one of Israel's most prominent businessmen and the owner of Fishman group, the largest private investment group in Israel. It holds stakes in some of the largest Israeli companies that invest mainly in real estate, retail, media and telecommunications. Other Israeli finance angels invested as well. Israel-based Foriland Investments lists the company in its portfolio, but the Modelity has stopped looking for funding. "We are still interested in strategic investments like an investment branch in a bank that could both invest and become a client," Leibowitz says.

By 2015, Leibowitz expects the company to generate $20 million in revenue, two-thirds of which will come from outside Israel. Already, Modelity earns $4 million steadily from its local market in Israel. Their goal is to expanding internationally, moving on from Europe and the U.S. to Asia. "Our products are mostly found in developed countries like Hong Kong, Japan, Korea and China, these are the big players and we want to try selling directly to them," Leibowitz says.

"Instead of producing product explanation to customers once a year, our program can produce it once a month," Leibowitz says. Simply put: this can help with preventing the next crisis, or at least help bankers delete a lot of burdensome Excel files. RH

MultiTouch

www.multitaction.com

Petri Martikainen

Hardware

Finland

No

» The meteoric rise of the tablet over the past few years has changed the way tech savvy people interact with their devices. Touch screen devices have been threatening to break through into the mainstream market for a long time, and now they are well and truly here. Touch screen has become so integrated into every day life that parents tell stories of their children attempting to swipe, scroll and manoeuvre all sorts of surfaces, believing them to be controllable by touch.

This has led to more and more touch screen being seen in every day life. And the scenarios in which they can be used are plentiful. One company taking advantage of this huge opportunity is MultiTouch, a Finnish firm with headquarters in Helsinki. MultiTouch provides multi user interactive displays and software platforms for customers over a wide range of sectors.

The company was formed in 2007 and initially offered custom made projector based MultiTouch scrolls, but changed its strategy in 2009. The firm switched to LCD back projection displays, which allow unlimited numbers of users to interact with the displays at any given time. The display also identifies and distinguishes between left and right hands, which allows multiple users to be recognised even if they work closely to or reach over another user. The displays are also stackable, meaning multiple displays can be placed side by side as a wall or table in order to build large surfaces.

The firm has targeted six main segments of the market. These are corporate information and communication, productivity and cooperation, education and research, retail, museums and exhibitions and hospitality and entertainment.

MultiTouch CEO Petri Martikainen explains that he is most happy when he sees his products in the education and research sector, where the products are supplied to, among other, the NASA museum. "Personally I'm the happiest when I see satisfied users and that's usually what happens when the kids are using these. Like in NASA, there are thousands of kids using our displays every day and they are usually very happy. That's the best type of customers you can have."

company url ceo sector country vc$

In the education sector the products are used as large interactive teaching tools, where users can explore and interact with information that is displayed on the products. On the retail side of the business, the company has enjoyed success in providing customer engagement in store. The famous Harrods store in London boasts a MultiTouch display for its customers' use.

MultiTouch technology was recently used in two installations at the headquarters of the offices of financial media company Bloomberg in New York. Engage Production, a UK firm, used the firm's MultiTaction technology in a sculptural piece called The Scroll and a touch screen table which is known as The Hub.

"The Scroll is a colourful and playful piece of digital furniture," says Steve Blyth, managing director of Engage. "It gives the impression that a piece of wall has actually come bursting out under the pressure of all the news being produced by Bloomberg. For anyone passing through the lobby, it's a real head-turner, as is The Hub which allows visitors to interact with their environment and underscores Bloomberg's leadership in providing business and financial news and information."

MultiTouch may have been founded and headquartered in Finland, but it has expanded internationally. "We do have a fully owned subsidiary in United States and in Singapore. Basically we have now about 400 customers in 45 countries but if we look where exactly – North America is the biggest market, and Australia is the second biggest single country in the world buying these products," says Mr. Martikainen.

With the company already operating in the world's major markets, it is a different frontier that it is aiming to dive into next – the living room. "Today it's a high end product but we are definitely going in that direction. We've already made some living room tables where when you are not using it, it looks like a designer table but if you touch it, then it comes to life and you're able to do different things," explains Mr. Martikainen.

The interactive display market is fiercely competitive, and MultiTouch has some tough opposition working in the same arena of business. Last year Microsoft signalled its intent in the market when it purchased one of MultiTouch's competitors Perceptive Pixel. And that is not the only giant involved in this lucrative space. "There are the natural players Samsung and LG but at the same time they are cooperating with us – they are competing, but also provided components to us," says Mr. Martikainen. "Then there is the manufacturers providing simple touch displays, meaning single or dual touch. They are competitors in some sense. But I see competitors as a good thing because that is creating the market and creating the demand." RH

MVF Global

mvfglobal.com

Titus Sharpe

Internet/Online

UK

N/A

» For both large and smaller companies, creating international business and leads can be a difficult task. This is why companies often turn to marketing and lead generating firms to help them out.

One company operating this space, MVF, began in 2009 with five friends working out of a basement office in London. Bu the story stretches back further than that — in 2002 one of MVF's co founders and CEO Titus Sharpe started a web agency. He was approached by a U.S. based directory firm, which offered his company a directory listing and some leads for $200 a month. Mr. Sharpe accepted the offer and was delighted when his company was handed 20 leads in the first month. However, by the sixth month, the company only received two leads.

Mr. Sharpe considered this to be a good business proposal that was executed poorly and in 2004 set up Approved Leads, a pay per lead directory company. That firm was sold in 2008 and a year later Mr. Sharpe left. He soon found himself with time on his hands. "I had bit of time off and found myself twiddling my thumbs and got bored quite quickly so I met with other guys who I'd worked with in the past and were also looking for something to do," says Mr. Sharpe. "We started off in my basement in London and we grew the business pretty rapidly. We launched in 2009 and we grew the business to be one of the fastest growing companies in the UK. We now have 150 staff and we're about four years old and our turnover is pretty significant. And it's all been great fun."

MVF works in specific sectors – education, finance, business to business, market research, clean tech, healthcare and international moving. "We help clients in those specific sectors. The key to our success has been our marketing technology platforms that have allowed us to market across all the digital channels and help our customers grow their client base in those specific markets. And we've been market specific for the reason why we see high growth potential," explains Mr. Sharpe.

The company does a lot of work in Brazil and India and other emerging markets, but has no employees on the ground in these countries. Instead, MVF employs multilingual employees in London who can conduct their marketing activities from the UK.

It's easy to see why companies are turning to outside sources for marketing, as a recent report revealed that firms are coming unstuck when it comes to marketing innovation. Research by Forrester recently revealed that only 11% of marketers set aside a specific budget for marketing innovation efforts and the majority of respondents in a survey said they were only in the early stages of innovation maturity.

"Marketing innovation is difficult due to the ever-changing customer landscape caused by digital disruption, perpetually connected customers, and the shifting customer life cycle," says Forrester Vice President and Principal Analyst Bert DuMars in the report.

This is perhaps part of the reason why MVF sees competition in every sector it operates in. "What we find is each market has its competitors. Because we're in seven markets there are two or three competitors in each market we are in that we're concerned about. But we are quite unique in this that we're doing customer acquisition marketing on a global basis and a multi sector basis and there's nobody really like that in the market," says Mr. Sharpe.

The company has performed extremely well over its first few years, and has set itself ambitious targets for the future. "Our goals are very much gross profit focused rather than revenue growth focused. What we find is that we have a few mature verticals that are delivering good profits but we want all our vertical delivering good profits. It will come but it takes time so it's really about making sure that we are making good profit in all the markets we are in. So that's our immediate financial goal. Our long term vision is to be the world's leader in global niche verticals customer acquisition marketing," concludes Mr. Sharpe. RH

myThings

www.myThings.com

Benny Arbel

Internet/Online

UK

Yes

» Online advertising company myThings promises to pull consumers back to web sites they've just left behind — and to do so better than anyone. The European personalized retargeting firm delivers 5 billion impressions per month, and in the past has dramatically increased conversions and click-through rates for customers.

According to a myThings case study, 98 percent of online shoppers don't make purchases before clicking away to greener pastures. Once they've left, myThings unrolls its sleeves to reveal tricks to get them back. Strategies involve targeting, creative displays, and data analysis to pick the right way to say the right thing to the right customer — all at exactly the right time, when they need reminding of a brand's site and inventory.

All banner ads are not displayed equally. In order to pique user interest, myThings gathers what they know about consumers, then serves them ads via different approaches. Basically, myThings reads customers like a book, determines their value to brands, and markets to them accordingly. In turn, advertisers get online shoppers bounding back to sites, as well as the chance to deploy customized impressions across mediums (i.e., video, print). "We have invested over 100 development years to build innovative display technology that is centered on predictive artificial intelligence algorithms," the company's site reads. "These engines analyze hundreds of parameters from six different onsite and offsite data sources to calculate an up-to-the-second user value."

The company is also unique for its model, positioning and partnerships. Though myThings can go traditional if clients choose, they'll also charge via CPA (cost per action) frameworks; meaning customers don't pay until they see the results they came for.

MyThings gets clients in on exclusive channels and close to sales landscapes others will never see, like FBX, Facebook's ad-exchange platform. "As one of few select partners with a direct seat on The Facebook Exchange (FBX), myThings can deliver substantial performance uplift by serving personalized ads on the world's most popular website through a real time bidding mechanism," says myThings' web site.

In order to provide "access to preferred deals and private auctions," myThings pairs with plenty of big-name partners including The Telegraph, The Guardian, Fox, AOL, and Sky, according to myThings' site. Online, myThings also states that "proprietary [bidders] handles 7 billion bid requests per day from 14 top exchanges," listing Google Admeld, Double Click and Rubicon.

Perhaps most impressive: the long list of massive brands partnering with myThings to win customers back to buy. Founded in 2005, the company now works with everyone from Disney, Vodafone and Orange to Walmart, adidas, and Microsoft Store.

A November 2010 press release records myThings raised a $6 million round led by T-Venture. At that time, Accel Partners, Carmel Ventures, Dot Corp and GP Bullhound also contributed. Two years later, Iris Capital joined the ranks, taking the lead role in a round adding $15 million to the pot (Accel, Carmel and T-Venture participated, too), according to a March 2012 release. Another investor, Viola Private Equity, pumped $8.4 million into myThings in May of the same year. In June 2012, a funding-associated release reported total funding at $37 million, spread over four separate rounds.

"Personalizing over a billion banners per month, myThings generates over 150% performance uplift compared to the retargeting industry standard," the funding release says. "Its solutions propel customer acquisition and retention through retargeting, pre-targeting and look-alike targeting, driving sales at scale for the biggest retailers in Europe."

A Carmel Ventures press release announcing myThings as a winner of Deloitte's 2012 Israel Technology Fast 50 Award also declares the company experienced explosive revenue growth: more than 7,800 percent over five years. The company has scaled global and serves 15 markets, while its "number of customers increased 3x in 2012 with 97 percent customer retention rate," according to the release.

While myThings has made its mark on European markets, myThings has yet to fully tap the advertising and publishing opportunities on the other side of the ocean. Chatter in press releases assert Americans are ready for a new advertising model delivered by myThings. In August of this year, myThings opened its second U.S. outpost in New York City, after touching down in Scottsdale and deciding the company needed more hands on deck. "In the first two quarters of 2013 more than 80 new top tier advertisers chose myThings as their data-driven advertising provider," an August 2013 press release reads. "During this period, the company experienced an 800% growth in revenues in the North American market and anticipates a six-fold rise in demand in the upcoming 12 months."

With that expansion, myThings checks another market off its list — and more U.S. customers are suddenly reminded of that thing they wanted to buy online but didn't. Better do it now. RH

Next Media Group

www.nextmedia.ru

Dmitry Sergeev

Mobile

Russia

N/A

» The video game industry has been turned upside down by the popularity of mobile devices. For many it has finally brought about a real opportunity to better target casual gamers, who are typically unwilling to invest a lot of money in consoles or other hardware. Success stories such as Angry Birds and Fruit Ninja have proved this to be the case. For many businesses as well, mobile games have become a core part of their marketing strategy.

One firm which is working in this space is Next Media Group, from Russia. The company works in many different mobile spaces, but its main focus is mobile games publishing.

The products the firm offers work with all types of mobile content from full-length video to music and infotainment. But the Next Media Group sees games as the content with the highest efficiency. It boasts a games catalogue filled with offerings from some of the top publishers, and also games from its own studio, Shamrock Games.

Recent data compiled by Juniper Research revealed that by 2017 there will be 64.1 billion games downloaded onto smart phones and tablet devices, more than three times the number in 2013. This growth rate is being driven by the increase in free to play released, more sophisticated mobile devices and the ongoing popularity of smart phones.

Siân Rowlands, the author of the Juniper Research report, said "Tablet games are growing so much because they are such an accessible way for all consumer segments to access games. In particular mid-core gamers, who previously spent a lot of money and time playing games but now have jobs, families or other commitments, are driving this trend."

The company's revenue increased by nearly $10 million between 2011 and 2012, and is expected to rise a further $3 million in 2013. The company is still looking for investment in some of its ventures. "For several assets we are looking for strategic investors, like for Shamrock Games, our games development company," says Dmitry Sergeev, CEO and co-founder of Next Media Group.

Next Media Group has developed a number of solutions for publishing and distributing mobile games and boasts the largest number of games sales in Russia, where it has two offices – one in Moscow and one in Novosibirsk. It currently employs 120 people. The systems it offers in mobile gaming include payment models such as subscription, pay-per-play and try and buy. The catalogue of offerings tracks users' behaviour analysis and recommends systems based on the user's experience.

The firm's biggest challenge now appears to be staying on top of the game in Russia. Mr. Sergeev lists the challenges as: "To be leader on growing Russian markets and keep it away from newcomers and to succeed with our solutions on international markets. We are focused on emerging markets now,

because it's so close with Russian one by customers point of view." The emerging markets being targeted include Brazil, India and Bangladesh.

Next Media Group is operating in a highly profitable market and has a clear path to success, the company has ambitious financial targets set for itself, but with the right planning in place, there is a good chance it will reach them, particularly if it takes off in the emerging markets it is targeting. In the mean time, the company will rely on its core philosophy: "Be creative. Be smart. Be transparent for your employees and partners. Take a pause, hold on, and look for years ahead," concludes Mr. Sergeev. RH

Nitor Creations

en.nitorcreations.com

Matti Vilmi

Software

Finland

N/A

» For Nitor Creations, sound software architecture and pragmatic agile development processing are the building blocks of software development. The company provides a service solution to high productivity software development, "combining the jaws of agile software development with a lean software architecture design and development process automation," explained Matti Vilmi, the company's CEO.

"Many of our competitors don't think about architecture, but for us, it's an essential part of the software," Vilmi said. "We take into consideration the total cost of ownership of the software."

Its focus on architecture with agile project modeling and software development process automation are the key selling point to the company, Vilmi stated. A financial services company, for example, has an extended application lifecycle. A sound architecture design in development ensures that the cost of the software is optimized despite the long lifecycle. Nitor Creations can also speed up the agile software development process dramatically by automating repetitive manual tasks like testing and deployment, Vilmi explained.

The Finnish company uses a two cycle Pragmatic Agile development process model. A concepting cycle feeds the development team cycle with high quality requirements and ready-made architectural decisions, enabling the development teams to efficiently develop the software that also conforms to the client's architectural decision and guidelines.

It was Nitor's talented personnel and approach to development that proved a key advantage to a Fortune 500 company.

"Nitor has provided us right skills at the right time," said Teresa Sällström, Senior Solution Delivery Manager at the company, which preferred to remain anonymous.. "When comes to seamless development processes, we have experienced benefits that are rare to find, such as a great business understanding of our area.

Their technical skills are in the highest class, which in practice means we haven't spent unnecessary time on trainings or knowledge sharing that would in other cases cause delays to the project."

The company's approach to software development helped one of its biggest customers to shrink its engineering team to a third of its size, establishing more features in the same amount of time with a higher level of automation. Another client saved $1.3 million because the development process was reorganized in a new leaner way to streamline software testing.

Speeding up the development process requires agile business and IT management processes as well. The company therefore launched Nitor Delta, a new business for large scale agile transition services. A certified partner of the Scaled Agile Academy, Nitor Creations offers Scaled Agile Framework (SAFe) training and coaching services. "For a long time, there has been a mismatch between project management level and agile project teams," Vilmi said. "Now with this model our customers can also adopt agile management models to drive the development better and with lesser costs."

The company was founded by six software engineers working for large companies. Without a guide to determine best efforts, they found they spent most of their time "putting out forest fires," not dedicating their expertise to the core process of building high quality software. They founded Nitor Creations in 2007 and have yet to raise any investment.

Operating locally as well as globally, the company currently focuses on large customers mostly operating in Finland and the Nordic region. With large scale agile transition services, the company is now targeting European markets.

The company has been profitable throughout its history, and currently earns a profit margin of 30 percent EBITDA. It earned $8.7 million in 2012 with a growth rate of 57 percent. The company expects to grow profitably and be earning over $13 million in the next three to five years. RH

NLT SPINE

www.nlt-spine.com

Didier Toubia

Life Sciences/Biotech

Israel

Yes

» "One of our board members just called me and said that he can't come to our meeting in New Jersey — he has a back pain," Didier Toubia, the CEO of NLT SPINE told the Red Herring by the end of his interview.

Whether it's the way we bend, the way we sit in front of our computers or how we lift things, we've all had back pain or at least known someone who went through spinal surgery. It is no coincidence that 1.2 million spinal surgeries take place in the U.S. every year, 700,000 of which involve spinal implants, according to data from BioMedGPS, LLC, an intelligence company for life science businesses.

Back surgery lags behind when it comes to minimally invasive surgery (MIS) with about 70 percent of surgeries still invasive, requiring long recovery periods and more risk-taking. When treating heart disease, for example, a patient can go through cardiac catheterization and recover within days. But a spinal repair surgery not only requires a long recovery (up to 24 days), but also demands considerable financial expenses, with the surgery costing $24,000 and the total cost of hospitalization between $60,000 and $100,000.

"People don't want to go through back surgery since it's dangerous and costly. We want to make things different," says Toubia. NLT SPINE was founded in 2006 by Dr. Tzony Siegal, who is currently the Chief Medical Officer of NLT SPINE. The company's non-linear technology is a minimally invasive surgery platform intends to improve cost-effectiveness of spine surgeries and reduce hospitalization and recuperation time.

This innovative MIS technique uses a conduit that is inserted into a small incision and acts as a channel for procedural implants and instruments. The implant or instrument is shaped to form a bar of interconnected segments that are inserted into the spine through a conduit. The segments then bend to form a curved configuration in the spine. This procedure is not as invasive as a general spine surgery, and may thus reduce risk, while saving time and money for the surgeons and patients alike.

"Health systems all over the world are pushing to lower costs," Toubia explains, "It's not about saving a thousand dollars here and there, it's about achieving progress in the industry as a whole, and that means a lot more."

The U.S. spinal fusion market is expected to remain flat at $4.8 billion in revenues in 2013, but should increase to $5.1 billion in 2017, according to BioMedGPS. In 2013, smaller companies are expected to continue to take share from the market leaders, most noticeably in the U.S. market — a good sign for NLT SPINE.

BioMedGPS estimates continued market consolidation in 2013, as larger companies look to acquire innovative technologies, particularly in the MIS space, which NLT focuses on. "We're not looking to sell the company yet," Toubia says. However, he is searching for another strategic partnership to help NLT SPINE improve its market penetration. "This is our biggest challenge now," says Toubia.

About 80 percent of the spine surgery market is controlled by a few big corporations, including Metronic and Johnson & Johnson in the US. "It's a mature market, and entering this market as a small company is challenging, even with innovative technologies," Toubia explains: "Convincing hospitals to buy products from a small company isn't simple, and we can't always support their low-cost expectations."

Smaller leading companies in MIS space are Spineology and Interventional Spine , both located in the U.S. However, neither small nor big competitors provide a platform for a full surgical procedure, as Toubia explains. "Our platform is more versatile, allowing us to give more specific solutions for the market," he says.

Two of the company's lumbar fusion products are currently under limited release in the U.S. One is a tool that helps remove the degenerated disk from the spine, and another is an implant that keeps the spine steady until the vertebrae above and the disk under fuse. What is different about NLT SPINE's implant is that it takes a different shape according to an individual's unique spinal curvature, unlike uniform implants that are used today.

The released products still don't generate sales that cover research and development costs, but Toubia is not aiming for that yet. "At this point we want to improve our technology and marketing, the breakeven point will take a few more years," he says, planning to produce initial revenues by 2014.

The company raised $17.5 Million to date, with investors such as Accelmed in Israel and Peregrine VC in the U.S., and has 19 approved patents. Twenty-seven successful clinical cases with NLT SPINE's products have already taken place around the world. The company works mainly in the U.S. (specifically in Baltimore), but more trials are expected to take place in Germany, Czech Republic and Israel.

Six more products are expected to be released by 2015, and will have different functions regarding back surgery. Among them is an implant that expands the gap between vertebrae and an implant that gives special support the lower spine.

"This technology will allow us to change the way we do back surgery today," Toubia says. With about 30 employees in Israel and a small office in Boston, MA, he intends to keep experiments going, with the goal of turning today's scary and complicated operations into more convenient ones. RH

Oxford Immunotec

oxfordimmunotec.com

Peter Wrighton-Smith

Life Sciences/Biotech

UK

Yes

» Killing over 2 million people per year, tuberculosis is the leading preventable infectious disease death. To treat it, the illness needs to be identified early, ideally before infection has spread into full blown disease. Unfortunately, the current standard test, the Tuberculin Skin Test ('TST'), has a history of false positives, false negatives, and adverse skin reactions, according to the World Health Organization. Yet it has been the fallback solution for identifying TB for over 90 years.

Oxford Immunotec has developed the T-SPOT.TB test, a brand new TB test that overcomes the limitations of the TST test with improved accuracy. As a blood test, its solution fits well into existing laboratory infrastructure as blood is ubiquitous. Once a blood sample is given, patients do not need to return for further testing.

"Tuberculosis is a significant global public health threat that kills more than any in history, but the irony is that it is actually quite curable if caught early," said Peter Wrighton-Smith, CEO of Oxford Immunotec. "Our solution is a really helpful tool to identify TB infection, and it's significantly better than the current test."

Oxford Immunotec has a patented technology for measuring T-cells, an important molecule in the body's immune system for fending off a range of diseases. The company takes a blood sample, separates out the white blood cells, and then adds up the quantity into a standard number. The cells are then provoked with tuberculosis fragments. If the T-cell has been fighting tuberculosis, it will recognize the fragments and secrete germ fighting chemicals.

The company is so far only focused on tuberculosis in order to first prove its business model. Other potentials include autoimmune disease, allergies, cancer, Hepatitis C, and other illnesses that have no current vaccine. Wrighton-Smith expects the company to introduce cancer recognition strategies by 2016. "We are developing a very significant step forward in the early identification of infection and disease," Wrighton-Smith said.

The company received European clearance for its product by 2004, and FDA approval in 2008. It has since expanded into Japan and China. Today, Oxford Immunotec serves over 45 countries around the world. It earned $21 million in 2012, growing about 60 percent annually for the last three years.

Serving over 50 million TB tests per a year, the market opportunity for TB testing is between $1 billion and $2 billion annually. Yet aside from the antiquated skin test, it faces only one competitor, QuantiFERON. Though Wrighton-Smith points out the market is sizable enough for both companies to be successful, he listed some key advantages for Oxford Immunotec: a higher performing test and the ability to make the test available as a service.

The company earned its name from a close association with the University of Oxford, where Wrighton-Smith earned a PhD in engineering. He first got bitten by the entrepreneurial bug working as a CEO for PowderJect, a developer of cellular immune based diagnostics. Following that company, he approached Oxford's Technology Unit in search of a new technology to launch a business. He met with Ajit Lalvani, who introduced him to the platform that would become Oxford Immunotec. The two co-founders spent the first year and a half setting up key license and supply arrangements in order to develop a system that is commercially viable. It achieved EU approval in 2004, less than two years after it first went to market.

Based in the UK, the company has raised $110 million from NLV Partners, Kaiser Permanente Ventures, Clarus Ventures, Wellington Partners, Kuwait-based National Technology Enterprises Company, SPARK Ventures, DFJ Esprit, Oxford University and The Dow Chemical Company.

"We already see a strong market pull for Oxford Immunotec's products, including from emerging countries, and there will be a time when the 100 year plus old skin-test for LTBI will not be regarded as ethical anymore, so the whole market might convert to the two IGRAs, of which T-SPOT.TB is the one with the higher accuracy," said Rainer Strohmenger, a General Partner in the Life Sciences division of Wellington Partners.

Not yet profitable, Oxford Immunotec's next priorities are to invest in its market trajectory.

"The market clearly exists," Wrighton-Smith said. "We are replacing a very flawed test in a market large enough to support many players. We are in a fantastic place of being able to execute." RH

PacketFront

www.pfsw.com

Ulf Avrin

Telecommunications

Sweden

Yes

» Nearly as complicated as the human body, data networks are their own central nervous systems. Whether introducing new hardware, an improved service capability, or adding customers to the network, any change requires complicated tweaks to parameters and configurations to ensure network performance. Operators are forced to either do the work in-house or pay expensive system integrators like IBM or Amdocs to build a system, which wears thin on margins.

PacketFront provides fully automated and harmonized networks with end to end service activation. It provides network and service management that complements already existing networks.

"Very few can provide an out-of-box solution that enables this kind of automation," said Ulf Avrin, CEO of PacketFront. "We position ourselves as a strongly packaged software provider that includes all the elements needed to automate a network and minimize consultancy."

Whereas most operator solutions are 20 percent product and 80 percent integration, PacketFront turns that model on its head at 80 percent product and 20 percent integration. "Typically with costs, we see order of magnitudes improvement," Avrin said. "You don't have to run complicated systems. Making adjustments becomes really simple, and you also see radical improvements in quality, thanks to automation."

Considering that many systems in the traditional telco market need to be revamped to accommodate recent technological advancements, PacketFront faces a sizable market, according to Arvin. "A technology cycle change is happening," Avrin said. "People see improvements that need to be done to accommodate higher bandwidths, so we see huge opportunity in the traditional telco market."

Founded in 2000, PacketFront's roots trace to Bredbandsbolaget, which in 2000 was the world's largest fiber optic residential network built in Sweden and used Cisco equipment. They realized that products designed for enterprise use were not optimal for a large residential network, requiring many more endpoints and a much more dynamic setup at generally a larger scale. Several in Cisco and in Bredbandsbolaget realized a better approach, and left their respective employers to found PacketFront.

The company sold a complete solution for customer premise equipment, growing considerably through 2006 until the market unexpectedly died in 2007. The next few years proved a difficult time for the company, which filed for Chapter 11 in 2010. In 2011, the founders recapitalized the company and cleaned out its debt. It spun out several divisions of the company separately to run more effectively, with the software division launching independently as PacketFront in 2011. All other divisions have since been sold.

"In terms of the company, we are a startup with small team that is VC funded, but in terms of product, we have been on the market for quite some time with proven technology," Avrin said.

Though the company originally targeted small fiber networks, it has transitioned in the last 18 months to serve large providers, including Radius, the largest fiber operator in India, and Com Hem, the largest fiber provider in Sweden. Employing 25 people, PacketFront earned nearly $4 million in revenue with a 30 percent growth rate. As it continues its transition to larger network providers, Avrin expects the company to achieve growth rates of 45 percent per year. It serves telco broadband networks, enterprise communication networks, and data centers.

Peter Eriksson, a manager of Com Hem, had searched a long time for a quality, non-proprietary system to handle IP networks and services. Com Hem now uses PacketFront to plan MDU networks, allocate resources, upgrade firmware, configure and verify functionality of the access path from BNG to media converter including distribution and access switch stacks.

"There are not many good systems out there to buy, and normally we end up writing something ourselves to really get what we want," Eriksson said. "But PacketFront was the exception. They really helped me set up a smooth automatic process for network rollout with their system BECS. We can now roll out a high quality new network very quickly."

Based in Stockholm, Sweden, the company competes against upper tier solutions like IBM and HP, which typically have legacy systems that are expensive and not as automated, Avrin said.

Bootstrapped since it was spun out independently, PacketFront could easily multiply its numbers by 50 or 100, Avrin indicated. "I don't think we are very far away where capital is the only limitation to what we can do," Avrin said. RH

ParStream

www.parstream.com

Michael Hummel

Big Data/Storage

Germany

Yes

» As data volumes continue to explode at an increasingly accelerated rate, the next step is being able to access it at lightening speeds so companies can respond in real-time. To achieve real-time understanding, large amounts of data need to be analyzed down to the millisecond, and that includes the continual waterfall of changing raw data.

For ParStream, the next tech revolution isn't just in big data, but in fast data. Using a high performance compressed data index, the company provides big data analytics in real-time. In most instances, it provides results within two seconds, but can react within milliseconds for such use cases as recommendation engines, advert delivery tracking and optimization, equipment and process monitoring and control, and network analytics monitoring.

"We talk fast data in contrast to big data," said Michael Hummel, CEO of ParStream. "To achieve real-time speed, you need to change from a technological perspective and really go deep into the data system, find the right data structures, and apply massively paralleled algorithms to different distribution systems. This level of speed is only possible through a high level of complexity."

The application use cases include just about every instance where real-time reaction is essential. Companies in monitoring and analytics, fraud detection, and the e-commerce advertising space can immediately respond to new data. Advertisers can instantly react to changing customer behavior to show the right adverts and better engage with users.

ParStream's speed took more than five years to build, Mr. Hummel said. The company began in the European tourism industry, where airfare, hotels, car rentals and other accommodations are often sold as package units with a high degree of data renewal. The German market alone has 14 billion tourist package accommodations, each with different prices and features. The company sought an end user approach that analyzed the best travel offerings based on 25 different criteria from 14 billion records, handling up to 1,000 queries per second in peak times. The closest alternative the company could find was MongoDB, which still proved 100 times too slow.

The data compression needed to deal with enormous data volumes was a formidable roadblock to high speed analytics, Mr. Hummel explained. ParStream developed a new compression technique that allowed it to analyze a bitmap index in its entirety at lightning speeds. It launched its first prototype at a travel exhibition in 2009 and landed its first customer outside of the travel business by the end of the year. The company added pilot customers over the next two years strengthened the maturity of the product, adding SQL interface, full class support, and interfaces into third party applications.

Today the company serves customers in the e-commerce, vertical, tourism and financial sectors, and is close to signing a deal in the teleco industry. It serves seven customers in Germany, Austria, Switzerland, and France. Working on a six to 12 month sales cycle, it is currently testing products with several well-known companies in the U.S., with deals soon expected.

ParStream is currently earning seven figure revenues and strives to reach $100 million in the next three to five years. He expects profitability by 2015. Based in Cologne, Germany, the company has raised $7.7 million from Khosla Ventures, Baker Capital, CrunchFund, Data Collective, Tola Capital and private investors. It competes against HP's Vertica in the U.S. and SAP HANA in Europe.

"The ParStream team has demonstrated that their deep technical capability and their business solution stands out amongst others in the industry," said Vinod Khosla, founding partner of Khosla Ventures. "They are disrupting the data analytics market through the daunting task of analyzing massive amounts of data in sub-seconds and providing customers with real answers to their biggest business challenges, specifically in ecommerce environments."

Mr. Hummel estimates ParStream serves a two digit billion dollar market opportunity, "larger than the $30 billion big data market by 2015," he said. "Big data is changing all industries. The market opportunity is enormous."

Paylogic

www.paylogic.com

Theo Hoeksema

Internet/Online

Netherlands

No

» When e-tickets became mainstream back in the middle of the last decade, the whole ticketing industry changed irreversibly. The vast majority of ticket sales are now done online, and event organizers have benefitted from a burgeoning ticket sales industry, providing new innovations and services to the sector.

Paylogic, a European based ticketing company based in Amsterdam, was founded in 2005, although the company did not always concentrate on the ticketing industry. The firm was originally a software development business and created several internet based products. But when e-ticketing kicked off in the Netherlands, the Paylogic saw an opportunity, and seized it. Within a few years the company had quit its other activities and was concentrating solely on ticketing.

The ticketing market is extremely competitive, with several big names players dominating the space. But Paylogic has worked to make sure its technology is a major differentiator. "First of all we focus on the bigger more professional event organisers — so the bigger festivals, the bigger concerts, and technology-wise we provide the most flexible platform," says Theo Hoeksema, CEO of Paylogic.

"We did Tomorrowland which is one of the most popular festivals in the world and we sold about 100,000 tickets within an hour, and within a second there were a million people wanting tickets, and nine out of ten ticketing businesses would have gone down. So we can handle the high loads, we deliver a full service product to our customers," he adds.

Another key differentiator is that the firm attempts to sell tickets from the site of the event organizer, rather than from its own platform or website. And the system works even when the main website is down. "We were amazed by the powerful solution Paylogic provided to sell tickets to over 100.000 visitors of million's interested ones, even when our own website was down Paylogic's system kept on working perfectly," said Geert Dethier, Operations Manager, Tomorrowland.

NoorderHuys, an investment company focusing on medium sized business in the Netherlands, invested 3 million Euros into the company in 2010, which was then called Accepte, and Paylogic was its main product.

Paylogic is looking to expand out of Europe and enter into new territories, but not before it solidifies its position in Europe. "First of all we want to focus on the bigger, more professional events organizers. And to have a strong position in the leading countries in Europe would be our first goal," says Mr. Hoeksema. "Secondary is also to expand much further in other region like the United States, South America and China would be especially interesting. Basically we want to deliver our service and our representation worldwide. But starting with Europe."

The majority of the company's experience so far has been in Europe, and excelling in other markets creates new challenges. "Every market is a bit different — Germany is a bit different from the Netherlands and France and the UK. They are 80% similar but the way you do business is different and also the way of doing ticket sales, so they are mostly cultural differences that you need to be flexible about. The cultural differences are probably the most complex ones, especially finding the right people in each country — that's also a really big challenge," says Mr. Hoeksema.

PAYMILL

www.paymill.com

Mark Henkel

Professional Services

Germany

Yes

» The number of regulations in Europe concerning online payments has made the process much more difficult than in the U.S. As a result, although there are many online payment offerings coming out of North America, there are not so many being developed in Europe which are able to cater for the stringent regulations.

Paymill is a German firm operating in this exact field. The company was founded by former consultants, who decided a solution was needed for the complex and often frustrating process of companies accepting online payments.

The company was founded in 2012, and has grown rapidly. "In the beginning we just started in Austria and Germany but there were so many people contacting us from the UK, Spain and France and asking us could you please also offer your services in our countries, it showed us that there was a big need for this in this area," explains Mark Henkel, CEO of Paymill.

The biggest challenge for any company delivering payment solutions is the regulations. Due to fears over the funding of terrorism and fraud, a merchant must know who the person is that is sending their money to them. In the U.S. this is easily done through the social security number, but in Europe there is no equivalent.

Some of the obstacles the company has had to overcome so far include finding the right marketing strategy. "Marketing in B2B is completely different to B2C. We're not offering shoes out of a garage but a solid software helping people to make payments easier, and finding the right approach and marketing channel was not easy," says Mr. Henkel.

The firm also encountered difficulties working with some of the banks in Europe. "Working together with banks in Germany and Europe was quite cumbersome because these guys are usually stubborn and outdated. And they are not very innovative so it was quite hard for us to find banks that would make this new innovative payment deal with us," says Mr. Henkel. "Now we are working together with European banks so we can allow 39 countries in Europe to process payments with us. And the US players are working mainly with non-European banks and so they don't have the same reach as we have."

The company secured additional funding in February this year, bringing the total capital it has raised between Blumberg Capital, Sunstone and Holzbrinck to well over 10m euros. "This is an exceptional team going aggressively after an underserved market globally, and we are excited to be part of the team," said Jon Soberg, Managing Director at Blumberg Capital.

Now Paymill's sole goal is to continue to grow and provide its solutions to more companies in Europe, it currently does not have plans to enter the North American market. "We have a solid product in place, we have more than 1000 customers and we just want to increase the number of our customers," says Mr. Henkel. RH

Payson

www.payson.se

Oskar Bjursten

Internet/Online

Sweden

Yes

» A leader in P2P payments in Sweden, Payson specializes in secure Internet payments between individuals. The company provides fast and secure payments via credit card or through a banking solution without the buyer or seller needing to submit sensitive information.

The company offers the Payson Guarantee, which holds the payment until both buyer and seller are satisfied. Employing 11 to 50 people, it is based in Stockholm, Sweden. It was founded in 2003. In 2012, it became the subsidiary of Svea Ekonomi AB. It has raised just over $1 million in two rounds of funding.

Payson competes against Paypal, Klarna, Dibs, and Payex. It differentiates itself through a transaction based revenue model with no fixed fees that includes all necessary payment methods for a web merchant. The company offers the first P2P payment service to Facebook connections with a credit card on file. RH

Phinergy

www.phinergy.com

Aviv Tzidon

Clean Tech

Israel

Yes

» Imagine that you could drink a bottle of water and fill up "gas" in your car at the same time. If you ask Phinergy's Founder and Chief Executive Officer (CEO), Aviv Tzidon, this process is part of everyday life. Tzidon drives a car his company has developed, powered by air and water.

Tzidon's Israel-based company, Phinergy, creates electric vehicles. It develops zero-emission, high energy-density systems based on metal-air energy technologies, mainly aluminum-air and zinc-air batteries.

Phinergy's aluminum battery consists of 50 aluminum plates that allow a 20-mile drive each. Every couple hundred miles, drivers must stop for "gas" (i.e. water), but the car's total range adds up to 1,000 miles. In addition, Phinergy's rechargeable zinc-air battery is resistant to dendrite formation, unlike other zinc-air batteries.

Since the '80s, air-battery technology created a "gold rush" among various companies and research centers around the globe. Lithium-air batteries are expected to improve the range of electric vehicles, solving one of the electric car's main problems. These batteries contain "air cathodes" that draw oxygen from the air, but conventional bulky cathodes contain oxidizers within the battery itself, carry the oxygen, and have many CO2-related failure problems.

"Metal-air technology came out with over-promise, but under-delivered," Tzidon says, "In the past these metal-air batteries would last for only 40 to 50 hours, but we've managed to pass 20,000 hours of constant operation." The company started with one pending patent, and today it has one granted patent and 15 pending.

The technology was initially developed at Bar Ilan University by Professor Arie Zaban, Head of Bar-Ilan Institute of Nanotechnology & Advanced Materials (BINA). It was created as an oxygen depolarized cathode (ODC) in 2000. Dr. Eric Khasin, Chief Scientist at Phinergy and former researcher at Bar-Ilan, developed a nano-silver catalyst at Bar-Ilan along with Zaban's group for 8 years. This catalyst proved to be the component metal-air batteries had been missing in the past. Tzidon decided to buy the technology in 2008 and use it as a cathode for metal-air batteries, attempting to turn the catalyst into a strong and long-holding cathode.

Phinergy's metal-air batteries freely breathe oxygen from the ambient air to release the energy contained in metals. The company developed an air electrode with a silver-based catalyst and structure that lets oxygen enter the cell, while blocking CO2. Thus, the operational lifespan can last longer: thousands of hours, according to Tzidon. At 55 pounds, the battery is also quite light in weight.

What's the secret? Aluminum plate anodes implemented in the battery. Aluminum batteries have a great energetic potential, with 8 kilowatt-hour (kWh) compared to 0.2 to 0.3 kWh average in most electric vehicles, according to Tzidon.

company url ceo sector country vc$

However, Phinergy's aluminum batteries are not rechargeable. Once the energy is expended, the plates need to be replaced. According to the company, though, this process is quicker than recharging. The aluminum is also recyclable, unlike other metals. Due to then nature of the technology, Phinergy sees its aluminum-air technology as a range-extender working in conjunction with the traditional lithium-ion battery, which would handle daily commuting energy needs. The aluminum-air battery would only provide the extra range when needed.

Tzidon says Phinergy works with a leading European OEM (an expert car manufacturer) in the hopes that the company's metal-air battery technology may be commercially available in vehicles by 2017. "Until then we still have to improve the total CO2 impact and the system's life cycle," Tzidon says.

The company also signed an agreement with Alcoa for the production of relatively low-priced aluminum. "This will allow us to be competitive in KwH price compared to a diesel or gas-fueled cars, but it's hard since we are competing with a technology that is hundred-years old," Tzidon mentions.

"Our strategy was to prove the technology in the most complicated market, and then go to other markets," Tzidon says. Phinergy decided to focus on the vehicle market first, but its metal-air tech can be used in different markets, including aerospace and defense, consumer electronic devices, smart grid energy storage, and UAVs and boats, the company says.

By 2017, Tzidon hopes to have positive cash flows and to increase sales by leveraging a competitive price and targeting a niche market (i.e. the emergency generator segment).

Phinergy's technology is sophisticated, and so are its backers. Tzidon was the first to invest, and he explains that its investor group is comprised of people familiar with the company. Until today, most VCs and other potential investors found the technology too risky, but Tzidon is not worried. "We'd rather put more effort into making the technology work than trying to convince others that it's working," Tzidon says. "Our current investors made the decision to keep supporting the company until its profitable," he adds.

Companies like A123 and Tesla have tried to use similar technologies to Phinergy's. However, Tesla's final product is expected to be a luxury car that would cost at least $70,000 to $80,000 due to its battery's high ticket price. Phinergy, on the other hand, is focused on middle-class usage of the technology. There are a few startups that have tried to revive the 20-year-old technology, but none have reached the same development stages that Phinergy has.

In just a few years, this once-unsuccessful technology may turn into the secret that will allow electric cars to run for longer periods of time, fueled with water. Until then Phinergy has to keep up with development efforts, competition, and most importantly, a strong belief in its technology. RH

Pozitron

www.pozitron.com

Fatih Isbecer

Software

Turkey

No

» The mobile revolution has completely transformed how we do business, yet many companies struggle to adapt to the new world. Providing out-of-the box yet easily customizable solutions for mobile banking, mobile payments, mobile sales force collaboration, and secure authentication, Pozitron eases the transition to mobile with a simple to use solution, personalized for each client.

"We open powerful channels of interactions for large companies," said Firat Isbecer, cofounder of Pozitron. "We don't just build the channel. We design, grow and develop each channel with our clients. We carry them quickly to the mobile channel with a competitive user experience based on multiple channels of interaction across a variety of platforms."

The company can open a mobile channel for a bank in less than eight weeks for example, where most competitive solutions can take six to seven months. The company uses a lean methodology to quickly implement the product, but then tweaks and perfects the offering in response to customer feedback. Each product is structured around a proprietary code base, but can then be differentiated according to the client's specific needs.

Pozitron serves around 30 clients, mostly blue chip, high revenue Fortune 1000 businesses, adding about three to four customers per year for a 15 percent annual growth. The company works with eBay, a strong reference that helps give it clout. It serves 12 different countries, including the US, Germany, South Africa, and Mexico. The company recently opened an office in the Bay Area.

Based in Istanbul, Turkey, Pozitron has a rich history in mobile that goes back to its founding in 2005. Founders Isbecer, his brother Fatih Isbecer, and Mete Balci began focusing the company on mobile as early as 2006, providing Java-based mobile software for banks and ecommerce companies a year ahead of the iPhone when even Blackberry's mobile offering was fairly rudimentary. "When the iPhone app store came out in 2008, we were the only company in our region that had substantial knowhow in mobile," Isbecer remembered.

The company began building mobile software solutions, eventually constructing a backbone platform to streamline the process. The core back end continually evolves. The company recently added push notification with geolocation that can send messages based on location with a personalized message.

In the last two years, the company has become the market leader for mobile banking in Turkey, holding more than 50 percent of market share in terms of mobile banking software vendors. Pozitron is targeted to earn $10 million this year. Over the last five years, its revenue has grown 85 percent, mostly through product cross-selling. The company is profitable with high margins.

Self-funded, the company seeks growth funding to help fuel its US expansion. "In terms of global software, the US is absolutely the best market," Isbecer said.

Pozitron competes against Antenna Software and mFoundry, but differentiates in its lean methodology as well as customization options, Isbecer said.

In the next three to four years, Isbecer expects Pozitron to be earning $60 million in revenue.

"Every single business needs to embrace multi-channel strategies, or they won't compete," Isbecer said. "We offer experience backed by proven technology." RH

Proxistore

www.proxistore.com

Bruno Van Boucq

Marketing/Advertising/SEO

Belgium

N/A

» Local advertising has traditionally been very easy, a company wanting to target the consumers near to its store would place adverts in local newspapers, magazines and billboards. But as print advertising continues to fall, and online ad spend stays strong, the question of how to advertise a local business becomes more complicated. Geolocalized advertising appears to be the answer.

"Everyone is aware that the revenues from publishers in the traditional newspapers have been declining for years. The digital advertising market is going up, we're also aware of that," says Frederic Convent, Chief Financial Officer of Proxistore, a firm offering commercial geo-localised web services. "But it's very curious to see that the newspaper digital advertising is rather flat. So in other words on digital newspapers on websites from newspapers you see that there is still a lot of unused ad inventory that management of the unused advertising inventory could be optimised so there is a large room for the monetisation of online audience."

"That's one element, and the second element is that we see that local advertising on the web is not so strong yet. Compared to radio, television and also door to doors and print newspapers, digital newspaper advertising does not promote enough local businesses," he adds.

Proxistore attempts to solve this problem though a technology that geolocalizes customers, so local advertisers can target only the consumers in their area. There are a number of ways to localize a user on the internet. One is to use the I.P. address, another is to do it based on their Wi-Fi system and it can also be done by tapping into GPS enabled devices. However, Proxistore uses another system.

"The most transparent and legal way to localize a user, if you consider all the rules of privacy, is the cookies. The cookies that an internet user uses is answering and saying ok I live there and that's my zip code etc. Then it is crystal clear we know where they are," says Mr. Convent.

"Once that localization is done we can bring local campaigns that are running on national website so that somebody that is based in Brussels can see on a website from La Monde can see an advertising of a local store within his city or community or zip code. And somebody who is looking at the exact same website in Antwerp will not see that because it's not a campaign for him," he adds.

Proxistore is an extremely young company, having spun off from BeWeb, an internet display advertising firm. Despite this, the firm still has strong plans for international expansion. Proxistore has the most contacts in its base in Belgium, but in September it is also going to begin operation in France, making use of the contacts it's parent company BeWeb has in the country. The company also plans to start working in Germany, and recently signed a deal with a young company called YieldLab to offer real time bidding technology in that market.

"The integration of Proxistore and Yieldlab will once again significantly increase the transaction volume on the Yieldlab platform. The combination of Proxistore and Yieldlab offers the local marketers an independent and strong complete solution in the area of inventory optimization" explains Marco Klimkeit, founder and Managing Director of Yieldlab.

Proxistore also has its eye on the North American market, and the west coast in particular. Representatives of the firm went on an economic mission over the summer to the west coast with Phillipe of Belgium, who at the time was a Prince, and is now the King of Belgium. The firm is currently closing a fundraising round and will have to consult with new shareholder any plans for major international expansion, however.

The firm now has ambitious targets to hit. "First of all I think that we should target in 2015 a revenue of around 20 million euro and being also in positive figures, not before," says Mr. Convent. "That's something that we should keep in mind. We should of course continue innovation of our product and consider all the challenges. What about geolocalization with mobile technology?"

Proxistore will also develop more real time bidding technology and welcome its new financial partners in the coming months. "If we are successful in all of these things then we will have done an extremely good job," concludes Mr. Convent. RH

Puzzlepart

www.puzzlepart.com

Steffen Norby

Software

Norway

No

» Microsoft's SharePoint may have over 100 million users, but as enterprise software, it doesn't really get a lot of love. Most users don't understand its intricacies and functioning to get the real value from it. Useful but complicated, SharePoint remains a problem child with a complexly robust feature set that's difficult to grasp.

Puzzlepart, a Norway-based company, believes that business software should be just as easy to install, customize and empower as consumer software. It designs SharePoint apps that simplify the use of the platform while taking full advantage of its functioning.

"We try to do for the business side what Apple has done for the consumer side," said Steffen Norby, CEO of Puzzlepart. "We empower SharePoint by delivering real business value for the platform. SharePoint is fascinating in the sense that it's a number of Microsoft acquisitions fitted together. Puzzlepart's provides consultancy to help it all fit together and deliver functionality out of the box."

The company features a suite of four packaged apps: the Did app, enabling time management and time sheeting capabilities; the Play app, a gamification engine; the Whoodoo app, a tool for project management; and the Hired app, which facilitates collaborative recruiting.

Puzzlepart's technology helped customer and partner 4Subsea improve collaboration efforts of their own as well as their clients'.

"Puzzlepart improves the SharePoint experience by providing good design and usability," said Øyvind Tveit, manager of engineering at 4Subsea. "It has been our choice since it adds value to 4Subsea's engineering services — we are able to combine SharePoint technology with engineering services to increase value to our customers."

Puzzlepart began developing SharePoint apps several years ago before Microsoft had even released a developer's platform. The company designed its own platform, and then integrated it into SharePoint's once the API had been released. Today the company sells its software apps through a cloud model. The company has development operations in India and Sri Lanka, with clients all over the world. .

Mr. Norby claims the company doesn't yet have much competition, and what does exist on the market offers little functionality. "When the marketplace for SharePoint is mature, it will be much easier for business users to buy these types of applications," Mr. Norby said. "We want to be an early adopter in a new ecosystem."

Puzzlepart does not really expect the market to mature until well into 2014, with business really picking up a few years after that. The company currently serves about 20 large enterprise customers. It earned $1.5 million in 2011, and $2 million in 2012. It is on track to earn $2.5 million this year. By 2016 or 2017, Mr. Norby expects the company to be earning at least a $15 million with high margins of 40 to 50 percent.

"We are the tiger in the grass waiting for the prey, but we don't need to make the big money right now," Mr. Norby said. "We're letting the market mature."

The company was founded in 2008 by Mads Nissen, an expert on the Microsoft platform who received Microsoft's Most Valuable Professional Award for his community efforts for SharePoint. He had the idea to sell Sharepoint apps in the same way Apple did with its app store. He developed the idea for two years before recruiting developers and launching Puzzlepart. They took two years to develop the core platform. They released it to customers at the end of 2012.

Self-financed, the company earns its bread and butter through selling custom apps, and then investing that revenue back into the company. It has always been in the black.

In the next five years, Mr. Norby envisions Puzzlepart to be a $100 million company. In that case, an acquisition would be tempting, Mr. Norby admits, especially if the company could achieve wide usage to fetch an attractive price. "We're really looking towards a possible exit strategy with Microsoft," he concluded. RH

RTR Rete Rinnovabile

www.rtrenergy.it

Paolo Lugiato

Clean Tech

Italy

N/A

» Italy's 16 gigawatt solar energy market is highly fragmented, with the top 10 players in the market owning less than a 5 percent share . RTR Rete Rinnovabile owns more than 117 plants producing over 400 GWh of electricity per year. These plants prevent more than 200,000 tons of carbon dioxide from polluting the atmosphere, according to the company.

In addition to being the largest solar provider in Europe, RTR stands out in the solar market for its high tech approach. It uses automated technology to optimize its solar output and has developed a real-time monitoring system that observes energy performance.

Text messages and emails are immediately sent to technicians as soon as energy lags. Typically solar panels are connected together so that one dysfunction can knock out an entire line. However, RTR Rete Rinnovabile's are equipped with power optimizers to ensure the entire system continues to work if a panel is suffering temporary shadows or breaks down. The company also tested a new algorithm for inverters that could maximizes output, optimizing the conversion of DC current into AC current for use in a commercial electrical grid.

"Typically, solar power plants are just seen as a real estate investment, where the utility just buys or builds the asset and runs it for 20 years to get incentives and sell energy," said Paolo Lugiato, CEO of RTR. "We are one of the few to have a utility approach. Our objective is to produce energy, and we have to maximize the production out of our plants."

Though it has no venture funding, RTR is 100 percent owned by Terra Firma, the private equity fund, which strives to bring the company's monitoring and energy optimization techniques to the solar markets in other countries.

Because it can test the optimization of plants, RTR makes an ideal partner for every startup striving to develop novel approaches to the photovoltaic industry. "We have a very powerful tool monitoring system that can collect, analyze and compare data, so we're continually developing new products to increase performances," Mr. Lugiato said. "We make an ideal R&D case for business."

RTR's monitoring system led RTR to change the acute angle of panels in two large plants, improving the energy harvested by as much as 3.5 percent. When a new Italian energy law required solar utility companies to predict their output in advance, RTR was able to quickly develop an internal algorithm, based on weather forecasts, that could forsee plant production 48 hours in advance.

Founded through the acquisition of a number of solar plants, RTR launched in March 2011 with already established infrastructure but no actual team. Mr. Lugiato was the first hire, and his immediate task was to assemble a technical team to handle maintenance and optimization, a business team to pursue growth opportunities, and a finance team.

The company achieved profitability last year and earned revenues of $113 million in 2011 and $186 million in 2012 at a 64 percent annual growth rate.

No other competitor offers a similar real-time monitoring system, according to the company. "The only real competition we face is on the acquisition of what is available on the market," Mr. Lugiato said. "If we do well and squeeze assets, it's good for everybody."

Mr. Lugiato's personal goal is to reach 500 megawatts by 2015. The company continues to pursue acquisitions, and has the objective to increase its solar plants by 10 percent by the end of 2013.

"In a mature market like this, we have plenty of opportunities to grow, geographically and technologically," Mr. Lugiato said. "The future of our technology is the grid parity. Ideally, the value of this technology will continue to accrue as we extract more value from it." RH

Sefaira

www.sefaira.com

Mads Jensen

Clean Tech

UK

Yes

» Green initiatives have spread through every industry, as the world attempts to stem the flow of dangerous climate change. One of the sectors that has addressed this issue is construction, and organizations such as the US Green Buiilding Council have been working tirelessly for a number of years to ensure construction firms are striving to build the most sustainable buildings possible. Efficiency and technology walk hand in hand, so it is no surprise that it is a technology firm, with a cloud based offering, that is giving architects the tools to design green buildings, with half the hassle.

Historically when an architect is designing a building, should they need to calculate the energy efficiency of the project they are working on, they would have to consult a specialist engineer, a process which can take up to several weeks. Therefore, architects have always finished their design prior to submitting it for performance analysis. This limits the number of changes the architects can make, without adding large amounts of time onto the design process. But a UK based firm called Sefaira, has come up with a solution that can calculate the efficiency of the design in real time.

"We're embedding energy analysis right into the CAD (Computer aided design) program of the architect," says Mads Jensen, CEO of Sefaira. "So instead of having to involve an engineer to specialise software to do different modelling, we can use our CAD program with our cloud platform and we can do energy analysis in real time."

The company was founded in 2009 and endured a lengthy design process before taking its software to market, where it was received with excitement by architects. It took three years to be launched, mainly due to the extremely complicated nature of what the company was trying to do. "Effectively we're taking a process that has in the past taken hours and hours to run, and we've got to calculate all the energy flows of a building and everything that's going on and compress that process down into seconds. It's one of those things, in research you don't necessarily know how hard it's going to be when you set out but we found a way through it and got out the other end," says Mr. Jensen. Having gotten over the technological challenge, the Sefaira software is now used by more than 160 architectural companies.

A recent report from McGraw-Hill Construction revealed that construction firms are steadily shifting their focus towards green buildings. The study revealed that 51% of respondents are planning more than 60% of their work to be green by 2015. This number has increased dramatically from previous studies, where 285 of respondents said 60% of their work would be green in 2013.

"The acceleration of the green building marketplace around the world is creating markets for green building products and technologies, which in turn will lead to faster growth of green building," says Harvey Bernstein, vice president of Industry Insights and Alliances at McGraw-Hill Construction. "And the fact that green is growing in all parts of the world indicates that there are market opportunities in both established markets as well as developing countries."

The hard work put in by Sefaira has paid off, as they are the only firm offering this type of software. "Our platform is the only platform in the industry that can do energy analysis in real time. There are plenty of traditional engineering software that runs on a desktop and will take hours and hours to do a simulation and so no other software can do what we're doing. It's completely unique and that's a big differentiator. For the first time it's a relevant part of the design process. You can't stop every time you make a change to the design and then wait two hours to see what happens," says Mr. Jensen.

Sefaira has had a good knowledge base in the market space it operates in since its birth. Mr. Jensen previously worked for IBM and has a background in technology. Co-Founder Peter Krebs is a trained civil engineer as well as a technology entrepreneur and worked on the prestigious The Solaire project in New York city, one of the first Gold rated green buildings in the U.S.

Orgnizations such as the U.S. Green Building Council are hugely influential in this space, and it is behind LEED, a ratings system for green buildings that construction firms strive for. "One of the things we're seeing in bodies like the Green uilding Council do, is they are starting to focus more on the importance of embedding analysis as part of the design process. And one of the upcoming changes to the LEED rating systems they are proposing is that design teams will get LEED credits for incorporating energy analysis as part of the early stages of the design process," says Mr. Jensen. RH

Sefamerve

www.sefamerve.com

Metin Okur

Internet/Online

Turkey

No

» The largest e-commerce portal in Turkey, Sefamerve offers choice and traditional Islamic clothing for women. Serving a demographic of Muslim women who choose to dress conservatively, the company provides clothing and other accessories that meet the traditional standards of Islamic dress.

"We provide choice for Muslim women," said Tayfun Uslu, co-founder of Sefamerve. "Women love these products. The choice of selection we offer empowers them to be beautiful within the standards of traditional Islamic dress."

Sefamerve drives its marketing efforts through social media. The company has a large social reach on Facebook with nearly 2 million likes. All customer service inquiries are handled through Facebook, with an average query response time of 10 minutes. The company receives 450 million Facebook impressions per month. It runs call center operations and employs a Facebook management team to give customers better personal attention.

Roughly 1.2 million of Sefamerve's Facebook likes come from Turkey, while the other 700,000 come from Islamic communities primarily in Europe. The company plans to expand soon into North Africa, followed by the Middle East and Asia.

According to Sefamerve, the company has shipped over 500,000 items of merchandise, and the majority of its goods are delivered within 24 hours.

Sefamerve was founded in 2011 by Oya Erciyes. Returning to Turkey after briefly residing in Canada, she noticed that Turkish citizens who wear a hijab did not have access to a variety of styles and qualities in brick and mortar stores. Meanwhile, Erciyes' brother Mehmet Okur had developed a sizeable fanbase on Facebook through his development of applications . The two teamed up to sell merchandise online.

The company is off to a good start. In its first year, it went from zero revenue to $9 million. Mr. Uslu expects the company to earn $25 million this year. In the last 16 months, revenue has grown 16 times over and there is plenty of room for growth. Sefamerve plans to triple its revenue in Turkey, adding a potential 5 million customers. With 1.6 billion Muslims in the world purchasing $120 billion in goods, according to an IBIS Global Apparel Manufacturing Market Research Report, Mr. Uslu estimates the company's target market is easily worth $25 billion.

"If we can increase the performance of Turkey and repeat that in other countries, Sefamerve has tremendous potential," Mr. Uslu said. "We have a solid business model with a low-cost acquisition of customers. Our community is dedicated and engaged. We have huge potential in the lifestyle business."

Wim Jagtenberg, CEO of Youdagames, wrote the business plan for Sefamerve. He points out that about 40 million Turkish people live in the Netherlands, France, Belgium and Denmark, which is about half the population of Turkey itself. The strength of the Turkish market combined with the potential of Europe offers enticing opportunities for the company, he said.

"Excluding Turkey, the turnover in Europe is about €100,000 monthly, but is mainly from the sites that are translated (German, French) with the wrong payment methods (credit card and PayPal)," Mr. Jatenberg said. "Translating to Dutch should make them €10,000 to € 20,000 monthly without any effort. Adding IDEAL, the payment method used for 90 percent plus of the population, will also double the turnover."

Sefamerve's presence in Turkey is roughly 10 times the size of its presence throughout Europe, Mr. Uslu indicated. RH

Showroomprive

www.showroomprive.com

Thierry Petit

Internet/Online

France

Yes

» Showroomprive provides a members-only eCommerce platform that enables up to 70 percent discounts on leading brands. The site features ready-to-wear merchandise for men, women and children, including fashion accessories, lingerie, beauty products, as well as toys and home decoration.

Through a partnership with Société Générale and an SSL protocol, the company ensures secure payments through credit, debit card or Paypal. The company also has a large mobile presence with more than 1.5 million downloads that make up 45 percent of its traffic.

Self-funded and profitable since inception, Showroomprive achieves roughly $320 million in annual sales, selling 50 million articles per year. About 70 percent of its turnover includes accessories or shoes. The average consumer shopping basket is $65.

But the company's secret is not what it offers customers, but what it provides the brands, explained Thierry Petit, Co-founder and CEO of Showroomprive. The company works with brands to alleviate overstock, which allows it to offer considerable discounts on big name merchandise. In many ways, the company is actually a B2B business rather than a B2C in the way it helps companies quickly sell a huge volume of unsold merchandise, Petit explained. In some cases, it can sell 50,000 orders of a particular item in just a few days.

"If you have the brands, you'll have the consumer," Mr. Petit said. "We offer real value to our brands. They give us their overstocks, and we provide them a way to sell their overstocked products very quickly to avoid distribution problems. It is critical that we are able to sell a large volume of merchandise in just two days. By delivering a mass market to brands on unsold merchandise, we are able to provide a huge discount on well recognized brands."

Mr. Petit has a long history in Internet ecommerce startups. In 1999, he won a Microsoft award for best app after creating a worldwide internet portal for L'Oréal. He also launched the first online price comparison site in France, toobo.com, which Tiscali acquired in 2000.

In 2006, Mr. Petit launched Showroomprive together with David Dayan, an entrepreneur in the stock clearance and private offline sales profession. Accel Partners bought 30 percent of its shares in 2010 in order to fuel the company's growth and foray into new countries.

The background of the company's founders has helped it succeed in an arena where many others have failed, Mr. Petit explained. Mr. Dayan holds 20 years of sourcing experience, which is complemented by Mr. Petit's media and ecommerce background.

Showroomprive has grown to more than 4 million members to date who have bought at least once from the site, growing 20 percent annually. Customer orders tend to be high with repeated buying patterns and 75 percent of its turnover is generated through loyal buyers. Its sales grow about 15 percent annually. Mr. Petit expects Showroomprive to reach $650 million in sales in the next two years. The company competes against Privalia and VentesPrivees.com. "We have now reached a critical size that allows us to grow faster," Mr. Petit said. "The most important thing is to be able to drive a good margin with good execution and capacity. Creating an engaged base has been critical."

Based in France, the company's primarily sells to Europe, including Spain, Italy, France, Portugal, the UK the Netherlands, and Belgium. It has plans to soon enter Brazil. Expansion in the U.S. is particularly challenging, as physical outlet retail stores are already strong and attract most of the inventories, according to the company. RH

Sievo

www.sievo.com

Fabrice Saporito

Cloud Computing

Finland

No

» If you want to know where money can be saved, you first need to identify where it is spent. The process of identifying procurement savings can be tricky. But new software solutions are offering a simple solution to a crucial problem.

Sievo offers a 'Procurement Performance Management' solution that identifies procurement savings through a platform which manages every step of a project. It simplifies budgeting and forecasting future spend and embedded savings, controls the realization of savings according to budgets and compares those savings with other financial periods. The platform essentially provides an accurate picture of where a company spends money, where it can save, and how much each decision impacts its bottom line. More importantly, Sievo provides an accurate way to measure the savings success of procurement teams to enable rewards.

"We provide a solution that bridges the finance and procurement world," said Fabrice Saporito, CEO of Sievo. "We help finance to not only understand what procurement does, but enable procurement departments to be recognized for the work they are doing. That is game changing when it comes to how the procurement space affects the finance function."

The company's software relies on three components. The data extractor pulls information from multiple sources and integrates it into a database. A collaborative web platform enables suppliers to provide detailed invoice data so clients can track, spend, and measure performance and savings. And a data manager translates the data into multiple languages and provides universal measurements to assess performance.

Sievo's software typically enables 40 percent savings to its clients' bottom line, as well as an 80 percent savings reduction in maverick buying, according to the company's website. Its technology allowed Lego to identify procurement losses that led to a 50 percent savings, simply by tweaking its supply change to better suite demand.

After analyzing the competition, Sievo stood out for the agility of the solution, said Alvaro Castro Martinez, Director of Operations for Bankia, a Sievo customer.

"The Sievo software was easy to implement and very easy to use for both technical and end-users, as it is based on selections using visual clicks, graphics and colors. It is very intuitive," Mr. Martinez said. "It benefits us in the way that the end-user does not depend on anyone to get savings indicators, supplier management or categories of purchases."

Mr. Saporito estimates Sievo can benefit from a $1.5 billion market opportunity. The company currently serves over 40 clients on the corporate level, growing at 50 percent annually for the last three years.

Although the Finnish company's customers are historically Nordic, more than 60 percent of its revenues today come from outside Finland. The company has clients in France, Spain, the UK, Switzerland, Germany, and Saudi Arabia. Sievo plans to expand to the United States in the coming year as well as the Middle East.

Sievo was founded by Matti Sillanpää and Sammeli Sammalkorpi, who met at the Helsinki University of Technology. Working for a local management consultancy firm, they understood the massive manual work needed to coordinate expenses, and decided to develop an automated solution. Mr. Saporito met them in 2004. The French CEO, who won the Booz & Company's Professional Excellence Award for the successful turnaround of LEGO in 2004, liked the approach of the Finnish startup, but thought it lacked differentiation. He encouraged them to address the procurement performance management space with a solution that managed current spending as well as projected future spending. The approach worked, with Lego signing up as a client by the end of 2004. A second client arrived in 2006, and the company has been on a growth trajectory ever since.

Without a dime of venture funding, the company has grown to 40 people, including 12 added in the last year. Saporito is looking to raise a Series A next year. Profitable since landing its first client, the company has yet to have negative year. Last year brought a margin of around 10 percent.

Mr. Saporito views Sievo as a $70 million to $100 million opportunity over the next few years. "Companies continue to outsource and have external purchases growing at a rampant pace," he said. "They need to get control, and it's not going to be with traditional solution. Sievo provides a robust approach that goes beyond basic expenses to deliver real savings that can have meaningful impact on the bottom line." RH

Sigfox

www.sigfox.com

Ludovic Le Moan

Telecommunications

France

Yes

» The Internet of Everything, a concept involving the linking of billions of everyday devices in a simple and effective way, has been around for many years. The phrase first surfaced in 1999 and since then technology experts have been predicting the rise of the concept, which is also referred to as the Internet of Things and M2M.

Finally, the timing seems to be right for the Internet of Everything to take off. A recent report by ABI Research revealed that there are now more than 10 billion wirelessly connected devices in the market today, and over 30 billion connected devices are expected by the year 2020.

Huge leaps in technology have spurred on the growth, and boosted the industry as they have made connecting devices more efficient and cheaper.

"The emergence of standardized ultra-low power wireless technologies is one of the main enablers of the IoE, with semiconductor vendors and standards bodies at the forefront of the market push, helping to bring the IoE into reality," said Peter Cooney, practice director at ABI Research. "The year 2013 is seen by many as the year of the Internet of Everything, but it will still be many years until it reaches its full potential. The next 5 years will be pivotal in its growth and establishment as a tangible concept to the consumer."

Entrepreneurs are rushing to take advantage of this boom, and many have been working in this space for a long time. One company which boasts experience in the Internet of Everything space is SigFox, a cellular network operator which concentrates on low bandwidth solutions for the smaller devices which will make up the Internet of Everything.

"The existing connectivity solutions such as the telcos aren't good enough for these low bandwidth objects," explains Thomas Nicholls, Internet of things Evangelist at SigFox. "So we at Sigfox as a cellular network operator, we cater specifically for these objects, they just need to exchange small messages once in a while. We do that by answering the major headaches that are within the industry."

The major headaches which Mr. Nicholls refers to are the cost of connectivity, energy consumption and complexity. The firm has been able to drive prices down to just £1 per object, per year in subscription costs, which has gone a long way to ease the fears of mounting costs when connecting devices to the internet. Mr. Nicholls says that clients of Sigfox are now using batteries in their objects which will last for more than 20 years, so technology is advancing to address the issue of energy consumption.

Finally there is the complexity problem, which Sigfox believes it has solved. "We've taken it to the extreme where you can buy an off the shelf modem, not even from us but from the regular providers, then you subscribe your IT system to our web services API, which is just a regular standard API and then that's it, you're up and running," says Mr. Nicholls. "There is no longer a need to install it yourself and operate network equipment or have your customers configure wi-fi connections etc. and no need to implement sophisticated APIs to integrate your IT system with the operator. Basically a very simple solution which is extremely cost effective and low energy consuming."

SigFox operates in the whole of France and is aiming to have complete nationwide coverage in the Netherlands by the end of the year. The firm has also begun operations in St. Petersburg and Moscow in Russia and plans to roll out to many more countries in the future. To deploy the Sigfox network in a country similar to France costs less than 5 million Euros in capital expenditure, which means it is not too expensive to roll out into a new country. This is partly because the Sigfox network is deployed in the Industrial, Scientific and Medical (ISM) bands of frequency, so there is no need to pay for a license. The company has also devised a strategy to build quickly in new territories, called the SNO, or Sigfox Network Operators. Companies in the countries where Sigfox is expanding are encouraged to become exclusive partners in their country and are made responsible for installing and maintaining the physical infrastructure. The chosen partner can then distribute and sell subscriptions within those countries. These strategies mean the company hopes to be present in 60 new countries within the next 3-5 years.

A look at the diverse range of clients which use the Sigfox network displays the potential of the Internet of Everything, and gives an indication of what is capable when everyday objects can be connected to the internet with ease. One client produces smoke alarms which are able to send 'heartbeats' to the manufacturer, which are signals sent every day to tell the company that they are operational, and the owners do not need to carry out any maintenance on them. These smoke alarms can also send alerts to house owners if there is a fire and the owners are not home, by sending an alert to the mobile phone of the owners. Some of the more exotic uses of the Internet of Things are devices which are put in the ears of cows in the Pyrenees mountains, which make a sound if the cow moves out of a designated area. The sound forces the cow to stay within an area without the need for fences. Another is a client who had designed a sensor which is able to alert homeowners to the presence of termites in the wood of the house.

Markets such as the Internet of Everything will always attract young companies looking to make quick money from a popular trend, but companies such as Sigfox are not only operating in the sector, but enabling its growth. "We're in this game because we know ourselves, from having had other companies that we've even successfully sold etc, we know what this business is about and we know that this has been a headache that has been there for a long time," concludes Mr. Nicholls. RH

SkySQL

www.skysql.com

Patrik Sallner

Software

Finland

Yes

» When a system becomes extremely popular, industries can spring up which offer support to them. One example is the case of MySql, an open source relational database management system.

MySql was bought by Sun in 2008 for $1 billion, and Sun was in turn bought by Oracle for $7.4 billion in 2010. Shortly after the Oracle acquisition, 20 employees of MySql left the company and founded a new company called SkySql, which provides services to MySql users.

"Over the past two and a half years we've built up a base of about 350 enterprise customers in about 20 different countries," explains Patrik Sallner, CEO of SkySql. "They are quite big enterprises in many different parts of the world. We've also in parallel built up a portfolio of different products that enable the deployment of databases effectively in cloud environments which is becoming more and more of a requirement."

The firm made a major market move when it announced it was to merge with a firm called Monty Program, the creators of the MariaDB database solution. "We are growing extremely quickly right now thanks to that acquisition and spreading out globally. So the goal for us is to become the leading database provider in the world and we believe we have a very strong product serving various different needs in the market place."

Michael 'Monty' Widenius, CTO of the MariaDB Foundation, said about the merger: "With this merger and my own role in the MariaDB Foundation, I'm ensuring that the MariaDB project will remain 'open source forever', while knowing that enterprise and community users of both the MySQL & MariaDB databases will benefit from best-in-breed products, services and support provided by SkySQL. And who doesn't want the best for their children?"

The addition of MariaDB to SkySql's offerings comes at an important time for open source databases. A survey conducted by 451 Research recently suggested that, by 2018, of those using any form of MySql variation, only 45% will actually be using MySql, compared to 62% in 2013. The research firm claims that by 2018 the majority of companies will be using alternatives such as MariaDB, Percona Server and Amazon RDS. The proportion using MariaDB in particular is expected to grow to 23% in 2018, from 145 today.

Monty Program was also set up by former executives of MySql, meaning the firm will boast even more know how of the MySql program and its origins. "The interesting thing is that after the merger we have most of the original core MySql developers, a lot of the technical talent and much of the original technical support team from mySql as well, so a lot of deep MySql expertise, that means that we've had unusually high customer satisfaction and also very high renewal rates of agreements. So 90% of our customers renew their agreements every year, which is unusual in this industry," says Sallner.

SkySql is headquartered in Helsinki, Finland and employs 70 people right now, but only has one office with five people working in it. The company uses an unorthodox set up for its employees, where the majority of them are working from home. This allows the firm to recruit the top people regardless of where they are based, and also enables it to adopt a 'follow the sun' organization, where people are hired in time zones where the firm needs more capacity. This means there is no need for night shifts, as there are always employees in the next time zone ready to take over once an employee's shift is over.

Employing talent in multiple countries to work remotely also improves the proximity to customers, and can be done fairly efficiently with the best collaboration tools which are on the market. SkySql does make sure that all of the employees meet each other face to face at least once a year, when it holds a company meeting which all employees attend.

Despite the company's strong organization and customer satisfaction, there are still challenges ahead. "We're still a fairly small company and our brand isn't especially well known. Especially in North America we are still building the awareness of who we are and what we do so one important step will be for us to increase the awareness and the adoption of MariaDB and also work with some partners to accelerate the growth of the business, that's going to be a big step forward," explains Sallner.

SkySql secured $20 million in Series B investment in October from Intel Capital, California Technology Ventures, Finnish Industry Investment, Open Ocean Capital and Spintop Private Partners.

Another challenge for the company is increased competition in the market. Although there have previously been only a handful of main players, in the past few years hundreds of database technologies have emerged. "So the challenge for us is to have a very clear positioning in all of this and that is something we continue to work on and we have a clear message to the customers to maintain a visibility and awareness of what we can do," concludes Sallner. RH

smartTrade Technologies

www.smart-trade.net

Harry Gozlan

Software

France

Yes

» Providing the first and most advanced liquidity management system for capital markets, smartTrade Technologies simplifies the trading exchange floor down to an app. Based on the idea that markets are essentially conversations, smartTrade creates digital conversational nodes for banks, brokers and exchanges, complete with execution protocols that can be abstracted for all asset classes. SmartTrade can automate trades across eight different asset classes, across 10 regions, and provide a different way to execute the order for each specific instance.

"This replaces the big switch board and the universe of traders," said Harry Gozlan, CEO and Founder of smartTrade Technologies. "With our technology, anyone can address any type of trading platform in a very short time frame in a very reliable manner. Our software identifies the best trade or order in the market. smartTrade works like an air traffic controller managing many different types of planes."

Headquartered in Aix-en-Provence in the South of France, smartTrade serves 10 or 12 of the largest tier trading institutions in the world. "With us, they can rely on the same core technology to build several different trading solutions, which is a great relief to a bank," Gozlan said. "Small banks, especially, cannot really just step back and streamline all they have built for 40 years."

The company currently serves 45 clients, including tier 1 and tier 2 banks, hedge funds, brokers and asset managers such as aiwa, Kepler, Nomura, FXSpotStream, BPCE, RBS, Société Générale and Deutsche Bank. It has been growing at 25 percent annually.

Gozlan founded smartTrade in 1999 following his own experience as an investment banker for 13 years. "I realized the next trading wave would not come from complex installments, but in the ways trades are executed, which is still pretty archaic," Gozlan said. He teamed up with several technologists and signed the first company's client a year later. In the first nine years, the company leveraged about eight large clients such as HRBC, adding an average of two to three per year. Today, the company averages about eight to 10 new clients annually.

Gozlan expects smartTrade to be earning around $50 million in revenue in the next three to five years. It has raised an undisclosed amount of venture funding from SEEFT Ventures. He estimates the company could eventually be earning $70 million to $100 million if it continues to focus on a pure trading world.

"It's a pure engineer and technical market now," Gozlan said. "You no longer need to understand how the market works. smartTrade has made trading a purely technical question." RH

Softkey

www.softkey.ru

Felix Muchnik

Software

Russia

Yes

» Before Softkey launched its online marketplace for consumer software in the late 90s, Russian ecommerce was its own desolate Siberia. Nearly impossible to buy legally, software was sold in boxes that had to be mailed to the buyer in a process that could take months due to the massive size of the country. Often, the programs were already outdated by the time they arrived.

When a severe economic crisis hit the country in the late '90s, Softkey realized it needed an easier selling model and that the Internet would be a perfect vehicle to connect with customers, despite the mere 15 percent web adoption rate in Russia at the time.

Bootstrapped from the financial pooling of its founders, the company launched an ecommerce platform that could handle both B2B and B2C customers well before selling online was a reality in Russia. Knowing it would take a while to grow an online business from just one vendor, Softkey chose to launch a marketplace for multiple vendors to offer more for the online shelves. Founded in 2001, Softkey issued its first order nine months later. Though not a well-known fact, the first electronic version of Microsoft software had been suggested for Softkey to sell, according to Felix Moochnick, CEO of Softkey.

"We realized the box software model would fail sooner or later, so we provided a technology that allows retail chains to sell digital software through the integration of our platform," Moochnick said. "We built a new way for software to be sold in Russia. Together with a few other stores, we are building the ecommerce world of Russia."

During its first year, Softkey earned $750,000 and had five employees. It has since nearly multiplied its revenue 100x and employs a staff of 100. "When I first announced that selling online was our future, no one except my wife believed me," Moochnick joked. "But it was clear early on the Internet would be quite a trend for business. Software was the perfect place to start selling."

Serving today's $3.6 billion Russian software market, the company's technology platform and ecommerce engine allows digital software and content to be sold to any party across multiple payment systems. Over 3,000 vendors now use the platform, primarily small and medium vendors who use it to sell across multiple nationalities and currencies. The company serves primarily Russia and former Soviet Union countries.

Softkey sells to about 1.6 million active B2C customers, and over 300,000 B2B customers. With over 8 million orders, B2B makes up about 60 percent of the company's revenue, yet its B2C base is growing fast. Over the past few years, the company has grown from $14 million in revenue to nearly $60 million in revenue. It expects to earn around $70 million this year. Breaking even four or five years ago, the company earns about 15 to 20 percent EBITA, but reinvests back into its operations. "In our changing world, we realize we continually need to update the platform to keep it fresh and interesting to stay ahead of the demands of the market," Moochnick said.

The platform's continual evolution grows with the times. "Softkey's developers continuously improve its performance and usability," said Sergey Zemkov, Managing Director of Kaspersky Lab, one of Softkey's first software ecommerce partners. "They appeared to be the first who introduced a technology of digital software sales in brick and mortar retail, thus significantly reduced logistic and inventory costs."

Softkey competes against international ecommerce players such as Digital River, but is the only one to provide direct sales or B2B sales. Softkey currently holds over 50 percent of the $150 million ecommerce software market in Russia.

Despite its revenues, Softkey has yet to make IPO plans. "It is still too early," Moochnick said. RH

Solutions 30

www.solutions30.com

Gianbeppi Fortis

Other

France

Yes

» For older generations in particular, new technologies can seem like inaccessible alternate universes. Solutions 30 opens a portal. The company makes tech support house calls throughout Europe to make technology available to everyone. The company's network of over 1,500 technicians provide on-site or remote one-on-one support to over 4,000 customers every day. As the name of the company suggests, Solutions 30 will suggest a solution within 30 minutes of receiving a query, the issues being typically resolved in under 48 hours.

"We help people take advantage of new technology," said Gianbeppi Fortis, CEO of Solutions 30. "New technologies come to the market faster and faster, and people just don't know how to use them. There's constant demand. We set up and provide an understanding for a wide network of technologies."

Operating in Belgium, France, Germany, Italy, the Netherlands and Spain, the company addresses several key technological areas. These include IT telecom, energy (specifically smart meters), audiovisual, points of service, and property security.

The company's main advantage is size. Most of its competitors are little guys serving local populations. Solutions 30 actively recruits roughly 250 new technicians per year to its network and maintains a local presence in all the markets it serves.

"At end of the day, our network processes allow you to integrate new technologies and teach people how to handle it," Fortis said. "That is the core strength of the company. We can replicate the process for as many technologies as we want."

Having spent all his life in the IT and communications sector, Fortis foresaw big demand for the company's solution when fast Internet was just beginning to hit the market. He spent a year developing a network of technicians that could adequately provide tech support, and another three years tweaking the platform that made it accessible. The company began growing fast in 2005 and has kept a steady pace ever since.

"Developing the platform was crucial," Fortis remembered. "To get it right, we needed a good IT system. All technicians need to see info in real-time, so we had to be mobile from the beginning."

Its first customers were based in France, and adoption was fast, earning nearly $400,000 in its first year, followed by annual revenues of $1.32 million, $13 million, $39 million, and $46.8 million in subsequent years. Today, Solutions 30 have provided onsite visits to over 5 million households. Its user base grows at 25 percent annually. Last year, it earned over $100 million.

Yet 75 percent of its revenues are based in France. If it can match its success in France with the rest of Europe, Fortis expects the company to be earning $400 million to $500 million in the next few years, which implies about $30 to $50 million of free cash flow. "I want to reach this before attacking new continents," he allowed.

And it's market will only mature, especially when it comes to the aging community.

"We believe in more and more technology coming into everybody's life," Fortis said. "Our next big thing is health care. Plus in Europe, more people are getting old, increasing the demand for digital equipment to be professionally installed in homes."

Solutions 30 has raised nearly $2 million from Sofinnova Partners. The company went public in 2005. Its shares have been available on the trading group E2 of the NYSE Euronext's Alternext market since 2010. Solutions 30 was one of Olivier Sichel's first deals as a partner for Sofinnova.

"I think the best skill of the company lies in its process to understand very quickly new technologies and manage a continuous know how database to implement emerging technologies it on field," Sichel said. "This skill is combined with an extremely rigorous management processes of the workforce and a strong will to grow and expand."

The company competes against Geek Squad, a division of Best Buy. RH

Somoto

www.somotoinc.com

Ben Garrun

Internet/Online

Israel

Yes

» Imagine a world where you would have to pay for every single piece of software that you download online. If that was the case, you probably wouldn't download more than half of the software that now currently resides on your computer. Customers wouldn't buy and developers wouldn't innovate — everyone would lose. Somoto's software monetization tools solve this problem with a bundling system and a wide net of advertisers, allowing users to enjoy a range of free softwares online, while simultaneously assuring developers still reap benefits.

Somoto's founders, Eyal Yaakov and Ben Garrun, started Somoto in 2009. Somoto provides freeware and shareware developers with strategies to enhance and monetize their work with multiple software monetization tools. Advertisers that join the Somoto community use the company's services to reach relevant users worldwide.

"We offer solutions to advertisers and business owners who wish to distribute their software, but our first market was program developers," says Yaakov. The company works with more than a thousand developers and about 40 advertisers from more than 200 countries, mainly in Western Europe, South America and Asia.

"The software developer uses our installer to download his or her software, and we add sponsored offers to it," Yaakov says. Distribution is free for the developer, sponsors pay a fee to Somoto, and revenues are shared with the developers. The network of sponsors that the company partners with (that includes companies like Google and Yahoo) allows Somoto to offer distribution services at a relatively low cost. Apart from those distribution services, the company offers analytic solutions that let users to view the download flow of certain software, plus the conversion and monetization data associated with that software.

Andreas Breitschopp, a software developer and publisher from Germany, uses Somoto's BetterInstaller technology to monetize his products, especially the free ones, on AB-Tools.com. "The revenue per install is very good, especially for U.S. traffic," he says, "I've tried other companies in this area, but the cooperation with Somoto was always very good and reliable. I never had problems in terms of late payments or similar things I've already seen with others."

Bundling systems like Somoto are the reason why an extra commercial plays when users download software. But they provide a solution for developers (who get paid for their products) that keeps that software free to download. "If a publisher like me tells you that he has the customer's experience in mind when he decides to use a bundling system like Somoto then that's surely a lie," he says, explaining that bundling systems are a key solution for both the publisher and the customer who downloads the software. "Customers probably don't like to get many additional offers in the installation flow, but without systems like BetterInstaller I'm sure there would be a lot less free products out there," he explains.

The first and main investment in the company came from its founders, both whom have significant experience in startup companies. The rest of its investment rounds were much smaller. An Israeli news source, Globes, reported Babylon Ltd. supplied Somoto NIS 4.6 million in July; Babylon received a 4.1 percent stake in the company. Globes reported in August Somoto's public offering raised NIS 20 million on the Tel Aviv Stock Exchange.

Many global companies have similar solutions, but Somoto's main competitors are the Israeli companies Installcore and Amonetize, and the American company NativeX, formerly w3i. "Our installer has some features that the others don't have," says Yaakov, "If a developer wants to use his own installer and not ours, we can still provide him with monetization services, while other companies require that developers use their own installers in order to have monetization."

Installation guidelines require monetization companies like Somoto to promise cookies aren't added to their installer, and download comes with no additional software the user doesn't know about. "Unfortunately, many other companies in our industry still do that," Yaacov adds.

The company's offices in Tel Aviv, Israel, are decorated with photos that employees took themselves. "We enlarged two photos taken by every employee, and they make our office more colorful," Yaacov says. All 60 employees live in Israel, but one can hear English and Hebrew in the corridors, as well as Spanish, French, Turkish and Chinese.

Somoto currently operates on the web only, but the company plans to penetrate the mobile and tablet markets in the future. This makes for an excellent move, as more and more software developers turn to this segment as well. RH

Sportradar

www.sportradar.com

Carsten Koerl

Entertainment & Media

Switzerland

Yes

» A market leading provider of live sports information and services, Sportradar provides real-time data science that keeps score of more than 70,000 events in 30 sports. Serving the betting, sports, and entertainment spectrums, the company integrates live data within seconds of the action.

"Prior to Sportradar, sports statistics were very boring and slow," said Ulrich Harmuth, Managing Director of Sportradar. "For the last eight years, we've provided live information on sports that brings a transparency across many different sporting industries."

Its clients include bookmakers using the data to place bets, media companies that subscribe to the analytics on a B2C platform, and sports federations all over the world. Professional teams use Sportradar's services for improving their performance, for example. It currently serves 400 to 500 customers, growing 60 percent annually. Clients include Fox Sports, Blick, and SPOX.com. The company provides the data in various formats, ranging from XML feed to online hosted solutions for mobile or app outputs.

Betting, however, is the company's best card. Consistently growing at double digit rates thanks to a constant string of new product innovations, the sports betting market now accounts for $30 billion globally. Sportradar serves as an official data partner to FIFA and ITF, and also offers fraud detection and prevention services. "The bookmakers are competing with each other and require sophisticated solutions to differentiate from their competitors," Harmuth said. "We provide them invaluable data."

Though the company originally began in 2003 focusing only on the data, it has since developed a rich product offering derived from pure raw data. Bookmaker products include tools to suggest odds, create events, as well as provide betting software and different betting games. Media products include white label live sports center solutions and sport analysis tools.

Growing from a pure data provider to a service provider, Sportradar has managed to organically outgrow competitors due to its focus on cutting-edge technology and constant innovation. "We have strong barriers to entry of at least several years," Harmuth said. "It's not as easy as it looks to extract this data in real-time. We also cover a wide range that would be very difficult to replicate, if not impossible."

The company was founded by two Norwegian students whose thesis focused on different methods of extracting sports data from the Internet. They teamed up with Carsten Koerl (a co-founder of Bwin, the online gambling company) and built the product foundation over three years. The company has since grown to over

500 employees working out of 18 offices, enabling it to cover sports around the world on a 24/7 basis.

The company is owned by its founder and CEO Carsten Koerl, EQT Expansion Capital as well as management.

"Sportradar's state-the-art technology gathers up-to-date and best in class information from a wide array of sports," said Michael Föcking, partner at EQT Partners. "It promotes less well known sports and gives the customers access to superior information. Sportradar's fraud detection division is paramount in preventing illegal betting and game manipulation in the sports market."

Headquartered in St. Gallen, Switzerland, Sportradar is profitable. It earned more than $60 million last year at a high double digit profit margin.

"Sportradar's position as an incumbent player in an emerging market gives us a clear advantage," Harmuth said. "We are clearly in a unique position as this market begins to mature." RH

Spreadshirt

www.spreadshirt.com

Philip Rooke

Internet/Online

Germany

Yes

» Remember your class t-shirt from college? You might have always wanted it to say something else, or have a cool logo that you and your friend designed that never got voted by the whole 500-students class. Spreadshirt can help you take that idea and print your own class T-shirt (even though it might be too late). The German-based company creates a platform for anyone who wants to create their own clothing, from t-shirts and pants to tablet covers and beer mugs. The "designers" can even open their own Spreadshirt shop online and start marketing and selling their products. Can the dream of becoming a fashion designer be achieved online?

In 2001, Lukasz Gadowski was finishing his MBA at the Leipzig Graduate School of Management and was looking for an online businesses opportunity. He found one in selling t-shirts to small groups online, who would market their own designs. Soon, a prototype for Spreadshirt was developed and the company started operating. Today, Gadowski serves as the Chairman of the board for Spreadshirt, after handing over the CEO position in 2007.

"We take something complex, opening a textile business with all the designing and marketing that is involved in it, and make it simple — so people can do that in a couple of minutes," says Philip Rooke, Spreadshirt's CEO.

Each designer can open an online shop or submit their designs to the Spreadshirt Marketplace, the general store on the company's website. A online shop has its own URL and can be integrated into a website, blog, YouTube page or Facebook site. The company makes money on commission, paid by the designers, and takes care of the printing and shipping process for them. In each case the designer decides the commission they want to earn, which is then added to the base price of the product and the printing cost.

"Over 45,000 online shops had sales in 2012, some of them are celebrities and some are made for campaigns, but some do it for money," Rooke says. Over 35,000 designers sold at least one design in 2012, mainly via the Spreadshirt marketplaces or the t-shirt designer tool, and in total Spreadshirt shipped over 3 million products worldwide last year, expecting to ship at least 4.2 million items in 2013.

"I think that we are the only company to ever export T-shirts from America to China," Rooke jokes. Even though the company is headquartered in Germany, its biggest market today is the U.S. The company has two printers in Germany and Paris, two factories that print in the U.S., and sales and marketing in 17 countries around the globe — 15 in Europe, in addition to the U.S. and Canada. "We actually delivered to 45 countries last year, since many people are selling their ideas that attract people from outside the countries they operate from," Rooke adds.

"We have to be able to support a 24-hour business now, especially if we are planning to launch in Australia in September," he says. By 2014, the company plans to launch in Asia and South America. With nearly 300 employees today, this will require further recruiting.

Initially, Spreadshirt raised a total of 22 Million Euros in two rounds of investments, mostly from UK-based Kennet Partners and global Accel partners. "We invested in Spreadshirt because we felt the business model was unique since nobody in Europe has built a network of tens of thousands of selling shops. They had built a very interesting business with very little money," says Harry Nelis, partner at Accel Partners, which invested $13 million in Spreadshirt in 2006.

The company became profitable in 2010 and doesn't see a need for further investments. In fact, it even invested about $1 million in a factory in Las Vegas and an engineering a factory in Pittsburgh in 2012. "Last year we grew over 40% year over year, and our profits grew 45% year over year. This year we plan to grow, so we don't have plans to sell the company," Rooke says. He expects the company to reach a size of €200 million by 2015.

Spreadshirt's competitors include companies like CafePress, which functions in a similar way both in the US and European markets, and Custom Inc which has been around since 1999.

"The different coffee shops that invite people to make t-shirts in them are also a big competition," Rooke says, "But customers come to us because we've made it simpler to operate for them." Rooke also adds that the competitors focus mainly on the American market, while Spreadshirt has more international operations.

"There is no theory of evolution. Just a list of creatures Chuck Norris has allowed to live," says one of the t-shirts that you can design yourself on the Chuck Norris Facts website. The action star's family runs an online shop through Spreadshirt. "This is a celebrity having fun with his family," Rooke says, "I actually have a Chuck Norris T-shirt and that's my favorite t-shirt to wear at home." The designs on the site also include some of the famous quotes from the last US 2012 elections.

"It's basically people having fun, even with serious issues," he concludes.

Whether this new way of creating custom design can "eat up" some of the traditional retail market remains to be seen, but growing companies like Spreadshirt singal changes to the way we might consume these products in the future. RH

StickyADS

www.stickyads.tv

Herve Brunet

Marketing/Advertising/SOE

France

No

» The power of online video content has for a long time been apparent to advertisers. But harnessing that power has been a struggle. As the number of people watching video content on a regular television has decreased, this issue has become even more important to solve.

A recent study, conducted by AOL's Be On, revealed that the majority of advertisers believed that they could achieve greater consumer engagement and scale with online video instead of traditional TV advertising. Of the 770 brands, media agencies and creative agencies surveyed across the globe, 78% of respondents in Europe and 58% globally said that they could improve engagement and scale with online video.

The research also showed that 73% of respondents believed that online video spend had increased over the last 12 months, while TV and display advertising were both citied as sources where budget has been moved from.

"The results of our study show that branded content has become an important part of global advertising strategies," said René Rechtman, SVP AOL Networks International.

Sticky Ads TV, which offers a video advertising network, has profited from the advertiser's move into this space, and has offered a solution to the problem of properly exploiting the potential of online videos.

"We aggregate premium video content from multiple websites and we sell that aggregated audience to advertisers. That's essentially what we do," says Herve Brunet, President and Co-Founder of Sticky Ads TV.

The firm has been operating since 2009 and has witnessed a change in advertiser attitudes over the three years it has been open. "It's been very simple – advertisers have been doing TV advertising for the past 50 years and they realised that their audience is not watching TV anymore, or at least some audience groups. Those people are now on the internet watching video content," says Mr. Brunet.

"But there is one big problem, the audience is basically spread over hundreds or thousands of sites so there was no simple way for advertisers to reach their audience. So we created this one stop shop for them," he adds.

The trend of video content being displayed online also means more videos are being watched on different devices. This is another challenge for advertisers looking to exploit this as there are multiple operating systems which need to be taken into account.

Sticky Ads developed an advertising marketplace in order to help with the issues of audience fragmentation and multiple operating devices.

"We've developed a video advertising market place which we call Sticky Xchange. It runs like a stock exchange – publishers sell in real time through an auction process, their video advertisement inventory and advertisers or buyers buy that inventory impression by impression on the fly. So it's a fully automated process. The sales process is fully automated and the ad process has been fully automated for years now," explains Mr. Brunet.

The system allows publishers to sell inventory at differing prices. One example is a UK media firm selling advertising space for a high price within the UK, but placing advertising in Europe on the exchange at a lower price. Firms can also price their inventory based on content, for example news items would be priced higher than entertainment. There are many other ways of pricing inventory using the exchange, such as audience groups.

Systems such as Sticky Xchange are more widely known as real time bidding mechanisms and have grown in popularity across all forms of advertising. "Over time we also believe that TV traditional TV advertising will be purchased through real time bidding mechanisms. Today TV is sold traditionally so you have a salesman talking to a media buyer and they agree on a pricing and they make a deal. We think that over time what's happening in the digital industry will also happen in the TV advertising industry, meaning that will be purchased through auctions," says Mr. Brunet.

Sticky Ads TV currently operates in two countries: France and Spain. The firm's next goal is to move into Germany next and then expand gradually into the rest of Europe. The firm is considering acquiring companies in new territories in order to speed up the process. "The ability to execute fast is a challenge. We have a very good window of opportunity right now because we are alone and we want to capture that today and take that to the next level so we need to execute really fast. Execution means going internationally really fast and we're thinking of buying companies in other countries," says Mr. Brunet.

Competition in the market is thin on the ground, with most of the comparative companies based in the United States, and they show no signs of moving into Europe. Therefore the company can allow itself to think big when setting goals for itself. "Our mission is basically to be the number one player in video in Europe in the next three years," Mr Brunet concludes. RH

Sympa

www.sympa.fi

Keijo Karjalainen

Cloud Computing

Finland

No

» The people that work in a company are its most important asset. Many human resources units run their workers' information using papers, Excel sheets, Word documents etc. Separate systems control payrolls and recruitment, while the management team doesn't always have full and updated access. "Our system can do 90 percent of what they do, ten times faster and cheaper," says Taina Sipilä, growth director and executive chairman of the board of Sympa.

The Finlandic Human Resources (HR) System, Sympa HR, combines various recruitment processes into a single entity, allowing enterprises to better manage their personnel. Using Sympa's system, a company's management has access to targeted information about employees, with analysis options that help long-term HR planning. The system also save time for HR units as it automates activities that would take a lot of time otherwise.

"It starts from basic information about the person, information, salary, from the recruitment to the exit interview," says Sipilä. "Most HR functions calculate payrolls that are sometimes not flexible and meant for local markets, while most companies are becoming international, and our system is more international."

Sipilä runs the company along with her brother, Keijo Karjalainen, the CEO. The idea came from their father, Lasse Karjalainen, a management consultant who saw a need in the market. Keijo launched the first version of the system in 2000 with a couple of companies in Finland. "Every company I met was excited," Sipilä says. "In other parts of the world, including the U.S., the need is quite the same," she adds.

Sympa HR is delivered as software as a service (SaaS). The business model is based on continuous contracts, with over 60 percent of clients planning to go international through partnerships. Since it is a cloud solution, the service can be delivered within hours. Sympa shortens the time it takes to creat a full, new and customized HR system for big companies. Normally it takes years, but with Sympa, it takes months.

The Sympa HR system now has over 60,000 users in more than 200 organizations. The smallest company they serve has seven employees and the biggest, 7,000. Customers are mostly located in Finland and the Nordic Countries, and across Europe, Asia and North America. Some of the international customers Nestle Finland and Rovio (which came up with Angry Birds). "I'd be happy if we'll be adding 100 customers a month in the following years," Sipilä says.

"The company is profitable from day one," Sipilä says. From 2005 through 2013, the yearly growth rate average of Sympa was 78 percent, according to the company.

"More and more companies are interested in developing their employees and will need a cost effective solution. Sympa is the right answer for that," says Eero Broman, a private investor in Sympa.

Ninety-five percent of Sympa is still owned by the founders, making it a family business. "My brother and I are doing this for the first time so its important to have older guys like our father and Broman that can see a bit further. If they say that we're doing great, then we know that we are," Sipilä says.

The company received €1 million in 2012 from the Finnish government for growth and internationalization. The latest funding round of €1 million from Tekes, the

Finnish Funding Agency for Technology and Innovation, came in 2013. "We're thinking of ways to expand and speed up — one of them may be another investor," Sipilä comments.

"We've been on the market for almost 10 years and we still haven't found something like our solution," Sipilä says. However, the company's competitors include SAP, the European multinational software corporation for business management, and the human resource and financial resource management system, Aditro, based in Sweden. It also has a competitor in Norway — Visma, which provides business software, outsourcing services, commerce solutions, IT solutions and more to 240,000 customers in Northern Europe.

"We were in cloud in 2005 and that gives us a big advantage compared to similar companies who don't use the cloud as much," Sipilä says. "The main advantage of the cloud system is that it is agile, so we can create a system according to the customers' demand relatively fast, and build features to the system whenever the customers wish to do so," she explains.

"When something goes nicely, we keep on saying 'Sympa, accidently good,'" Sipilä says. Well, the company's slogan is becoming less coincidental. According to Technavio, the global HR software market is currently worth $11 million.

With only 45 employees in Finland, the next step for Sympa is to reach more European countries and the US market next year. "The product, business model and team are now ready to go big time and the market is hot. We will partnership with big players to make our business fly," Sipilä concludes. .

Tageos

www.tageos.com

Matthieu Picon

Other

France

No

» Tageos takes a straight-forward approach to RFID tags, labels embedded with an antenna to electronically monitor an object through radio signals. The company keeps it simple. Whereas most RFID tags require the antennae to be placed on a plastic tag, an expensive process burdened by the cost of the manufacturing materials, Tageos' proprietary approach can implant the antenna on a simple piece of paper, significantly reducing expense. The company's tags provide an affordable way to track inventory.

For most RFID tags, the manufacturer traditionally must make an RFID inlay on a plastic substrate, which is then inserted into a paper label. The process typically requires several different companies, one to manufacture the chip and plastic inlay, and another to insert the inlay into the paper label, resulting in a bulky and expensive end product. Tageos' tags more closely resemble the paper tags attached to airline luggage. The company uses a very thin aluminum antenna to attach it to a paper label through a process it keeps confidential. The labels are simple paper tags that can be glued to the items they monitor. By doing all its manufacturing in-house and simplifying the materials and manufacturing process, Tageos claims to produce an RFID tag of equal or better performance quality at a 30 percent savings to traditional RFID tags.

"This solution we've developed is very productive, efficient and a fantastic way to save costs," said Matthieu Picon, Co-founder and CEO of Tageos. "Most manufacturers have made large investments in antenna manufacturing chips based on plastic solutions and haven't found the relevant technology to manufacture on paper. What we do is not easy, as you need a technology that doesn't destroy or make the antenna suffer during the process. An accurate reading requires quality products and materials. We've overcome a serious technical challenge."

The company addresses the retail, clothing, pharmaceutical, cosmetics, and other markets, bringing cost efficiency to an industry that creates about 2 billion RFID labels per year.

Tageos' simplicity and cost efficiency has fueled its growth. Currently serving more than 14 sizable customers, the company has doubled or tripled its client base in the last year, a momentum Picon expects to snowball in the coming years.

"Our solution is globally patented," Picon said. "We think it would be quite difficult for competitors to remove plastic from their manufacturing universe. You need very solid technology to be able to install such a small chip."

The company was founded in 2007 by Picon, Laurent Delaby and Nicolas Jacquemin, who each had extensive RFID experience working for RFID suppliers and leading technology companies including MBDA and IBM Global Services. The three first launched Frequentiel in 2005, which is still currently the leader in France. Working with the French government's leading RFID research center (CNRS) in Montpellier, they spent two years building a functional prototype, and another three years tweaking the product for the industry, relying on several beta customers to keep it afloat in the meantime. After five years of R&D, the company only started full marketing of its technology in 2012.

Headquartered in Montpellier, France, Tageos also has offices in Arkansas and India. It works directly with integrators who distribute its technology globally. The company has received about $1 million in government funding, as well as about $2 million from Newfund.

Earning $1 million last year, Tageos expects to earn about $1.5 to $2 million this year, and about $7 million next year due to new contracts. It expects profitability by the second quarter of 2014. Picon expects Tageos to reach $15 million by 2015.

TeamUp

www.teamup.fi

Donna Kivirauma

Marketing/Advertising/SOE

Finland

No

» Social media breaks barriers between fans and their heroes, but before TeamUp, no one leveraged the platform for marketers. Tampere, Finland-based TeamUp links brands, fans and talented individuals and groups to create a sharing-is-caring community where fans follow their idols, those idols can make money, and the sponsors behind them can find new, passionate audiences.

"It's for musicians, athletes and artists at any phase in their career and they can broaden their fan base and really add some value for their sponsors by giving a direct sales channel to their fans," says founder and CEO Donna Kivirauma.

The site generates revenue from businesses seeking new targets, the idea being: fans will remember brands that sponsor their heroes the next time they decide what kind of milk or shirt or shoe to buy — especially as their allegiance can earn them rewards in TeamUp, according to Kivirauma. Brands buy profiles at €250 a year, €500 a year or €5,500 a year. "We're doing our marketing differently, it's a whole new way of marketing," Kivirauama says. "It's something I call common purpose marketing, which is being in a social media community with your customer, with a common purpose; and the common purpose here is to discover and support these talents. By sharing a purpose with your customer there is more acceptance."

Miikka Honkasalo of TEHO Sport, a sports drink brand, brought his company to the platform to give his talent portfolio extra air time. "Our fans or our customers only know the big sponsorships; no one knows that much about the little ones and the talents that are not so famous in Finland," he says. "Together we thought that it will be great to give an opportunity to our fans and customers to get to know [them all]." Plus, he says, TeamUp allows athletes and talents to find other willing sponsors.

TeamUp will snag business from enterprises such as Facebook, Twitter and LinkedIn advertising, and Google Adwords, Kivirauama says, because TeamUp's model allows for more effective marketing that won't leave users feelings overwhelmed with spam. "Instead of trying to dig out people's private information to market to them, you can market to them through the sponsorship that you're doing. These are the things that are important to your customer," she says. "[A business would come to TeamUp] to build that connection with their customer and then provide them benefits. That way, you're not throwing ads at them."

On platforms like Facebook where people go to play games and share or chat with friends, Kivirauma says users aren't in a "lean-forward buying position." As a result, those ads can't capture audience attention, leaving marketers with dismal measurables. "The click-thru rate on those ads are less than 1 percent," Kivirauama says. "It's becomes spam or clutter." On TeamUp, customers find common ground with and seek out businesses supporting talented people users admire. Instead of "selling" to them, brands provide "benefits."

For example, Kivirauama says, if a user follows adidas, the company might provide targeted offers like a special shirt for the game at a special price, or VIP passes to the game. Today, TeamUp attracts attention from all camps: fans, brands and talented people. More than 40 businesses already have profiles, and upwards of 240 athletes, musicians and artists have joined the platform, which launched at the end of October. Notable among the talents, the Finnish Olympic team decided to make TeamUp the pinnacle of its online presence; and they've agreed to help with TeamUp's global expansion plans. "They've made a commitment that, any country we want to go to, they will arrange a meeting with the Olympic committee of that country for us," Kivirauma says.

"If we do this right, the market opportunity is in the billions," she says. The company currently faces Finland only, which presents a large market to tap. "There's 330,000 companies in just Finland," she says. "If just 5 percent of Finland's companies come to TeamUp, and 95 percent of them buy the €250 profile, we've got almost €5 million in revenue for the company. But that's not the case since most are interested in the €5,500 when they're buying."

TeamUp keeps busy getting the word out. Kivirauma expects scale to come quickly and prepares the platform for an influx of all kinds of users. TeamUp aims for 100 customers at launch and 200 by the end of the year. "Those first 100 create the tipping point, and we're also leaving Finland next year," she says. Next stops include: Brazil, Portugal, Spain, the U.K., the U.S., France, Germany, Sweden, Norway and Denmark.

Kivirauma also predicts profitability once TeamUp hits 600 business, which she sees happening by the first quarter 2015. But no matter their size or revenues, Kivirauma is bent on keeping TeamUp private. "We have no desire to be a public company," she says. "That's not in our plan, and a possible partner we're discussing with would not desire it to be public either."

According to one marketing agency,

one million fans will join the site by year's end. Afterwards, growth ramps up exponentially. Kivirauama stands at the ready. "We're already talking with Microsoft because the platform we're using right now can only go to 50 million users, which we hope to get in 2015," she says. "We'll need to be looking at our own datacenter after that. RH

Tethras

www.tethras.com

Brian Farrell

Internet/Online

Ireland

No

» Over 46 billion apps were downloaded in 2012 by 1 billion smartphone owners around the globe. About 600 million of those users were non-native English speakers. Yet 80 percent of all apps are only available in English. In fact, most app developers are ignoring 60 percent of the market. Tethras provides a translation engine for apps that makes localization easy, putting the global, non-English speaking market within arms' reach. That's good news for the 3 million app developers around the world, 90 percent of which work in teams of five members or less.

Named for a mythological chieftain in Irish folklore, Tethras provides a cloud platform that integrates with software development kits. Its tools pick up changes or revisions in app software and manage their complexity across multiple languages and platforms. A sizable app may have a 100 word update, which in 32 languages, requires 3,200 individual strings to be updated and organized.

Tethras offers a one-trick pony to provide a localized version in languages and platforms across the globe. The company claims to be the only solution to manage system content while allowing developers to do billing and purchasing up to seven times a day on one project.

"A lot of complexity creeps into languages and internationally published software," said Brian Farrell, CEO and Co-Founder of Tethras. "Small teams of app developers have to manage those changes. Our service in the cloud automatically shows our customers changes they made to the app by uploading their changes directly."

Tethras' ease of development is certainly being carried by its own momentum. In the last 12 months, it has grown 400 percent on a steep escalation. The company serves over 2,000 customers, from the smallest hobbyist to large organizations releasing as many as 60 apps in multiple languages. Rather than a SaaS model based on monthly fees, its services are pay as you go, with app developers paying for each new localization.

For Focused Apps, whose game Hit Tennis 3 is the most popular tennis game on the iPhone and iPad, translation essentially comes down to fully tapping the market. Nearly all of its customers prefer to search and play the game in their native language, so Tethras services ultimately translate into more revenue. Its tools work seamlessly with the tool Apple built to handle transactions, said Mark Johnson, a Focused Apps developer.

"I'd say nearly all translation companies are really there to translate documents, but Tethras is specially for translating apps, and that makes a huge difference," Johnson said. "Apps are never finished. We are always releasing updates, which means constantly adding and changing translations. Tethras' pricing takes that into account."

Farrell expects Tethras' growth to be just the beginning. "Much of the ecosystem is new to localization, and there is an abundance of potential customers out there," Farrell said. To prove his point, Farrell looks towards the company's international footprint. Just 18 months ago, most of its customers were app developers in the US transitioning to new markets, but it has seen significant uptake in Europe and Asia, especially Eastern Europe and India. Now about half its base is in the US. "This is a growing industry that has only begun," Farrell said. "We're looking towards phenomenal global growth with the majority coming from the non-English speaking markets."

The company was founded in 2010 by Farrell and Brendan Clavin, who had helped develop the engineering team for Google's localization. It is Farrell's third startup, having previously founded MVT and XSIL. The two built the foundation platform over three months, which it piloted with a small number of developers for feedback. They then spent 11 months building the commercial platform. Through early coverage in the Guardian as well as word of mouth in the close-knit developer community, Tethras picked up customers quickly. "As engineers ourselves, we developed a solution by engineers for engineers," Farrell said. "That really helped us with word of mouth."

Based in Dublin, Ireland, Tethras has raised $2.6 million. It is currently working on raising another round of similar size to expand its customer base with increased marketing efforts and hiring. It competes against Babble-on and Applingua.

In the next three to four years, Farrell looks for Tethras to be a $30 million business. "The opportunity is only limited by our ability to onboard customers," Farrell said. RH

Upfront Chromatography

www.upfront-dk.com

Michael Pålsson

Life Sciences/Biotech

Denmark

Yes

» Every 11 seconds, a child dies from hunger. Nearly 1 billion people are malnourished, with around 98 percent of them living in developing countries, according to Food Agriculture Organization data.

Upfront Chromatography's technology has the potential to revolutionize the global food supply. Upfront provides a more specific and pure way to process proteins. Going a step beyond traditional processes that produce concentrations of proteins, Upfront's optimized system can extract specific proteins out of any industrial sized protein stream. A high density absorbent bead bed captures specific proteins through the manufacturing process, enabling an extreme purity of highly specific proteins.

Immunoglobulins specific to the immune system of cows can be extracted from cow's milk, so a new born baby can digest it, for example. Protein can be isolated from algae and used to supplement various food products. Its technology can also extract the proteins from biofuel before it is turned into gas, providing biofuel manufactures an additional revenue source through food streams.

"We need to move mass scales of quality proteins to developing populations where there is pent up demand," said Michael Pålsson, CEO of Upfront. "Upfront can find and isolate sources from material streams never been used before. We meet an unmet demand in the world with a much higher yield at a much higher purity. Upfront solves an ethical problem in the challenge of a limited food supply."

With the fast growing infant formula market alone estimated at $8 billion to $10 billion, Upfront easily faces a multi-billion dollar opportunity. Its immediate focus is the dairy and biofuels markets because they are well known. "While there are good infant formulas out there, none have yet been able to assimilate cow milk to infants. Aside from Upfront, the technology does not exist today," Mr. Pålsson said. "On the biofuel side, we can dramatically improve the cost structure for operators by tapping more from their operations."

Cash positive for the last two years and earning revenue through asset sales of its technology, Upfront serves 20 to 25 global customers, including several early stage customers on a private scale, as well as large customers on an operational scale. Its clients are typically the leading customers of the world within their markets. It has sold its technology to a large pharmaceutical company in the Netherlands and to a Canadian company for dairy applications. Its processes are used by the world's largest chromatography installation for potato protein production at Solanic NV.

It has had an organic revenue growth rate of 15 to 20 percent, which Pålsson admits isn't impressive."But the valuation that is created means we are actually doing very well. We are a well-funded company," he said.

"There is no doubt we are in front of the scale up of the commercial side," Mr. Pålsson added. "Several customers have completed pilot studies and are ready to do scale up."

Upfront's competitors are mainly the traditional membrane filtration technologies that first entered the market in the '50s. "We really face no competitors in the fields we operate in," Mr. Pålsson said. "The real competitor is the time to prove the model works within each application area."

Founded in 1992, Upfront has raised investment from DSM Venturing, the corporate venturing arm of Royal DSM N.V., and existing investors InnovationsKapital and NBGI Ventures. It is based in Denmark.

"Upfront is at the forefront of technological breakthroughs in downstream processing," stated Leendert Staal, CEO of DSM Pharmaceutical Products.

While Mr. Pålsson does not see a rapid increase of revenue in the next three to five years, he does see Upfront developing a storyboard to prove the capacities its technology can achieve in specific areas. He estimates that each application represents a value of $25 million to $65 million.

"Our technology answers the lack of the proteins to the world population," Mr. Pålsson said. "Huge opportunities for the technology are still to be proven." RH

Vaadin

www.vaadin.com

Joonas Lehtinen

Software

Finland

Yes

» When it comes to applications, first impressions are essential, and a quality user interface is as good as a professional smile and a firm handshake. The UI essentially determines the quality of interaction and ultimately the success of the program itself. In the new digital age, users expect UIs comparable to Facebook and Google, yet a professional looking interface typically comes with a hefty price tag. How can business app budgets with a small user base and limited app lifespan afford consumer grade UIs?

Vaadin strives to make building quality UIs easy and affordable. Addressing the 9 million developers using Java, the company provides a free Java framework for building modern web applications that simplifies the programming process. Easily compatible with multiple devices across all major browsers, its automatic platform provides ready-made building blocks so developers do not need to reinvent the wheel with every line of code. Providing a stable, secure and uniform user-friendly Java platform, Vaadin enables developers to build quality UIs 50 percent faster. With 50 percent fewer codelines and half the development time required, Vaadin essentially simplifies multiple layers of coding language into one. All major browsers and platforms have been written into the language.

"Vaadin simplifies the core processes of developers," said Joonas Lehtinen, CEO of Vaadin. "Instead of writing applications for each browser, we make it easy to concentrate on the server side of Java, reducing the amount of code they have to write. They don't have to learn anything new. Using Java language that they already know, developers can write really nice looking web applications, while getting all the benefits of the Java platform."

Vaadin's free platform features a community of over 100,000 developers that grows at 50 to 75 percent per year. The company monetizes through selling developer tools, support and training. Its serves enterprises, banks, insurance companies, government entities, and healthcare companies.

"By using the Vaadin TouchKit we were able to focus on functionality rather than on all the tricky details of a regular web application, like CSS, JavaScipt, HTML, etc.," Christian Burger, Senior Group Head IT Custom Solutions at PUMA SE, said in a company testimonial. "With the help of Vaadin we built a functional and intuitive GUI."

Last year, Vaadin earned $5.3 million at a 40 percent annual growth rate, a trajectory Lehtinen expects to continue for the next several years. The company is profitable, generating 10% EBITDA, but reinvests much of that back into operations.

Nearly 90 percent of the Finnish company's user base is outside its local market, with 50 percent of its development community centered in Europe, 25 to 30 percent in the US, and the rest in Asia.

The company competes with large entities like Oracle and IBM, but their offerings tend to be more traditional websites and do not provide a rich user experience, Lehtinen said.

The company has raised $1.3 million.

Lehtinen was inspired to launch Vaadin's platform from his own experiences leading a team in building a virtual hospital system in the late '90s. Unimpressed with the tooling methods of the day, the team decided to build its own. Lehtinen and a couple of others founded Vaadin in 2000 with the idea of using the tooling language to do third party projects, but eventually decided to make the tooling itself the main function of the business. The company launched the product in 2002. "It took us quite a while to figure out how to learn how to make a business by offering free tooling," Lehtinen said. "In a few years, we went from a few hundred programmers to over a hundred thousand developers. It has been quite an amazing ride." RH

Valens Semiconductor

www.valens.com

Dror Jerushalmi

Consumer Electronics

Israel

Yes

» Trying to connect your TV to your cable box, DVD player, and all your other devices can be quite a difficult task, especially when you get lost among cables. One often needs the assistance of TV technician. but even then, experts might have a hard time figuring out which cord goes where. Valens has found a way to unite devices connect them all.

Valens was the first company to create a 100 meter Local Area Network (LAN) cable that delivers HD video, audio, Ethernet, power and controls. Their HDBaseTTM (HDBT) chipset takes signals produces from several devices and bundles those signals into one protocol.

Established in 2006, Valens was created by six engineers with backgrounds in video technology. "Israeli engineers can never get enough, they keep challenging themselves," says Micha Risling, Valens's vice president marketing and business development. "The HDMI video cable wasn't revolutionary enough for them, so they wanted to add more to the same cable — Internet, electricity and USB. The result is a relatively cheap and easy-to-work-with cable that installers like and fits many devices. We tried to match the technology to the cable and not the cable to the technology, even though it requires a lot more effort." Today, Valens is led by co-founder and CEO Dror Jerushalmi.

The original chipset was released in 2009, only three years after the company was started. Today, Valens' more than 100 clients include Panasonic, Pioneer and Epson. "We started in the U.S. but in recent years more and more production happens in China and Taiwan," Risling adds.

Since Valens' technology requires both a transmitter and a receiver and is used by different brands, the company embarked on an ambitious journey to create an international standards to approve usage of one cable for disparate devices. This way an installer knows that a Sony TV can communicate with a Panasonic DVR through Valens' cable. "A small company from Hod HaSharon, Israel actually managed to recruit big names like Samsung, LG and Sony into an organization that is responsible for the standard," he adds.

Much of the company's sales strategy concerns introducing the disruptive products to the market. Valens founded the HDBaseTTM Alliance to hype and explain its technology. "It's not just about promotion for the producers to use the chip, it's also promotion for TV installers that need to choose to use the cable that goes with the chip."

"I want to get to a point where not only professionals use it, but private users ask for it themselves," he adds.

After two rounds of funding, that produced about $24 million in investments from Genesis, Magma, Asus and Mitsui, Valens released two new chipsets in 2012. These generations include optimization functionalities for specific needs, such as surveillance. "It's important to get a better frame in these camera in order to identify criminals, and since we have the ability to add more information on a cheap foundation, we have an advantage," Risling says.

"The second round of investments was needed to help us enter the market and work on future generations of our product," Risling explains, "We reached sales with only 30 employees in three years, and we wanted to pump up the expansion." Eighty percent of the company's 90 employees operate from Israel, but other support and sales offices are located in Asia and the U.S.

The company says that the next generation of its products will also allow fiber optics technologies to run on the same cable. Those capabilities might appeal to organizations like the military.

"We are getting ready for the day when large companies will try to imitate our product, so IP is very important," Risling says. The company has 13 granted patents and more than 50 pending requests. "There have been unsuccessful attempts to create the same technology, but it's very complicated. Companies like Intel, for example, produce HDMI technology, but can't produce ours."

In a world sprinting towards adopting wireless technologies, Valens' cable solutions might not seem as innovative as others. "The biggest problem with wireless is that it's unpredictable and sensitive to the environment," Risling says. "It's enough that your neighbour turns on his microwave and it might affect the quality of your video. People are so forgiving when it comes to the quality of video, unlike other kinds of media."

As a global company, Valens has an edge. Risling highlights how the company makes an international impact; as a marketing person who used to be a software developer, he tries to take developers to conferences. "It's just so they can see that what they developed in our small country is used by a person in New Zealand. People who use it at home approach them, shake their hands and thank them, and this is the kind of feedback that programmers can never get if they only stay in the lab." RH

Varaani Works

www.varaani.com

Kimmo Lahdensivu

Big Data/Storage

Finland

No

» Information storage is stuck in the past. Digital memories don't stack up like boxes of photos in the attic; rather, personal data pileups require solutions stressing mobility and flexibility.

Finnish startup Varaani Works helps users easily stow away massive quantities of data. Now, instead of in closets or file cabinets, users' pictures, document and videos find homes on Varaani's hardware (the Cloud Hub) and in the cloud through Varaani Online Backup.

Gartner reports that by 2016, storage on average per household will reach 3.3 terabytes. "Still, two-thirds of that data will reside at home, not in the cloud," says Varaani founder and CEO Kimmo Lahdensivu. "[For] two-thirds of the data, so over two terabytes of data per household, we don't think anybody's solving that [the] way it should be solved."

Varaani gives customers leading scattered digital lives a place to keep everything organized: the Hub. "All my photographs were here and there, lots of photographs on old CDs, old home-burned DVDS, memory sticks, whatever," says Olli-Pekka Kulmala, the company's chairman and angel investor. "Music is another thing. I have a lot of old LP records which I started five years ago to digitize and I have hundreds of CDs."

"Everything has to be centralized. That's what I wanted," he says. "When I found the company, I realized this is something [that] I need, and I think that if I need it, my neighbor needs it."

Importantly, Varaani's cloud service has data's back in case disaster strikes. Everything on the Hub can be restored through the company's online offering, which keeps memories safe and secure without a second thought from users. See Varaani's slogan: "Do nothing. Save everything."

Their core innovation and IP relates to cost-cutting and efficiency. "In the beginning we figured out a way [to] do online backup with only 10 percent cost compared to anybody else doing online backup," he says. "We don't do one-to-one copy of the data ... and we are able to regenerate the data if something goes lost."

"Even if your data is at home and it's quickly accessible with any device, we also secure all your data so whatever happens — if your house burns down or something — we are able to recover any data," he says. "We are able to do that for terabytes of data because of our invention."

Currently Varaani serve SMEs by teaming with operators. Lahdensivu says the company serves customers at the crux where three markets meet, as it provides online backup, network-attached storage devices, and cloud storage services. "We see ourselves in the intersection of these three markets, integrating seamlessly together all the required functionalities from each of them and trying to create our own blue ocean there," Lahdensivu says. "These three markets together by 2016 will be [a] $20+ billion market."

Right now, clients include one operator and a few service providers, which Lahdensivu says are more like value-added resellers. Though each customer markets Varaani's products differently to end consumers, at its most basic, the revenue model consists of one-time fees for devices and recurring monthly service costs. "We basically sell the device to the operator upfront and then we charge per month for a subscriber after that," he says.

Next up, Lahdensivu sees the company concentrating on consumers and increasing its scale capabilities. He hopes for 15 operator customers "mostly in Europe" by 2017, which would mean just under one million end consumers using Varaani, as the company reaches less than 4 percent of operators' base. But acquiring funding in Finland remains an obstacle to growth; and to overcome challenges, Varaani has had to stay away from the consumer market longer than it wanted to, focusing instead on SMEs.

Originally, funding arrived by way of angel and public money totaling €1.5 million, with Varaani valued at €3 million pre-money in the angel round. Now, Lahdensivu says Varaani scouts for interested investors, as the company would like to raise roughly €2 million to €3 million soon. "We are currently looking for VC funding, round A type of funding, as we already have the customers in pipeline that we will require more funding to be able to fulfill," he says. "We need a VC round for scaling the business."

At Varaani, scale and revenue will go (and grow) together. Lahdensivu projects next year, the company will generate about €2 million in revenues, while 2015 should see Varaani "already" in the "€5 million range." Break-even should follow in early 2016, he says.

Now, Varaani moves to tap not just SMEs, but international companies and the broader consumer market. "We are currently talking with several Asian brands, global Asian companies about possibilities for them to license our asset," Lahdensivu says.

Kulmala sees the company as poised right before a tipping point. "I'm pretty sure that during the next 18 months we're gonna make a breakthrough," he says. "Right now we are having our first pilots with the telecom operators here in Finland ... we have a sales organization in Middle Europe and we have got very, very encouraging contacts."

"When the big breakthrough has happened with first let's say mid-size or big operators, it will spread very very quickly," he says. RH

Varnish Software

www.varnish-software.com

Lars Larsson

Software

Norway

No

» Nobody likes a slow website. A faster one can help businesses increase revenues. Varnish Cache is a web application accelerator that typically speeds up content delivery, i.e. that of text, images, video or audio. Where a typical web application server can spit out somewhere between 10-50 pages per second, the same server with Varnish can deliver up to 50,000 pages per second — a speed increase by a factor of 1,000, according to the company.

company | url | ceo | sector | country | vc$

Varnish started as an open source project initiated in 2005. Varnish Software was founded in 2010 with 14 employees; the company is headquartered in Sweden. The name "Varnish" came about when Per Buer, CEO of Varnish, was working on an art poster with the word "Vernissage" on it. The word can have three different meanings, all which relate to polishing or improving the look or finish of an existing product.

Varnish provides a solution for a problem most Internet sites come across as they grow and become more popular, when more content and visitors make response time slow. Varnish's scalability allows savings on of number of servers, infrastructure complexity and CO2 emissions. But more importantly, a faster website attracts more users.

Varnish's free software is available online, but technical support will cost users, who usually need it. "If you run a big website for financial information that reaches half a million people, you want to make sure that the software works so you can hit that distribution," says Buer, explaining the business model. "Software companies spend more money on selling and marketing, while open source companies spend money on developing, and the distribution is free," Buer says. The radical idea about open source is that a small number of subscriptions is enough to make a profit, especially since marketing costs are close to zero. "There is somebody blogging about our software at least twice a week, and money can't buy that," Buer says.

Varnish received a leg up over competitors in 2008 when Facebook and Twitter started using the company's software. "Once people heard that they use us, it was the biggest PR boost we've ever gotten," Buer says. Approximately 100 customers have already subscribed to Varnish and pay a service fee. Among them are major companies like Morningstar, Globe and Mail, Vimeo and ESPN.

The average subscription runs at around $20,000 a year, and these fees generate 75 percent revenues for the business. Varnish also receives payments for professional services rendered and from developer and system operator trainings they provide. "We are more or less breaking even, it changes every month," says Buer. The company has no control over marketing, so revenues can be difficult to manage. However, "staying profitable is not necessarily a good idea," Buer says, who would rather focus on meeting the need of customers before making more money.

Redpill Linpro Group, which provides professional Open Source services and products in the Nordic region, made the first investment in Varnish Software and is its majority shareholder today. "As traffic on the internet increased and the number of Varnish users grew, and HTTP at the same time became the de facto protocol on the Internet, it was obvious that Varnish had tremendous business potential," says Lars Larsson, COO at Redpill Linpro Group.

Networking equipment manufacturers such as Cisco, F5 and Blue Coat make appliances that provide similar services Varnish does. "But we focus on acceleration and nothing else," say Buer, "We 'eat their lunch' when it comes to performance."

According to Larson, other technologies require significant capital investment and demand long-term contractual commitments, while Varnish resolves technical and financial issues for customers at lower costs, employing a more flexible approach.

Varnish is also an application platform. High-performance applications can be written and executed within Varnish Cache. "This is important because it gives us an arena to add value," Buer says. In addition, Varnish's Paywall product enables websites to move from ad-based to content-generated revenues without sacrificing performance. In recent years, a number of online publications made the switch; all the better for Varnish, which taps a growing market.

Ease of distribution enabled the software to spread to every continent relatively quickly. Varnish also delivers IT services to India. About 70 percent of the customers are European (especially northern Europe where the financial ecosystem is better), while 25 percent come from the U.S. A few more customers come from Africa and Asia. "We can definitely have a larger U.S. presence and this is one of our goals," Buer says. He expects that in three to four years, share of U.S. customers will double to 50 percent. RH

WalkMe

www.walkme.com

Dan Adika

Internet/Online

Israel

Yes

» Starting any kind of account online, purchasing your summer vacation or even just paying bills on the web is not always an easy task. Website operators often aggravate the situation, as millions of users are routinely challenged with the complicated technology hurdle of trying to figure out the "easy as 1-2-3" steps. WalkMe Ltd. is solving these issues with interactive on-screen guidance sequences that companies can add to their website. The small balloon hints that appear on top of the screen should make things easier for users and walk them through any process, all while cutting customer support costs for businesses.

About two-thirds of customers agree that valuing their time is the most important thing a company can do to provide good service, and 45 percent of U.S. adult customers will abandon their online purchase if they can't find a quick answer to their question, according to research by Forrester Research global advisory firm. The firm calculates that a 10-percentage-point improvement in a company's customer experience score can translate into more than $1 billion in revenue.

"It's like a GPS, it tells you what to do and when you should do it, but doesn't give you all the instructions at once," says Rafi Sweary, President and co-Founder of WalkMe, in describing the system. Sweary's partner and co-founder, Eyal Cohen, conceptualized the solution from an epiphany — as he helped his mother navigate her bank's website, he saw an opportunity."When she kept calling every week, Eyal resorted to think about a better support system than himself," Sweary says.

Founded in 2011, WalkMe is headquartered in Tel Aviv and San Francisco. The business model is based on monthly subscription from clients. While a couple hundreds of business clients are currently paying for the service, thousands are still using the free basic plan, limited to 300 clicks on the Walk-through system. However, WalkMe projects reaching break-even by the end of 2013.

The system enables companies to control the content and design of the balloons, keep track of the number of users that follow the on-screen guides and identify problematic steps which make them leave the site and abandon the transaction. ElementBars, an online store based in Chicago, where customers can create custom energy bars, claims that their company experienced an increase in the number of first-time site visitors that engaging after using WalkMe, which translated to an increase of 12.7% in ElementBars's e-commerce conversion rate in six months. The company was not willing to provide the full conversion rate numbers.

"WalkMe had the richest feature spec and the best value per dollar," says Uri Tzikoni, product manager at Clarizen, a work and project management software company based in San Mateo, California. "Our management has a strong feeling that adding WalkMe has increased the conversion rate and reduced support needs. These two items are strongly connected to the company revenue and profit," he adds. The main service WalkMe provided to Clarizen is the ability to deliver a software feature without the need to spend valuable resources on development and maintenance from Clarizen's side. Clarizen's large customers use WalkMe as a training tool, Tzikoni says, while many ask for custom walkthroughs on the already-customized environment Clarizen created for the companies.

The main challenge WalkMe faces is that people are not used to the system, and might not notice the little "Need help?" tab on the bottom or side of the web page. "It's a matter of educating people to search for our tabs," Sweary explains. Online video tutorials, for examples, are more popular, and serve as another challenge that WalkMe faces.

Similar companies and technologies remain quite rare, mainly due to technological obstacles. "It's not just about the ingredients of the cookie, it's about the bakery itself," Sweary explains. He is proud of his group of veterans from leading IDF computing units, who managed to adapt the "balloon" technology to every website on the net. "The competition for good people is tough, but the best way to find them is through the network of the programmers themselves," he says. "They know what to look for."

WalkMe also ends up reducing employee-training costs for its clients by using the step-by-step system for instructing employees, instead of in-person instruction. U.S. organizations spent $156.2 billion on employee learning and development in 2011, according to the American Society for Training and Development (ASTD) association. According to Planet Soho, a small business management platform, Walkme saved the company 50 percent on support representative costs and increased user engagement by over 10 percent, from the traditional 2 percent.

Most of the company's business clients are located in North America, but some are from Germany, India and more. "Even though we are based in Israel, we are targeting mostly English-speaking markets," Sweary adds: "The sales team simply works according to East Coast time, instead of Jerusalem time."

Mangrove Capital Partners, Giza Venture Capital and Gemini Funds have backed the company with a total of $7 million in two investment rounds. Sweary isn't looking for further investment right now, with profitability soon on the horizon. "We want to focus on the long run and change the whole industry," he concludes. "There is a potential client in every website that requires a username and password." RH

Watchful Software

www.watchfulsoftware.com

Charles Foley

Software

Portugal

Yes

» One PowerPoint presentation set the entire world searching for Edward Snowden, a former technical contractor for the National Security Agency (NSA) and Central Intelligence Agency (CIA), who leaked details on top-secret American and British government mass surveillance programs to the press. Snowden was able to access this information even though the NSA and the CIA are considered to be the most secure places on the planet. "If the NSA would have used our product, you wouldn't hear about Snowden. Cause that wouldn't happen," says Charles Foley, CEO and founder of Watchful Software.

Watchful's security solutions work seamlessly for the different users within an enterprise. Whether dealing with emails, documents or spreadsheets, Watchful secures any kind of information separately and transparently, such that only people with the right clearance can get to it. The information stays safe as it travels, regardless of whether the file is on a corporate server, sent via email, or shared on a USB key, anywhere in the world. The clearance for specific data can also be changed; so even if a file is locked up in the bottom drawer at your desk, it can't be accessed by certain users.

"It used to be all about building a massive wall or boundary against people hacking into our systems, but now people have realized that every user is a come-and-go from the boundary, and it is those users from the inside that make a mistake or do malicious things, and the document ends up getting to a competitor or a journalist," Foley says.

With more than 20 years experience managing company teams at companies like TimeSight Systems, Inc., which develops leading-edge storage and video management solutions for the physical security market, Foley believes that the information security market is a great opportunity for Watchful. The analyst firm VisionGain estimated the cybersecurity market at $68.3 billion for 2013 in a report released earlier this year.

Watchful Software, based in Coimbra, Portugal, is a member of Critical Group, anchored by Critical Software, which specializes in solutions and technologies for information systems. "We always look for three things to invest in: a large market, an 'unfair advantage' and a strong team. We saw all three here in Watchful Software," says Joao Carreira, managing partner at Critical Ventures. "The key technologies of the flagship products, RightsWATCH and TypeWATCH, were actually the result of work done with real customers, and are ahead of anything else in their market segments," Carreira says.

Watchful started as a spinoff of Critical Software, a company founded in 1998 that gained a reputation for high-quality software and for developing safety-critical technologies for mission- and business-critical systems. The security technology (IP) behind Watchful developed and matured over three years within within Critical Software. After first proof of concept and early customer adoptions, it became clear that the market opportunity was massive and required a sharp market focus, a team, and financing of its own. At that point Watchful Software was created and €1 million was raised from Critical Ventures to launch the new company.

Watchful indeed has an "unfair advantage" in the market, as Carreira puts it. "We're very fortunate because we had 15 years of development from the start," Foley adds. Developers at Critical Software were working on Watchful's specific technology for more than two years before it became a separate company in the summer of 2012. However, since the tech was initially targeted at specific customers, the challenge remained creating a production line that appealed to all kinds of users.

Watchful's business model is based on selling standard licenses with annual support or annual subscriptions. "By 2015, the number of subscriptions is expected to be higher than licenses, since people want the benefits of the products, and not the commitment," Foley says.

As with any young company, Watchful is focused on getting the word out to market in order to drive revenue growth. The company is already selling product, has filed for one patent and working on filing more, but has not reached yet reached break-even. "We are running in banking, governments and defense organizations already, so I believe that we will be profitable by next year," Foley says. Watchful's customers are located in Europe and the U.S. It has distributors in Germany and the Middle East and a partner in South America.

Watchful is considering raising $4 million to $5 million in growth capital mainly from the U.S. venture market to drive sales and marketing in 2013 Watchful is considering raising growth capital to drive sales and marketing in 2013.

Further investment from Critical Ventures is still an option. "You'll find us right there supporting that effort," Carreira says. "Watchful's technology is significantly better than market alternatives, so that is not a concern, and they have built a strong global channel network in less than a year, so we believe that they have a good chance to reach their goals," he adds.

According to Foley, next year the company will focus more on TypeWATCH, its eBiometrics solution, as biometric systems are gaining popularity in the market. The solution needs no hardware, but can still monitor devices for identity data theft attempts by analyzing free-text typing patterns of each user. Its costs are lower than most biometrics systems, which involve complex and expensive hardware components.

The primary competitors for Watchful are budget competitors such as point-of-purchase companies like Symantec and McAfee. However, these companies "don't secure the information itself, but where will it go," Foley says. "We're winning and they are going to have to partner with us."

"They are very expensive and difficult, and they don't do a very good job in securing the information," he says.

Some smaller companies also compete with Watchful. The Israeli firm Secure Islands Technologies, develops advanced Information Protection and Control (IPC) solutions. In addition, the Canadian company Titus serves more than 2 million users worldwide, including the U.S. Air Force and the Canadian and Australian Departments of Defense.

A future IPO is also part of the plan, Foley says. But for now, the company focuses on growth and capital requirements.

"Wikileaks showed us and Snowden reminded us that even the biggest organizations are not fully protected and that data is going to continue to walk out the door," Foley concludes. It seems like it's only a matter of time until the next Wikileaks comes along. Until then, companies will continue to search for the best solutions to protect their information, and companies like Watchful can only benefit from this growing need. RH

Wi-Next

www.wi-next.com

Nicola De Carne

Telecommunications

Italy

No

» WiFi everywhere. That's the vision of Wi-Next. The company's technology allows for the easy setup, configuration and management of broadband networks. It specializes in mesh technology that can create a network and enable router recognition without a centralized computer controller required to manage it. Every Wi-Next access point can create its own autonomous network that's flexible, scalable and elastic. At a 30 percent savings compared to legacy competitors Cisco and Aruba Networks, Wi-Next can easily scale up to 200 access points at a lower cost because no centralized controller is required.

"Thanks to our technology, it is possible to create very large networks very easily," said Nicola De Carne, CEO and founder of Wi-Next. "In the future, we will live every day always connected in every hour of our life. We need effective wireless networks that can easily spread as smart devices become ubiquitous. We provide a very easy solution to build networks quickly, effectively and affordably."

Naturally, keeping the world connected will require plenty of juice, and again Wi-Next's technology comes into play. Its Green Networking chip can recognize traffic in network ports, and can shut off when not in use. It essentially allows WiFi to be turned on and off like a faucet, only when it is needed. The connection sits dormant in an office building on nights or weekends, coming on automatically when someone makes a connection. This function enables an energy savings of 50 percent.

Currently focused on Italy, Wi-Next plans to extend into Germany and France by 2014, and the US by 2015. The company faces a robust market, estimated at nearly $400 million in Germany alone, and a billion dollars in the US. All of its production facilities are centered in Italy, which provides direct control of production to be able to better personalize the product with its OEM customers. "Through the control of our production, we can personalize our technology to provide very effective solutions for the Internet of Things," De Carne said.

De Carne founded Wi-Next in 2007 as a solution to Italy's digital divide, where up to 60 percent of the population lacked a broadband connection. In 2010, the company was acquired by Carpaneto Sati, which owns 70 percent of the company. Wi-Next spent its first three years building the technology, and only began to concentrate on sales at the end of last year. That allowed for a rich platform that enables quick product development for its customers, De Carne explained. Over the last half of the year, it plans to release five new products. A fiber optic access point, for example, can be provided in less than two months. "We now have the capacity to develop and release new products in a very short time," De Carne said. "We can personalize technology as our customers need. Our competitors don't have that capability."

Serving primarily telecom operators and big systems integrators on a b2b model, Wi-Next has about 110 customers, growing at 15 percent. Clients include Wind, Telecom Italia, Vodafone, Enel, Lottomatica, Juventus F.C., Terna.

Earning just under $2 million this year, Wi-Next is on track to reach revenues of $45 million in the next three years. De Carne strives to make Wi-Next the second player provider in Italy to knock Aruba Networks out of its second place position to sit beneath Cisco, which currently holds the first tier. He expects profitability in 2014. The company is looking to raise venture funding from a firm which could not only invest but also partner in distribution. De Carne estimates Wi-Next could reach revenues of $100 million in the next 10 years, but allows it is anybody's guess.

"We don't want to become the next Cisco," De Carne said. "We want to become the leader in a niche of specialized WiFi." RH

Widespace

www.widespace.com

Patrik Fagerlund

Internet/Online

Sweden

No

» Sometimes the most frustrating experience for an entrepreneur can be waiting for the market to catch up. Many have been predicting the rise of mobile technologies for a number of years, and others have waited patiently for the technology to reach the necessary level to support their entrepreneurial ambitions. Finally, the era of mobile has arrived, and the patience of the few is starting to pay off.

Patrik Fagerlund and Henric Ehrenblad realised the potential of mobile advertising at the start of the millennium, when the pair were both working for Ericsson. In 2006, they believed it was ready to take off and began plans to form their own company, which materialised in 2007 in the form of Widespace. The firm was set up to operate in the premium mobile advertising space, which meant it would be targeting the top advertisers and publishers in the markets in which it was operating. But the two founders had to remain patient for a little longer before they achieved the success they desired.

"I would say that the first couple of years were really tough, there were very few companies apart from the ring tone players that wanted to be seen in mobile, and that was not really what we were about," explains Mr. Fagerlund. "Once you had the penetration of Android and iPhone devices in the marketing departments and at the media agencies, then all of a sudden this started to take off. Since 2009 we have had a tremendous growth.

Widespace is headquartered in Stockholm and expanded into Norway and Finland a year and a half ago. The company then moved into the German, Dutch and French markets around five months ago and recently ventured into the UK and Denmark. The firm's targeting of premium advertisers means it needs sales people on the ground in the companies where it operates, and it also needs to build relationships with the top media agencies in any market it moves into.

In 2011, Widespace recorded net income of 1.7 million Euros, a figure which rose to 5.6 million Euros last year, and Mr. Fagerlund predicts, based on the first quarter of this year, that the company will reach a net profit of 12-13 million Euros in 2013.

Analysts are now agreeing that the mobile market has started to fulfil its potential. "Every year since 1999 has been declared the year of mobile and it may actually be finally be coming true," says Ian Finley, research vice president at Gartner.

The mobile sector has proved daunting to some looking to exploit it, in part because of the wide range of devices which have to be catered for. "The devices are being replaced on average every two to three years. The operating systems are being updated every couple of months to maybe a year. It's a very different pace to what we saw in the PC world and maybe even the web world. So that's tripping people up," says Finley.

The wide number of devices is made even more complex by the multiple operating systems on which they run. Depending on how it is counted, there are two and half mainstream operating systems on mobile – iOS, Android and Blackberry. But it gets even more complicated when the multiple versions of these operating systems are taken into account. There are as many as 14 different versions of Android alone. All of this can scare people away from working or advertising in mobile. However, Mr. Fagerlund believes this problem is slowly being addressed. "I think it has to do with more and more companies like Widespace actually offering services that helps companies get into the mobile. More than just providing them with an online solution," he states.

Widespace is now looking to the United States as one of its next possible ventures, although much depends on the company's ability to secure the right publisher agreements in markets. The European market continues to be the primary focus of the firm, but Mr. Fagerlund admits he has an eye on the U.S. market all the time. "It's a big market and it's big money so we would definitely want to be a Madison Avenue company."

For Widespace, one of the challenges the company has faced is to maintain the culture of the company while expanding at the same time. "One of the reasons that we have been really successful is that we have a great culture in the company. The more people you get and the more markets you go to, it is hard to extend that culture over the total group of people. But we believe the people in our company, they are creating the success, it's not one person or two or three — it's a culture that creates success. Culture beats strategy every time."

Mobile has finally arrived, and it has brought success to companies such as Widespace and the company's story serves as a reminder that even in the fast paced world of technology start ups, patience can be a virtue. RH

WITBE

www.witbe.net

Jean-Michel Planche

Software

France

Yes

» As monitoring customer experience online is becoming more and more important for service providers, technologies like Witbe's are crucial for their survival.

Jean-Michel Planche, President and co-founder of Witbe, founded the internet service provider Oleane in France in 1990. It was the first "Internet Operator" focused on selling IP infrastructures to business customers. Oleane soon became the second largest ISP in France and was acquired by France Telecom in 1998.

"At that time it was clear to us that all applications and communication streams would soon be based on IP and that there was a need for a new generation of monitoring technologies to ensure these new services were properly delivered," Planche says.

Witbe was founded in 2000, with some of the key people that drove the success of Oleane. "Our vision was that rather than focusing on monitoring individual equipment, the industry should focus on controlling the quality of the delivery and the actual user experience," Planche explains. "In an IP world, the sum of the quality does not equal the quality of the sum. Monitoring each network component is certainly useful, but provides too much information and no hints whatsoever on the quality really delivered to users."

Witbe's technologies simulate user transactions with active robots on any type of service or terminal, and measure performance, quality and integrity of what was delivered to users. The company started with solutions to monitor Internet access and website performance, introduced telephony monitoring as the market migrated to VoIP; since 2004 Witbe has helped service providers test and monitor their IPTV (Internet Protocol television) services and now does so for their multi-dscreen services.

Witbe has about 400 customers in more than 35 countries. They include large service providers such as DISH Networks, Comcast, Bell Canada, Orange, BT, Deutsche Telekom, Telefonica, Canal+, PCCW and China Telecom. Main set-top box developers such as Pace, Sagemcom and Technicolor work with Witbe's test equipment. Large IT infrastructures at BNP Paribas, Generali, LVMH, Total, Brinks or Schneider use the company's monitoring solutions.

Customers can choose to have the entire solution in-house, or use Witbe's technology as a managed service. A significant share of revenues, the company says, come from the professional services team that helps customers who work with the system. Witbe has been profitable since 2006 and generates revenues of $15 million, according to the company.

"We are on a trend to double revenues by 2015," Planche says. With a network of more than 40 Points of Presence (PoPs) around the world, this statement seems reasonable. "We're seeing a huge traction in North America where we secured very large customers. We're just starting to promote our solutions in Latin America and the feedback is tremendous. We have a very strong value proposition for the Multiscreen Video delivery market which is booming right now and we are very successful there," he adds.

"We're not actively looking for investors right now, but this could be an option," Planche says. As they reached profitability one round after initial financing, additional backing could only be relevant to accelerate, Planche says.

Witbe competes with many players from the quality-of-service world that monitor network equipment and analyze traffic to assess quality. With the introduction of the Internet, this type of monitoring is getting harder.

"These QoS monitoring solutions are still relevant for making sure infrastructures are working properly. But they do not provide insights on whether users can conduct transactions, on whether a particular malfunction has an impact on the delivered service, etc," Planche argues, "Service delivery has become so complex, NOC [Network Operation Center] engineers and management generally have either too much information or no information at all. Witbe gives them the relevant information they need to get straight to the point and solve issues, focus on issues that could really affect revenues, control SLAs [service-level agreements], prioritize investments, and more."

Witbe has two challenges to face this year. On the technology side, Witbe's newest solution is in big data analytics, released earlier this year, which enables the business case for multiscreen video services. "We have several trials going on and we need to transform them," Planche says. On the business side, the company recently opened an office in São Paulo to drive its business in Latin America. "We already have customers in the region, including a major incumbent. We're working on several large opportunities there and I am sure we'll have many successes," Planche says.

Witbe has about 100 employees across offices in New York, Montreal, Paris, Singapore, Casablanca and São Paulo. More hiring is expected due to the new office in Latin America, as well as more offices in Europe and in the U.S. RH

WiTech

www.witech.it

Andrea Calcagno

Telecommunications

Italy

No

» In today's connected world, people expect to be able to access their emails, apps and the internet wherever they go. Any park, shop, building or house without a Wi-Fi connection is in danger of losing its credibility very quickly. As more and more devices pour onto the market, the demand for Wi-Fi everywhere is only going to get stronger. Telecoms companies have introduced Wi-Fi in all manner of places, but are they making the most out of monetizing these networks?

One company which has been helping network operators do just that is an Italian firm called WiTech. The company was founded as a spin off from the University of Pisa in 2003. WiTech boasts a portfolio of Wi-Fi solutions, including its newest offering, Cloud 4 Wi, which uses a cloud solution to offer Wi-Fi hotspot services. "It means that through this solution a service provider or a telecom operator, can offer Wi-Fi services by introducing some added values, for example marketing tools, advertising tools and so on," says Elena Briola, CMO and VP of Technology at WiTech.

"At the moment we have two different patents, on telco solutions and we're also developing four other patents related to our Cloud 4 Wi solution. At the moment we are the main provider of hotspot services in Italy, for example one customer of ours is Telecom Italia. So starting from these customers, and starting from the domestic market, we have decided to move to the international scenario at the beginning of this year, so at the moment we have more than 25 pilots worldwide with the Cloud 4 Wi," she adds.

Analysts at TechNavio forecasted earlier this year that the global Wi-Fi hotspot market would grow at a CAGR of 0.84 percent between 2012 and 2016. The technology research company said one of the key factors contributing to this market growth is the increased use of mobile devices.

WiTech is targeting the U.S market, and intends to focus on the telco providers and service providers market. The company s currently searching for sales staff in the U.S. and plans to open an office with a management team, while keeping the research and development team in Italy, Ms. Briola says.

The firm set up a subsidiary in San Francisco recently to work in the U.S., called Cloud 4 Wi Inc and the firm also has plans to open an office in London and expand into Europe. WiTech has also seen interest in the Brazilian market so plans to move into Sao Paulo at some point in the future.

The company, led by CEO Andrea Calcagno, has put a lot of time and effort into research and development in order to come up with the solutions it offers, but it also has to maintain that level of research to keep up with technological trends. "At the moment the R&D department has more than 12 people. We have the solution already now and what we want to do in the next months and years is to improve our solution taking into account there is always an upgrade of a new technology and we need to satisfy new standards. For example in our road map there is the integration with the 4G networks. So the solution is ready but we need to evolve it in order to address new market requirements," explains Ms. Briola.

WiTech has also evolved its business models in order to address new markets. The company uses a classic business to business model in Italy, with direct channel sales. But as it expands into international markets, the company is set to change to a non-traditional plan. "For the international market, what we want to create is a new model, it is a business to community model. We want to join the communities of Wi-Fi vendors, and starting from them we want to create our community so in this way through the community, we can decrease the costs related to the sales channel and we can leverage on the word of mouth phenomenon," says Ms. Briola.

In order to do this WiTech has launched a channel partner program, which aims to recruit resellers and distributors into the community so they can sell and distribute the Cloud 4 Wi solution in their own countries. The firm is working with distributors in the UK and South Africa currently and is close to signing more agreements in the near future. RH

XMOS

xmos.com

Nigel Toon

Hardware

UK

Yes

» Today's next generation embedded computing requires a chip with more than a single processing core to deliver multiple functions at instantaneous speeds. XMOS, a British fabless semiconductor company, uses time slicing technology in its products to effectively introduce multiple processing cores on the same chip. According to XMOS, this delivers unprecedented performance at speeds 100 times faster than any microcontroller on the market.

The company's architecture provides different instructions at scheduled intervals to enable separate, logical 32-bit cores, each with its own instruction stream and register file, all on the same chip, for a series of multicores that perform at the lightning strike of real-time.

Its chips do not have any dedicated external interfaces implemented in the hardware, allowing for any interface to be programmed in the software. It enables USB, Ethernet, serial interfaces, a daisy chain network for industrial applications, on a very flexible platform where the exact interfaces can be specified by the designer.

"In many cases, we can replace several devices to allow you to build a programmable system on a chip solution and integrate a complete system on a single chip that you wouldn't find on a conventional microcontroller," said Nigel Toon, CEO of XMOS. "Because our chip can be repurposed to solve so many different applications, we end up with a broad potential of customers with a plethora of potential applications. We create a flexible platform that can solve many different problems."

Competing at the high end of the microcontroller market focused on embedded applications, XMOS primarily serves four key markets. These include the consumer market, with a focus on high end consumer products such as audio devices and gaming interfaces, and the audio space, where it can support multiple audio streams thanks to low latency. It also supports the automotive space, implementing lower cost end points for interfacing on real-time networking and the industrial space, its largest market, where its level of interfacing can deliver a broad array of applications in fields like industrial robotics.

XMOS has already shipped more than a million units. It is currently adding to this number every month at a fast trajectory. With 50 percent of its revenue based in Europe, the company also serves a growing global market with distributors all over the world.

"The XMOS USB Audio solution gave our engineers the perfect starting point. Its flexibility allows us to easily customize the processor to our exact requirements," said Jerome Henry, Chief Brand Officer for Vestax. "The single XMOS device replaces a number of components from our previous designs, dramatically upgrading our standard sound specifications, and reducing our material cost."

The XMOS technology was conceived in 2005 through the research of David May, Head of Computer Science at the University of Bristol. May previously wrote the OCCAM language and designed the Transputer, a highly versatile silicon-based processor. XMOS spun out of the university as a separate entity when it received venture funding in 2006. The company launched its first product in 2009, with its first aggressive marketing in 2010, and began ramping its revenue stream in the second half of 2010.

Based in Bristol in the U.K., XMOS has raised $60 million in investment from Amadeus Capital, DFJ Esprit and Foundation Capital. Mr. Toon expects to announce new investments over the next several months. Earning close to double digit million dollar revenues, the company should be profitable sometime next year.

The closest competitive technologies to XMOS are FPGAs and microcontrollers, the former which provides a similar flexibility but at a much higher price point, the latter which fails to deliver XMOS performance, Mr. Toon said. "There's a huge space between the two where we fit in. We provide high flexibility and performance at a price point that is very attractive."

Mr. Toon looks toward the Internet of Things market, predicted by Gartner to reach $1.9 trillion by 2020, as a massive opportunity. The company competes against Atmel and STMicroelectronics.

"We see a massive opportunity to build a fundamental platform technology," Mr. Toon said. "We see a smarter world where devices will need to be connected with not just one sensor but several."

XMOS is working towards an IPO with a market capitalization of up to $500 million in the next several years. RH

Xstream

www.xstream.dk

Frank Thorup

Software

Denmark

No

» The way the average consumer of video content accesses video and television has changed irreversibly over the past five years. The days when a family would sit in a living room, huddled around a television, waiting for their favourite TV show to start are almost over. The new TV is on demand, on different devices, and online.

Any disruption in an established market creates huge opportunities for those with enough foresight to anticipate it. The video content delivery market is no different, and many companies have already experienced huge growth as a result of this shift in market culture.

One such company is XStream, a Danish firm which provides solutions for video content producers to deliver their videos to users across multiple devices. The firm was founded in 1999, and in 2001 it won a major contract from one of the top broadcasters in Scandinavia, to help broadcast Danish soccer on the internet. During this time the company developed what would be known as Media Maker, which is the central platform used by the company today. Media Maker is a video management platform which enables clients to make the most of 'over the top' services.

Despite this early success, the company had to wait until around three years ago to really take off, as online video content on multiple devices really took off. "Since three years ago, this business has really been taking off," explains Frank Thorup, CEO and founder of XStream. "Two or three years ago we were around 15 people, today we are closing in on 100 people."

This sudden growth in the business can be attributed to a shift in strategy by the clients which XStream serves. Video across different devices has moved from a speculative, tertiary tactic of businesses, to a core marketing and delivery strategy.

Mr. Thorup explains that he has witnessed clients "spending much more energy and resources on the technology that we have." The success of companies such as Netflix and the online service provided by HBO has also driven demand for video platform services.

The market is now changing for the cable and TV companies, so these over the top services are now vital to their survival. "One of the most interesting things about being in this business is that the way we watch TV and the way we consume video is changing so rapidly so the TV industry and video content delivery industry is changing so rapidly over the last five years, so I would say all the cable operators and all the TV distribution operators, they need to compete in order to be in business in five years.," says Mr. Thorup.

"That's why the demand for technology vendors and companies like us with the product that we have is so high. Because they know that it's a question of being in the market in five years," he adds.

John Farrell, Director of YouTube Latin America, recently explained how much opportunity lies in online video advertising. "I think that advertisers still invest heavily in TV advertising because video is the best way to connect with consumers. On YouTube, 1 trillion videos were uploaded in 2012 alone."

As advertising online ramps up in the coming years, so will spending allocated to online videos. For XStream, one of the major challenges the company faces is taking full advantage of the market opportunities. "We are in a market where we see open windows all over and there is a lot of business going on and we need to grab as much as we can," states Mr. Thorup. "And the reason why it is important is we need to grow in order to spend more and more money on innovation. So in order to fulfil our vision of being one of the five top suppliers of video asset management within three years, then we need to grow and we need to build out the business that we have."

XStream is expanding internationally, and last year opened an office in Toronto, Canada. This gives the firm a position from which to go after the North American market. The company, headquartered in Copenhagen, also has an office in Warsaw, Poland.

As video consumption habits continue to evolve, companies such as XStream will have to work hard to stay ahead and profit from the changes. But with the enormous market opportunity, it will surely be worth the effort. RH

YD

www.ydworld.com

Mendel Senf

Marketing/Advertising/SOE

Netherlands

No

» The advertising market has changed considerably over the past ten years. The introduction of online advertising caused a seismic shift in the way business could be done for companies looking for the maximum exposure and value for money for their adverts. But for many years the advertising industry continued to use old systems to sell and place adverts online. Only in recent years has the industry begun to use a system more befitting of an increasingly digital sector.

The standard advertising market model involves a publisher selling their advertising space or media, by rate cars. The sales people of the publisher would go out with the rate card and sell directly to advertisers. This model is still widely used today, but may soon be a thing of the past. This may be bad news for the media sales person, but it will be beneficial to both the advertisers and the publishers.

YD World is one of the companies that are offering a fresh way for both sides to do business. "YD is a display advertising technology company, we're mainly focusing on delivering performance display advertising to direct advertisers. We built technology which made us able to reach targets for advertisers," says Mendel Senf, CEO of YD World. "On top of that we have been building our performance algorithm which is a decision making tool that decides on the data we collect from the advertisers funnel. It's quite easy set up and an easy approach to generate a real time bidding request and start buying impressions," he adds.

The real time bidding process is a system in which companies bid in real time for advertising space from publishers, which enables them to target specific audiences and users, and get a fair price based on the success of the publication in attracting users.

A recentr report from Adform, an advertising technology platform, revealed that investment in real time bidding spend increased 275% in the first quarter of 2013. Martin Stockfleth Larsen, CMO, Adform says "RTB spend has continued to increase as the industry realises the benefits of automated campaigns for reaching and engaging with the most relevant audiences."

"I believe that on the publishers' side, they are enjoying one of the best situations to monetize their media because they don't need sales people any more and it's just an algorithm based business on the buy side and on the sell side. And the advertisers have a way better insight into the quality of the media," says Mr. Senf. "I think both benefit — the publisher can now sell more, the advertiser gets more quality. We believe in the coming years more inventory sources will be automated, so mobile and mobile television is a big source which will be in the exchanges soon."

Mr. Senf founded YD World in 2008 with Niels Baarsma, who is the CTO of the firm. The company currently has around 60 employees and operates in five different countries – The Netherlands, where the firm is based, France, Germany, Spain and Poland. The pair began the venture due to the lack of performance based sales in the advertising industry. "We saw that people were working on a purely a cost per acquisition brokering activity and we saw that if you chose a scientific approach by analysing data and making decisions on data, then we could forecast or predict prices we wanted to pay for media. That's where the ambition came from to close the gap between the traditional branding world and the performance world," explains Mr. Senf.

The company's algorithm takes into account numerous factors to predict how well an advert will perform in a certain placement, and how much it is worth there. As with all algorithms, it needs constant revision. "The algorithm is purely focused on delivering performance, so it's an ongoing research and development process in which we're trying new variables all the time to optimise our bid strategies," says Mr. Senf. "If you look at the main research that we've been doing for finding the algorithm it's a big piece of our time and a big piece of our performance for the research and development people. On top of this algorithm we've been building a platform that is just a user interface and if you look at the company, we have more developer people than sales people at this moment."

This market, although extremely lucrative, is also very competitive, and this is the main challenge that YD World faces as it looks to expand further. "The challenges we see are on one side of competition, because our main competitors are the big six media communication holdings in the world, who also have large wallets to do investments with. But on the other side our advantage is they don't have the knowledge or the speed to develop technology themselves," explains Mr. Senf. RH

Zerogrey

www.zerogrey.com

Guido Meak

Internet/Online

Ireland

No

» Zerogrey co-founder Guido Meak was 26 years old when his multi-brand online fashion store hit a brick wall. The wall took the size and shape of the CEO of the largest client the young company had. In 2001, Mr. Meak was at a meeting with one of his business partners to ask why this particular client had not paid their invoices. The CEO, in his 40s, told him that internet companies in the past had stolen his money, so he wasn't going to pay. Mr. Meak reminded the client that he had a contract, so he must pay. The CEO's reply was blunt — "I'm going to eat the contract."

For many entrepreneurs this could have been a huge blow to a young company, but Mr. Meak somehow managed to turn it into an opportunity, from which the e-commerce firm he runs today was born.

The meeting proved to be the inspiration Mr. Meak needed for Zerogrey, a company which offers an e-commerce platform to clients, who can effectively outsource their online stores to the company. Over 12 years ago, the client in question owed 30,000 euros, and flatly refused to pay, so Mr. Meak offered him an alternative solution. "I said you know what, you pay us 50% in cash, and 50% you pay us in product and we'll set up a mono brand online store for you for free and we'll sell those products online so we can get our money back. He said you've got a deal, where shall I sign?"

Although the plan would ultimately be successful, there was still much trepidation about the deal he had just struck. "My business partner didn't speak to me for the next hour," said Mr. Meak.

Today, Zerogrey has subsidiaries in the U.S., Europe and China and provides it's e-commerce solutions to clients in a number of different sectors, including fashion, sports equipment and catering. The idea spawned from that meeting, to provide companies with an online platform from which they can sell their merchandise internationally, has proved to be a hit in the lucrative e-commerce market.

E-commerce spending in the U.S. alone will reach approximately $262 billion this year, according to a report from Forrester Research. That figure represents a 13.4% increase from last year. Meanwhile, in Western Europe, e-commerce spending is set to jump 14.3% to $114 billion in 2013, compared to last year. The report bases its findings on consumer and executive research, public financial documents and web traffic analysis, and shows the trend of online spending is heading in only one direction.

"Online retail's growth will outpace that of physical retail stores," read the report, written by Sucharita Mulpuru, Forrester's vice president and principal analyst for e-business. "As a result, stores will continue to lose wallet share to web retailers."

Zerogrey, headquartered in Dublin, Republic of Ireland, operates mainly in Europe currently, but the firm is looking to capitalize on the opportunities North America presents. Mr. Meak himself is going to the U.S. to ensure the success of the U.S. project. The main things I'm going to be doing in the United States. One is helping our existing European clients to move decently into the US and sell online in the US. So my task is to come over and compete with the local stores and get a slice of that market. Goal number two is to contact and sign as clients US companies and help them to sell internationally.

"There are two main things I'm going to be doing in the United States. One is helping our existing European clients to move into the U.S. and sell online. So my task is to come over and compete with the local stores and get a slice of that market," explained Mr. Meak. "Goal number two is to contact and sign as clients US companies and help them to sell internationally."

According to Zerogrey, most U.S. companies use e-commerce platforms that are ill suited for use in European and Asian transactions. Some may think this is due to language barriers, but that is only part of the problem. Tax laws differ widely across different regions, and this causes a problem when selling products in different countries. Companies may also want to change their prices according to which territories they are selling in. Zerogrey seeks to make an impact in the U.S. by offering its platform, which supports sales across the whole of Europe and even Asia.

Another aspect of the company that differentiates it from its competitors is its modular offering. A client can pick and choose which parts of the e-commerce platform and services it needs. The company doesn't just offer technology either, it has logistics operations and warehouse space it can offer to clients should they need it.

The e-commerce platform market is a very dynamic one. The number of potential customers is decreasing in one respect, and increasing in another. There is a steady flow of companies taking these types of services in-house, to varying degrees of success. But there are huge numbers of consumers still switching to online shopping, and still a large proportion of brands without an online presence. Luckily for Zerogrey, the number of potential clients entering the market outweighs those exiting it.

Both Zerogrey and Mr. Meak have come a long way since being told their contract was to be eaten 12 years ago, and the company has found a way to exploit an extremely profitable market space — one which is only going to get bigger in the future. For Zerogrey, the main focus now must be the U.S. — and succeeding in a region of almost unlimited potential. RH

Zoobe

www.zoobe.com

Lenard Krawinkel

Mobile

Germany

No

» A producer and director of animated films, Lenard Krawinkel founded Zoobe to bring cartoon animation to the land of instant messaging. The company produces an app that creates animated avatars for mobile messaging. With apps such as Talking Tom and Headcast already vying for position, the CEO admits his company serves a crowded marketplace. But what Zoobe provides is not just another messaging app, but a technology. Its speech patented animation platform humanizes instant messaging with imagination that seems to come fresh off the storyboards of Disney. It's a natural leap for Krawinkel, who has previous experience directing and producing advertising spots for Disney.

"VCs who look at Zoobe only for an instant might mistake us for another copycat of Talking Tom, but we are actually a technology," Krawinkel said. "We enable any character through our backend system that has an SDK of just 2 megabytes. This means we can integrate into any other app and provide a library of endless characters. We become a marketplace for content providers who can access our SDK, using a minimal of on-device storage space."

Aside from the animation, Zoobe features a speech patented technology that enables more natural lip synching in its characters, independent of language, whether the user speaks French, Chinese, or Swahili.

Based in Berlin, the company produces Zoobe Pets which enable users to send animated voice messages, as well as Zoobe Eve, which features an attractive female avatar. The apps have had over 50,000 installs in the last three months and are used to create hundreds of thousands of videos daily. They were recently featured in the Google Play store and have received over 500,000 downloads. Yet the apps actually serve as an ambassador, not a central product, Krawinkel explained. They serve to show other instant messaging services, brands and content providers the possibilities of Zoobe's rich animations. The technology is the actual sale, not the app, Krawinkel maintains.

Zoobe soon expects to announce a new partnership with what Krawinkel refers to as "one of the big five instant messaging services, such as Facebook, WeChat or Viber." Zoobe will be deeply integrated with the partner, enabling Zoobe messages to be created and sent at a touch of a button, similarly to adding a photo, video or emoticon. "We'll become a new category for sending premium, instant messages," Krawinkel said.

Krawinkel compares Zoobe's market to Line, the app that provides free calls and messaging. That company told him it made $8 million in July purely from stickers. "A year ago, nobody said that stickers could be such as successful business," Krawinkel said. "I look for similar opportunities for Zoobe."

The company plans to soon launch Zoobe 2.0, a marketplace for animated characters. It is also working on a karaoke app. "We're providing the next level of personalized expression," Krawinkel said.

The company has raised an undisclosed amount of seven figure investment from a private group of Berlin entrepreneurs. Krawinkel looks to raise a Series A of $3 million to $5 million to increase partnerships and introduce new licensed content.

Krawinkel founded the company on July 4, 2008, a date inspired by his admiration of the entrepreneur spirit of Silicon Valley's culture. When asked how big Zoobe can get, he points to the size of the sticker business. "For me, the sticker business is just the beginning for Zoobe," Krawinkel said. "Look at what 3D effects did for the film industry, or what Pixar did for animation. Zoobe strives for nothing less." RH

EUROPE STATS

For more statistics of the 2013 winners, visit us at www.redherring.com

REVENUE

SECTOR

40%
Of all winners are Internet and Software

Sector	# Companies
Banking/M&A	1
Big Data/Storage	4
Clean Tech	7
Cloud Computing	8
Consumer Electronics	3
Entertainment & Media	3
Hardware	2
Internet/Online	21
Life Sciences/Biotech	3
Marketing/Advertising/SEO	4
Medical Devices	1
Mobile	5
Other	4
Social Media	3
Software	19
Telecommunications	10
Virtualization	1

THE CEOS

Are CEO

Are CEO/ Founders

FUNDING

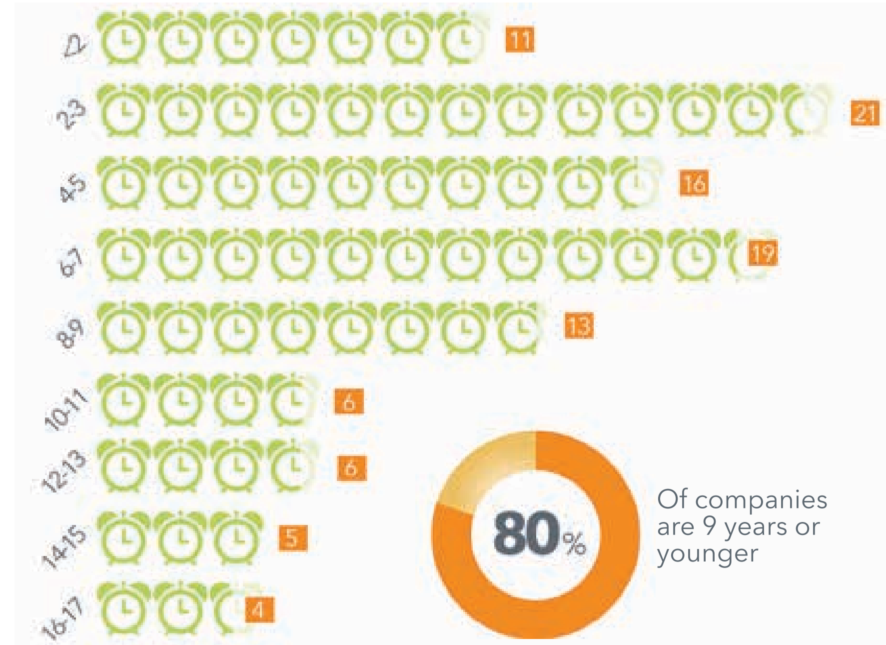
85% Of companies have between 0-2 rounds of funding

25% Of companies are not VC funded

Average Funding **$11M** With mean at $1.5M

# of Rounds	# Companies	Avg. Total Funding
0	26	$40k
1	31	$5.6M
2	27	$7.2M
3	9	$40M
4	3	$20.6M
5	3	$46.6M
6	1	$110M
8	1	$64M
Total	**100**	**$2.9M**

COMPANY AGE

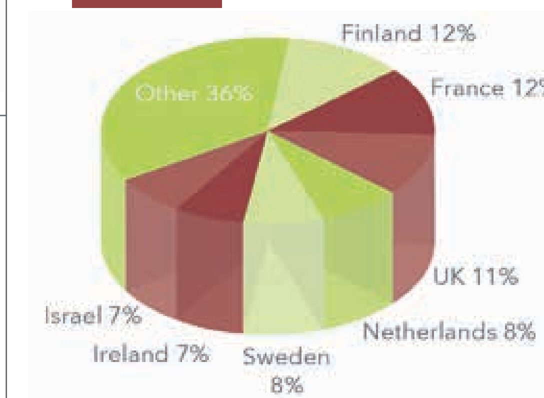


80% Of companies are 9 years or younger

GEOGRAPHICAL DISTRIBUTION

Finland	12%
France	12%
UK	10%
Netherlands	8%
Sweden	8%
Ireland	7%
Israel	7%
Other	36%
Grand Total	**100%**

20 Countries



PATENTS

637 Patents

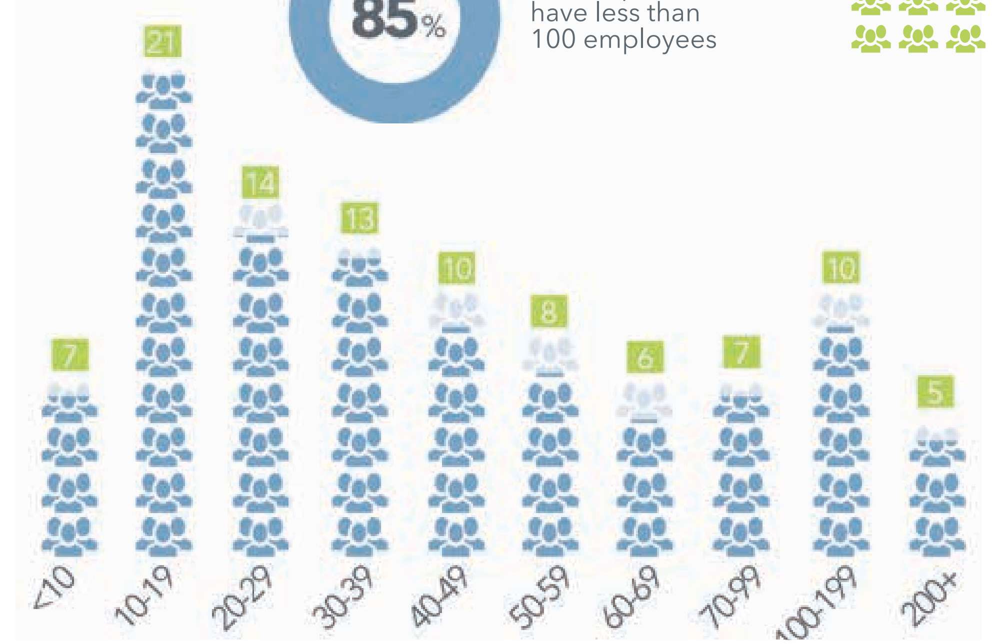
60% Have no patents

4 Companies hold one third of patents

EMPLOYEES

85% Of companies have less than 100 employees

x 5 = 1000
Only 1 company has over 1,000 employees



1/5 Of companies have 10-19 employees

1/3 Of companies have less than 20 employees

Apple's China Mobile Deal

Could provide temporary relief

Apple completed its long anticipated iPhone distribution deal with China Mobile at the end of last year. The Cupertino-based tech giant will enjoy a sales windfall from the deal, but will the boost help the company recover share in the smartphone market?

Apple hopes the long-awaited agreement with China Mobile, which boasts 759.3 million users, will help its sales figures in a country of increasing significance to the American behemoth, and the tech world at large. Apple's revenues in China stood at $25 billion last quarter, a 13% increase from last year. The company relies heavily on the iPhone for revenue — the devices accounted for 53% of total net sales so far this year, up 3% from last year and 11% from 2011.

Apple's performance in China is certain to improve dramatically if the deal is signed, but analyst predictions vary on just how many more iPhones the company will sell through China Mobile. Brian White, an analyst at Cantor Fitzgerald, estimates Apple could sell 20-24 million iPhones to China Mobile in 2014.

"We estimate there are 35 million to 40 million iPhone users on the network at China Mobile. As such, Apple not only has the opportunity to attract new iPhone users but also to tap into a large base of iPhone users on the China Mobile Network that we believe could upgrade in 2014," White wrote in a recent note.

White also predicted this could result in an earnings per share increase of $4. Other analysts expect the deal to add anything between 10 million and 40 million extra iPhone sales.

Apple holds a 12.1% share of the smartphone market, compared to Samsung's 32.1%, according to third quarter 2013 data from Gartner. Apple looks increasingly isolated in the smartphone market, mainly due to the success of the Android operating system. Android holds an operating system market share of 81.9%, according to Gartner figures. In contrast, iOS takes a 12.1% share, and this is not the only troubling omen for Apple's smartphone ambitions.

This year there were more apps designed for the Android operating system than iOS for the first time. If the content developers prefer Apple's competitors, there may be trouble ahead. Paul Deninger, senior managing director at Evercore Partners, recently said at a Red Herring event that if current growth rates hold, Google Play, which hosts Android apps, could generate more revenue than the Apple app store by 2016.

The deal with China Mobile will vastly improve Apple's revenues and smartphone market share. But down the line, the dominance of the Android operating system casts a longer shadow over the performance of the company's iPhones. This deal will offer temporary relief for Apple and its investors, but the long term issues remain. RH

Mobile Internet builds promise in African E-commerce Market

The vast continent of Africa presents a significant opportunity for e-commerce retailers, but a lack of infrastructure has held back online shopping in the region. Now the use of mobile devices to shop online is unlocking some of the potential, and big players are starting to take notice.

MTN, the largest cellphone operator in Africa, recently announced a partnership with Swedish e-commerce company Millicom International Cellular and incubator Rocket Internet. The three firms will each hold a 33.3 percent stake in Africa Internet Holding, set up to develop e-commerce businesses across Africa. Millicom and Rocket Internet will attempt to leverage MTN's reach in the continent and create startups in some of the world's fastest-growing internet markets.

Business-to-consumer e-commerce sales in Africa totalled less than $1.4 billion last year, but annual growth of around 40 percent is forecasted for the next ten years, according to a report released by yStats.com. The same research states that South Africa currently leads in online shopping, but other countries such as Egypt, Morocco, and Nigeria have higher mobile shopper penetration and may overtake the country in the future.

More than 10 percent of active Internet users in Africa shopped on mobile during 2013, according to yStats.com, illustrating the increasing importance of mobile connectivity on the continent. In areas where computers are hard to come by, consumers increasingly use mobile devices to connect to the internet.

But some countries in Africa saw connectivity increase over the past few years. In Kenya, the number of Internet users reached almost 20 million this year, half of the country's population, according to the yStats.com report. E-commerce has room to grow in the country, as mobile

> In Kenya, the number of Internet users reached almost 20 million this year, half of the country's population.

Internet penetration trumps a lack of fixed broadband infrastructure. Only 20 percent of Kenyans are shopping online, though, reflecting an opportunity for growth in a country where mobile Internet penetration is negating the lack of fixed broadband infrastructure.

The Middle East faces the same structural issues as Africa, and MTN recently announced a similar partnership with Rocket Internet in that region. MTN expects to invest a total of around $400 million into the projects in Africa and the Middle East.

But MTN's move into e-commerce in Africa highlights the risks of betting on the continent's digital shopping sector. As a result of this announcement, ratings agency Moody's Investor Service downgraded its outlook for MTN from positive to stable, citing the company's increasing exposure to more unstable markets.

"MTN's exposure to the risks within the political, social, regulatory and economic environments in the key countries in which it operates such as South Africa and Nigeria are important drivers for MTN's ratings," said Dion Bate, vice president and senior analyst at Moody's.

Worldwide e-commerce sales topped $1 trillion for the first time in 2012 and Emarketer predicts that figure to rise to $1.3 trillion this year. Sales in the Middle East and Africa accounted for just 1.9 percent of sales in 2012, which is expected to grow to 2.1 percent this year, according to figures from eMarketer.

The e-commerce market in Africa holds great riches for whichever companies make the bold decision to move into the likes of Nigeria and Kenya. Mobile Internet penetration grows every year, and with it the opportunities in e-commerce. Investors may not see immediate payoffs from the continent, but in time are sure to reap rewards. RH

Automated Vehicles

Stand out from crowd of 'moonshot' projects

Amazon may have its head in the clouds with its GPS-driven drone delivery plans, but a far more realistic form of automated driving is gathering momentum on the roads.

Volvo, the Swedish automaker, recently unveiled a pilot program in which automated cars will take to the roads in Gothenburg, Sweden. The company aims to put 100 cars capable of driving themselves in the hands of customers by 2017.

This marks a big step forward for Volvo's automated driving ambitions. Until now, Google has led the field, clocking up over 500,000 miles of driving in its autonomous cars. Its technology uses a combination of sensors, algorithms, GPS coordinates and digital maps to safely navigate public roads. Google has about two dozen Lexus RX450h vehicles in use, and has yet to report any accidents. However, there is no word on when the technology could reach consumers.

Volvo has already deployed automated cars on the roads, according to Erik Coelingh, technical specialist at Volvo Car Group, but the vehicles have not yet been driven without the aid of a supervising engineer. The biggest hurdle for the project right now is making the automated system dependable enough to be used unsupervised. Before the cars hit consumer markets, their operating systems and built-in technology must prove reliable, sensitive and secure. Automated cars need extremely sophisticated sensor systems in order be considered safe.

"The major challenge is on the sensing side," Coelingh said in a phone interview. "Making sure you can detect everything that can potentially happen on the road in traffic — that is a really big task. It requires a very advanced sensing system." Coelingh gave the example of a piece of debris falling off another car and into the road suddenly. The automated car would need to quickly acknowledge the debris using its sensor systems, and maneuver clear of it without endangering other cars on the road.

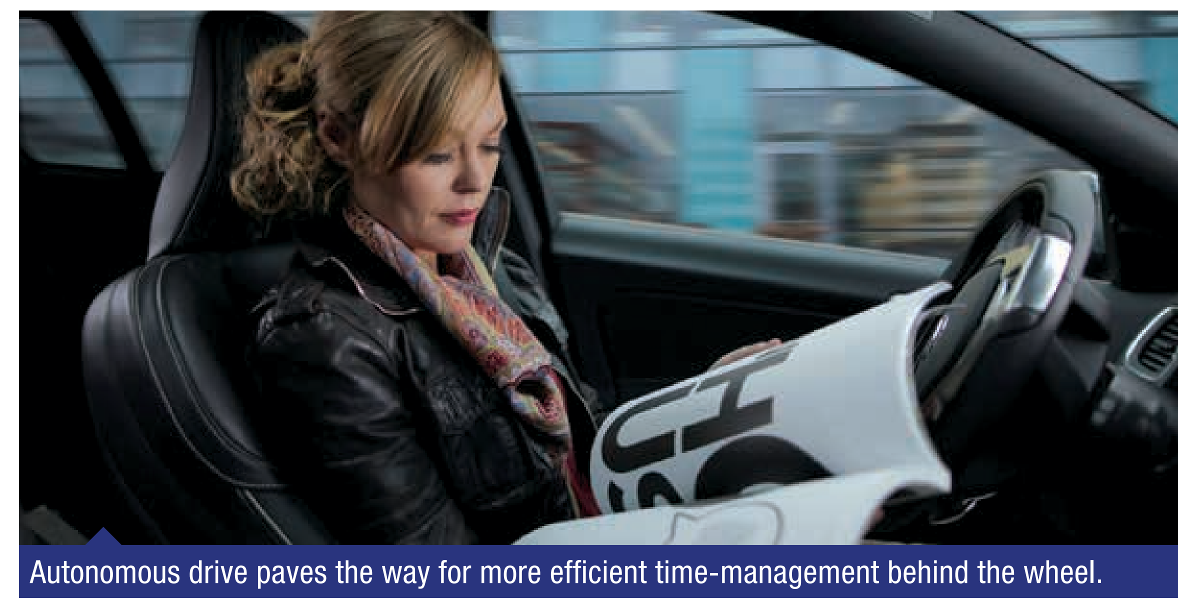
Significant progress has been made concerning the legality of driving an automated car. In the U.S., three states have already passed legislation regarding automated vehicles. Nevada's Governor signed a law recognizing automated cars in June 2011, which required the Nevada Department of Motor Vehicles to set safety, performance and testing standards for them. In July 2012, Florida followed, while California was the latest state to recognize automated cars, requiring California DMV to adopt regulations on testing, performance and equipment by January 2015.

Most European countries adhere to the Vienna Convention on Road Traffic of 1968, which states that drivers must be in control of the vehicle at all times. However, this law can be interpreted in different ways and has sparked much debate. Some say to be in control of a vehicle you must be accelerating, braking and steering at all times, but other say as long as there is an option to deactivate and activate an automated driving system safely, then the driver is in control. Volvo has attempted to bypass any legal confusion by partnering with the Swedish Transport Agency and the Swedish Transport Administration on the project.

Volvo set out to make driving less boring, and this may be what ultimately fuels its success. Rather than chasing an idea born out of science fiction, it has attempted to address a genuine problem in a realistic way. The company seeks to put an end to tedious driving conditions such as city commutes and traffic pile-ups by enabling a driver to switch on automated driving and turn their attention to something more entertaining or useful.

Many other car manufacturers are working on varying levels of vehicle automation technology. Volkswagen, for example, has been developing automation solutions since the early 2000s, and is now looking to incorporate this technology primarily into the Audi brand.

A number of 'moonshot' projects have gathered attention over the past few months, such as Amazon's fleet of delivery drones and Google's robotics project. But automated driving has reached a level where it can no longer be classified as an overly ambitious fantasy — just ask the people of Gothenburg in a couple years' time, when the first driver-less cars hit the roads. RH



Autonomous drive paves the way for more efficient time-management behind the wheel.

Lower Left: The self-driving cars have sensors that keep track of cars and the surrounding environment. The cars will also be connected to a Volvo cloud to get map data and other information from a traffic control center.

Lower Right: Signing of project Drive Me, from left to right: Staffan Widlert (Swedish Transport Agency), Caroline Ottosson (Swedish Transport Administration), Håkan Samuelsson (Volvo Car Group), Anneli Hulthén (City of Gothenburg), Niklas Wahlberg (Lindholmen Science Park).

Photo courtesy: Still from the video Autonomous driving by Volvo Car Group.

Nextdoor's Social Platform
aims to connect U.S. neighborhoods

Much of social media depends on the ego of the user. Facebook users post pictures and statuses, Instagrammers snap shots of breakfast, and Tweeters write witty quips, hoping for a Favorite. Nextdoor, the web platform for neighbors, asks members to take a wider view of the world.

Targeting neighborhoods may feel niche, and has been tried before with varying levels of failure. But the company has well respected backing and is taking aim at the likes of Facebook and Twitter.

Kleiner Perkins founder John Doerr describes the positioning of the company as "Solomo", meaning it covers social, location and mobile. Nextdoor started out as a web portal, but has now deployed smartphone and tablet applications, allowing users to contribute content on the move.

The U.S. has around 150,000 neighborhoods in total and Nextdoor has targeted these first, and has no global presence yet. But it's a tough task facing the company — to connect and protect neighborhoods in a world where people want less and less to do with each other.

According to a survey by Trulia, Inc., only slightly more than half of Americans know their neighbors' names. A 2000 book by Robert Putnam, Bowling Alone, explores the idea that civic life, once so rich in the U.S., might be fading.

Plenty of people will reminisce about the 'good old days' and claim that the sense of neighborhood has been lost, but studies such as these show that there is a genuine problem there. But social media has been shown to bring people together. Research from independent research organization Pew, states that portals like Nextdoor may increase offline interactions. Almost 80 percent of Americans that engage with online neighborhood forums speak to neighbors in-person at least once a month, up from 61 percent of all Americans, according to the study.

A platform to connect neighborhoods digitally is not a new idea. Neighborhood forums such as i-Neighbors and Home Elephant have been around for a while. Home Elephant was founded in 2011 and boasts more than 6,600 neighborhoods, according to its website. I-Neighbors was launched back in 2004. Another competitor, Tel Aviv-based Meetey, has started deploying its services in more than 90 countries. The company, founded 2012, has reportedly racked up 200,000 users and connects members to 56 people they wouldn't link up with on any other digital platform.

> Almost 80 percent of Americans that engage with online neighborhood forums speak to neighbors in-person at least once a month

Nextdoor is looking to perfect what has already been done. It only takes one person to sign up a neighborhood to the platform. That person then becomes responsible for inviting others to the platform. Pilot neighborhoods must gather 10 verified users in 21 days or they lapse (though Nextdoor notes it can extend the three-week deadline). The site authenticates users, confirming their addresses by a credit or debit card, snail mail, phone, or a social security card. Once online, members get access to forums where they can post news about crime, free stuff they're trying to unload, local events and more.

Mobile plays an integral role in bringing new and younger audiences to the platform. Currently, 20 percent of user-generated content comes via the company's iPhone app. Nextdoor sees mobile engagement ramping up as a harbinger for growth across multiple aspects of the business. The company saw that in lower-income or younger neighborhoods, engagement spiked when the mobile apps were released.

The company also coordinates with city governments and agencies in order to keep users updated on local goings-on, and members have the capability to deploy mass urgent alerts in case of emergency. Nextdoor is currently partnered with 130 city governments but this is not just the only service it adds to distinguish itself from competitors.

Features such as neighborhood maps allow users to mark significant locations, and a recent map encouraged people to mark their house with a small light bulb if they were intending to decorate their homes with lights over the holidays. Subtle differences like this have helped the company gain significant funding.

Nextdoor is currently pre-revenue, but has raised $100 million in VC funding over the past two years. Nextdoor's most recent, $60 million injection came from some of the best VCs in the business: Benchmark, Greylock, Kleiner Perkins, and Tiger Global Management. Having this kind of backing can only provide the company with an added sense of respectability.

Nirav Tolia, Nextdoor's CEO and founder, has previously worked at Yahoo and co-founded a digital sports almanac called Fanbase, which didn't take off. But he is extremely passionate about Nextdoor. "As we have gotten older and purchased houses and gotten married and had children, we realized the importance of the neighborhood in our lives," he says. "I care very deeply that Nextdoor is something that my children use, and their children use."

When the time comes for the platform to make money, the potential lies in local advertising. Tolia gauges the local advertising industry at $100 billion. Every day, his platform's users recommend 260,000 service providers. The connection is there to be made.

The company's main aim now is to keep its head down and grow, following the likes of Pinterest and Snapchat, which also secured large amounts of cash pre-revenue. Nextdoor has reached 25,000 neighborhoods in the United States — one out of every seven, or roughly 14 percent. The firm is aiming to reach half of the neighborhoods in the U.S. before targeting the international market, which holds great potential

"I think there's the same identification with neighborhood and community in Stockholm that there is in Sacramento so this will work, but no doubt the product will be tailored, adapted and customized for those communities," Doerr says. The company will approach English-speaking countries first and head into other international markets based on demand.

Tolia says Nextdoor often adds 100+ neighborhoods a day now. At that rate, its user base at 23,000 will grow by 3,000 neighborhoods a month and 36,000 a year. By this time 2014, Nextdoor could have racked up more than 75 percent of U.S. neighborhoods as members. If the figures hold up, there will be nothing to stop Tolia's goal of revolutionizing the society in which we live, be connecting the world to the people next door. RH

TOP 100 WINNERS:
NORTH AMERICA

AMERICAN PIONEERS ARE EMBARKING ON NEW TERRITORY THROUGH TECHNOLOGICAL INNOVATION

American start ups are still leading the charge and provoking much disruption around the world of innovation. Although breakthroughs are sprouting from most regions at an unprecedented pace, U.S.-based, venture backed companies show an amazing ability to scale and disseminate their technology before reaching out to international markets. The Award Winners at Red Herring America 2013 have, by all metrics, beaten all former records.

The time taken to go from 0-20M in trailing revenues has shrunk. The number of companies with Fortune 100 clients at that stage has more than doubled. New concepts in education have become commonplace. A larger number of biotech firms are bringing seminal changes in healthcare for millions of Americans and personalized medicine is no longer a buzz word. We are witnessing not only a leap in execution skills but also an early adoption or acceptance of innovators throughout the economic fabric. In a nutshell, tech has crossed a frontier and the current vintage epitomizes this unstoppable trend, and is featured many times in this issue.

You will read about each of them but we cannot stress enough the limits of the exercise. For every profile, so much more could be said and reported but we focused on the core aspects of their achievements. It goes without saying that the Red Herring America Top 100 does not include candidates which did not complete the selection process, but whose journeys will continue to capture our collective attention. Nevertheless, our writers intend to give you an opportunity to read about some exceptional entrepreneurs who are backed by an increasingly successful venture community.

Over the years, our readers have used this magazine to get acquainted with tomorrow's innovators. They have kept this issue next to them for weeks, discovering the companies one at a time. I hope that you will use these next pages as a springboard for further exploration. Have a nice read.

2013:

TOP 100 Technology Companies

North America: A-Z

AccuVein
Ace Metrix
Actifio
Adaptive Computing
Adly Inc
Agiliance
AgilOne
Airbiquity
AirWatch
Alteryx
Asigra
AtHoc
Autonomic Technologies
Avalara
Awarepoint Corporation
Azumio
BizSlate
Bloomfire
Braintree
Brand.com
Bright Computing
Caring.com
Causata
Celladon Corporation
Centric Software
ClearPath Networks
Continuuity
Couchbase
Course Hero
Crescendo Bioscience
Cvent
CytomX Therapeutics
Drillinginfo
Elance
Evolven
Fiksu
Finovera
Full Circle CRM
Gainsight
GainSpan Corporation
Gen-E
Glassdoor
Grammarly
hc1.com
Infinite Convergence
Influitive
Intacct
Invuity
Jasper Design
Jumio
Kargo
Kony Solutions
Labcyte
LeadBolt
Linkable Networks
Manta
mBlox
Medsphere System
Metamarkets
Mu Sigma
MuleSoft
Myriant Corporation
Narrative Science
Neuronetics
Nextiva
NuoDB
Nutanix
OncoMed Pharmaceuticals
OnForce
OptiMedica
Paymetric
Pentaho Corporation
Perfect Market
Pertino
Quantenna
Qwilt
Resilient Network Systems
RetailNext
Revinate
ShopKeep POS
SimpliVity
Skybox Imaging
SmartDrive Systems
SnagFilms
Snapfinger
Spring Mobile Solutions
SS8
Taykey
Tealium
Teladoc
TouchCommerce
UniversityNow
Vantrix Corporation
Venafi
Veracode,
WaveTec Vision Systems
YapStone
Zend Technologies
ZestFinance
Zetta.net
Zettics
Zscaler

AccuVein

www.accuvein.com

Ron Goldman

Medical Devices

New York

Yes

» A lot of people hate needles, and for some, a simple blood test can turn into a nightmare if the nurse can't find a vein. Now, new technology can make veins more visible than ever.

AccuVein, a New York-based company, developed a vein illumination device that allows healthcare professionals to see a map of peripheral veins on the skin's surface. The technology helps to guide the most commonly-performed invasive medical procedure, venipuncture, as well as other vascular access procedures. "It's so rare that you have a technology that you don't need to explain, you just show it to a technician and they understand the difference that it makes," says Ron Goldman, AccuVein's CEO.

AccuVein's solution can be particularly useful for obese patients with relatively dark skin or for newborn babies. The technology saves time that can be crucial especially in the emergency room. "When you use conventional techniques you often miss the veins, and once a first nurse misses twice the hospital is required to get another nurse for the procedure," Goldman explains. "We avoid the escalation process within the hospital."

A study conducted by the company in 2009-2010 in a hospital with an annual volume of 4,500 patients showed using AccuVein's device resulted in $1,600 savings per month and more than $19,000 annual savings. In addition, the probability of infection increases when the procedure is done over and over again, meaning technology such as this can lower that risk.

"We were able to build a device that was 10 ounces versus the 150-pound machines that showed your veins beforehand," says Goldman. The price difference was also significant: $500,000 for the machine versus $25,000 for AccuVein's device, which doesn't require training, unlike the vein machines.

The target market for the Accuvein devices are hospitals, long-term care facilities (such as nursing homes), ambulances, emergency medical services, blood labs and blood donation centers. "The market is huge because blood is drawn throughout the whole medical system," says Goldman. Most sales today come from the hospitals, but the company hopes to target other segments in coming years, such as the cosmetic procedures market.

AccuVein's devices are in use in more than 2,000 hospitals and available for sale in 100 countries. The company distributes its device in Asia, Latin America and Europe. "We found good distribution partners in those areas," Goldman says.

In July 2007, private investors from the Memphis Tennessee area invested more than $10 million in Accuvein. Products were first sold in 2009. In 2010, the company raised a $22.5 million Series B round from Bessemer Venture Partners and MVM Life Science Partners LLP, both of which invest in healthcare-related companies. The company doesn't plan to raise more capital, but to focus on acquiring more distribution partners. Most recently, it has teamed up with PSS World Medical Inc., a leading national distributor of medical supplies and equipment to office-based physicians and long-term healthcare providers.

"When asked about time spent at a hospital, patients frequently comment on two things: first, the lousy food, and, second, the pain, anxiety and treatment delay caused by problems starting an IV," says Eric Bednarski from MVM Life Science Partners, a firm that invested $9 million in AccuVein's Series B round. "Doctors and nurses recognize the value of AccuVein's product and the importance of starting IVs smoothly as failures result in unnecessary escalation of hospital resources and cost, inefficiency in health care delivery and adverse patient care," he adds.

AccuVein's intellectual property portfolio includes over a dozen patents covering a broad range of imaging and medical diagnostic technologies. The company is not profitable yet, but Goldman hopes to break even by 2014. "The company's strong growth is being fueled by deeper penetration of existing clients, new product launch, and greater expansion into the vast market opportunity improved by vein illumination," adds Bednarski.

From the patient's point of view, less pain and more comfort makes a significant difference. "I was in Boston Children's Hospital and noticed that the doctors put the IV into the child's better arm. With our device they could put it in the diminished arm, so the children were able to use the other arm for other functions," Goldman concludes. RH

Ace Metrix

www.acemetrix.com

Peter Daboll

Marketing/Advertising/SEO

California

Yes

» Over a phone conversation, Ace Metrix CEO Peter Daboll was discussing with Microsoft how its latest Surface ads performed. The company said they already tested the ads and compared them against advertising for other Microsoft products. Daboll responded: "Wouldn't you like to see how the new Surface ads compare against advertising for the iPad?" The company was speechless.

As it turns out, those Microsoft's Surface ads actually did perform better than iPad advertising, scoring a 674 on Ace Metrix's ad scoring system, compared to Apple's 489, slightly below the industry average of 542.

Ace Metrix can measure the creative appeal of an ad against nearly every ad on the market in as little as 24 hours. The company monitors about 200 advertising networks and has the technology to grab the actual ad from the digital content. It then fingerprints the ad to see if it is new, places it in its advertising cloud, and then has the ad reviewed by 500 viewers carefully chosen for geography and demographics. Every ad is scored according to the same nine questions and given a rating that can be compared against other advertising, including the competition. Ace Metrix surveys about 5,400 ads a week, 11 percent of which are new that are then tested and put into the company's database.

"To understand the creative complexity of the marketplace, this is a perfect tool," Daboll said. "Only about 10 percent of the cost of developing an ad is actually spent on producing a commercial, yet when you look at the ROI, the actual success of a campaign can really be attributed to the quality of the creative. There's tremendous leverage to get that right. Nobody has been able to provide this level of color in advertising."

One amusing Jell-O ad featured parents terrifying their children to keep them from stealing their Jell-O desserts. After the ad was released, more than 300,000 people signed a Facebook page to boycott Jell-O, and the company panicked . Within 24 hours of the ad's release, Ace Metrix was able to provide quantitative data that proved the ad was actually one of Jell-O's best performing ever. Kraft stuck to the ad campaign, which proved to be one of its most successful.

"They had three hours to make a decision, and we were the only ones who could help them," Daboll said. "There are a lot of loud mouth opinions in social media that don't necessarily represent your base. We provide the necessary speed and clarity to know how good the creative is and which parts really work with what audience."

Plus, the company can provide near real-time analytics for TV advertising in an industry that has been based on estimated guesses for decades. "This is absolutely disruptive in TV advertising because they don't typically think in real-time," Daboll said. "Our platform tells broadcast TV advertisers the creative score as part of the optimization process. Yeah, you can optimize on cost and eyeballs, but you need the creative to be key in the mix so the ad environment can work well for everybody."

Doubling annually, the company serves over 50 advertisers that include some of the top brands in the world, including Facebook and Google. For its new video unit, Facebook will soon be requiring all advertisers to first test their creative with Ace Metrix. "Both Facebook and Google are really behind this because they want a superb user experience by being able to offer great content," Daboll said. Other customers include Dr. Pepper, Snapple, Ford, and Taco Bell.

"Ace Metrix has given us more than just a score for our ad, but a barometer by which we can see how our campaigns are doing against competitor's messaging and different segments within the consumer market," said David Marine, Director of Client Engagement with Coldwell Banker, an Ace Metrix customer. "Everything in advertising today has to be measurable but for a while how effective your creative truly is wasn't instantly available in a quantifiable format."

Difficult to duplicate, the company's IP includes its scoring algorithm, a proprietary fingerprinting system that identifies each ad, unique software and apps as well as the panel calibration methods that provide consistent scoring across brands. It has invested significant resources in establishing the ability to collect the elements that determine an ad's success. Its meta data on normative comparisons on over 30,000 ads also present a significant barrier against competitors.

Founded in late 2009 and based in Mountain View, Calif., the company has raised $22 million from WPP, Hummer Winblad Venture Partners, Leapfrog Ventures, and Palomar Ventures.

Expecting to be cash positive by the end of the year, Daboll foresees the company earning $50 million revenues in the next three to five years. "With some diversification of products, we are well on a path to be a $100 million company," Daboll said. "This is a space that is really ripe for innovation." RH

Actifio

www.actifio.com

Ash Ashutosh

Big Data/Storage

Massachusetts

Yes

» Today, data storage ranks highly on enterprises' list of concerns. Historically, as data gets stored, files get backed up over and over again. This process creates multiple copies of the same data. Massachusetts-based Actifio tries to keep up with the data storage needs of our time, as datacenters turn into virtualized and Cloud architectures.

In 2009, Actifio's founder Ash Ashutosh observed how little storage technology had evolved to meet new business requirements. Having spent 25 years in the business, most recently as the Chief Technologist at HP storage, and before that as the founder of AppIQ, Ashutosh found that over two-thirds of storage capacity was being used to store copies of data, rather than production originals. There were copies for data protection, business continuity, disaster recovery, analysis, archiving and more. Organizations had reached the point where they were spending more to manage copies than they were to manage their actual "stuff."

Ashutosh got started Actifio Copy Data Storage (CDS) as its industry shifted to virtualization, storage commoditization, and from tape to the emergence of various storage media including Solid State Drives (SSD's). The moves opened up a place for Actifio and a new approach to data management.

"I can't comment about the specific potential size of our company, but the market opportunity is huge," Ashutosh says. The International Data Corporation (IDC) sized the segment of copy data storage at $48 billion by 2016. Moreover, IDC finds that copy data consumes 60 percent of disk capacity, drives 65 percent of storage software spending and accounts for 85 percent of hardware spending. Today, organizations are already spending $44 billion on storage and software to manage copy data according to IDC's research — and that number is expected to grow by the end of the year.

Actifio sells Copy Data Storage solutions through its partners across 19 countries, via SaaS model or as an on-premise solution. "We have more than 300 systems deployed in North America, Israel, Germany, UK, Korea, Japan, Australia and New Zealand," Ashutosh says. Some of Actifio's clients include HBO, Time Warner/Navisite and Dassault Systémes.

Even though it is not profitable yet, Actifio claims to have grown 700 percent in 2012, with reported bookings of $17 million, and 11 consecutive quarters of triple digit growth.

The company raised a total of $107.5 million over 4 rounds of funding, with the last round being the largest one at $50 million. Different investors have led every round, and among them were Greylock, North Bridge, Advanced Technology Ventures, Andreessen Horowitz and Technology Crossover Ventures, which led the most recent round. "We're not seeking additional funds at this time," Ashutosh says. The company intends to use the investment to scale and grow its community of 200 "Actifians."

"Our initial investment thesis was that Ash is going after a large and important market with innovative and disruptive technology . Given Ash's track record before Actifio we also assumed he will be able to attract around him a world-class team," says Erez Ofer, partner at Greylock Israel, who also serves on the company's board of directors. Greylock invested in Actifio since its A round in 2010.

Actifio competes with many companies including EMC, Hitachi Data Systems, Symantec and Commvault. According to Ashutosh, "Actifio consolidates many of these competitive tools that are the root cause of the cost, complexity and confusion in the data center today."

According to Ofer, competitors like EMC and HDS validate Actifio's model by introducing products and bundles to compete with the company. Actifio, however, has a solution that is radically more simple and cost-effective than what incumbents are able to patch together from their existing product sets.

Like any young company in an accelerated growth phase, Actifio's main challenge and opportunity is to grow the company in a scalable fashion while maintaining the culture and focusing on hiring the best folks. As the data storage market grows furthermore, its revenue potential is expected to grow with it. RH

Adaptive Computing

www.adaptivecomputing.com

Robert Clyde

Software

Utah

Yes

» Adaptive Computing empowers high performance computers to reach 100 percent utilization rates. The Oakridge National Labs Computing Center, the largest in the world, is a $100 million system. With traditional systems, it would cost over $200 million with only a 40 percent capacity. Adaptive Computing's intelligent workload automation enabled the computer giant to operate at 100 percent capacity, saving over $100 million a year.

TH1, the world's fastest computer from 2010 to 2011, ran 2.566 petaflops, consuming over four megawatts of power, which cost about $3.5 million annually in power. Yet it, like most in the high performing computing space, operated at only a 40 percent utilization rate.

"The math provides tremendous savings," said Rob Clyde, CEO of Adaptive Computing. Most companies operate at an 8.5 utilization capacity. Adaptive Computing can drive that up to 25, 35 or 45 percent.

Achieving over 50 to 200 percent additional efficiency, the company provides workload management to some of the world's largest computer installations. It provides the ability to do self-service through a service catalog in an automatically provisioned system. But its core strength is it does in all in an optimized fashion. It consolidates workloads to deliver extreme efficiency that has deep impacts to a company's bottom line.

The company has 27 patents issued, with 22 pending. Its technology identifies which workloads need to work together, whether or not data can be moved, and which applications are limited by licensing to certain servers. It looks at both regulatory and business needs, environmental considerations, and a number of other regulatory limits to the data. Savings are well realized by large customers, Adaptive Computing tends to have the biggest. In addition to the Oakridge National Laboratory, other customers include Yahoo, Yale and the FDA.

"Packing the data is easy. The trick is knowing where to fit it dynamically in real time, or the system will thrash a lot," Clyde said. "You need to be able to look into past and the future and figure out where to put things."

Based in Utah, the company serves over 300 customers, each a household name. Its customers include financial institutions, the oil and gas industry, research organizations and governments. Its customers drive seismic research for oil and gas and studies to cure cancer. "One of reasons I love working for Adaptive com, we help solve some of the world's most important problems, as oppose to getting people to click on more ads," Clyde said. "It's tremendously rewarding." Growing far faster than the $ 1 billion cloud market, the company doubled its licenses last year. Its customers are global. In addition to the US, the company has sales offices in the UK, Germany, Russia and Singapore. It competes against VMTurbo.

The company was originally founded in 2000 by David Jackson, who later brought in his brother Michael Jackson to handle business logistics. Both started the business with four guys in a trailer. A thought leader well known in the computing space as a founding member of the Global Grid Forum and a member of the Department of Energy's Scalable System Software Initiative, David Jackson brought in substantial clients that allowed the company to grow, and began implementing the cloud services as early as 2004. Clyde only recently joined the company after it surpassed $10 million in sales.

"This is core technology," Clyde said. "Gartner pointed out that policy based optimization is key. Without it, you don't get a real return, and it ends up costing you more money. We are still in the early stages, but we are starting to be recognized as a key element in the process."

It raised $24 million in 2010 from Intel Capital, Epic Ventures, and Tudor Growth Equity.

"Honestly, these guys own an incredibly valuable IP portfolio with 33 patents. In essence, Adaptive Computing is the inventor of this type of workload management and Cloud Computing," said Chris Stone, Managing Director EPIC Venture Funds. "Adaptive Computing sells two product lines based on the Moab technology: Moab Cloud Suite and Moab HPC Suite. They solve different, but related, problems within Cloud and HPC environments. Without either of these products, data centers are wasting millions of dollars." RH

Adly

www.adly.com

Walter Delph

Social Media

California

Yes

» Founded 5 years ago, Adly uses cross-platform social marketing tools and integrates within Twitter, YouTube and Facebook to drive celebrity-and-influencer-sponsored awareness for brands and partners. "I think there is no better group to reach individuals from an organic conversation point of view than a celebrity, because they can reach the most people, while consumers have emotional attachment to them," says Walter Delph, Adly's CEO for the past 1.5 years. "A consumer can now directly connect to a celebrity, follow where the celebrity is going and what they are doing. Those things can't be replicated through TV or billboard ads."

Unlike traditional ads, digital advertising allows better understanding of the target audience and potential customer. Adly analyzes the needs of specific brands and works with these brands to address specific customer groups. Then, the brand managers connects celebrities with specific campaigns. The company has over 2,000 celebrities in its network. Some come to the company included in partnerships with talent agencies. The celebrities get advice from Adly about what is occurring at the brand level and what new categories they can get involved in.

Adly has worked with various large enterprises, including Coca Cola, L'Oréal, Disney, Canon and more. Based in Los Angeles and New York, the company employs 11 people. In May, Adly joined a campaign with State Farm insurance that starred the NBA's Chris Paul, and tweeted from his account. "We targeted over 30 million people, specifically men ages 13 to 45 located mostly on the coast, with California being the number one market," Delph says.

Adly charges the brand according to how deeply they are engaged with that celebrity. A campaign that involves pictures and videos would cost more than a couple of Facebook statuses, for example. The company doesn't disclose details on its revenues, but it is still unprofitable. But things are busy at Adly, which bodes well for business. "August was moderate until the craziness of back-to-school time, and until Christmas it's going to be the craziest time," he says.

The company is privately-backed by digital media and retail consumer investors, such as Greycroft, GRP Partners and Siemer Ventures.

"The sector of social media will reach close to [$15 billion to $20 billion] soon, and the people that work with the largest publishers would gain a significant share of the market," Delph says. Celebrities are among these publishers, and their share of the market, according to Delph, is significant. Adly's average reach is 1.5 million people per celebrity. "We have the same reach as a mid-sized cable network," he says.

"The sector is very new so there are no specific companies that we are losing business to," Delph explains. However, providing proof that social media advertising actually works proves a greater challenge than competition. "Anybody can get a celebrity to tweet but finding the right target audience is something that very few companies do," he says. RH

Agiliance

www.agiliance.com

Joe Fantuzzi

Security

California

Yes

» Security is the haystack, and risk is the needle. Agiliance streamlines its clients' security efforts to target only those security holes that most open up a company to risk, effectively separating "risks to the commerce server from risks to the coffee server," as the company's CEO Joe Fantuzzi puts it. Providing continuous monitoring on all its assets, Agiliance only interrupts a business in the case of critical security risk that requires a company's direct action, using over 50 various feeds to provide user, event, threat and vulnerability inputs as well as its proprietary software that determines which risk affects a business's core operations.

"Agiliance works like a Whac-A-Mole. The critical risk Whac-A-Moles that come up on our screen are only a small quadrant of the whole landscape," Fantuzzi said. "We have disruptive patents that give us ability to correlate the exact threats to vulnerabilities leave an asset open to attack, with controls that close off attacks, all correlated in real-time."

The Department of Defense, for example, once created 180,000 vulnerabilities in a tracking system based on vulnerability scans that its team would meticulously review for weeks. Agiliance's system automatically identified the most critical risks, narrowing down the massive amount of vulnerabilities the government would have to assess manually. "Typically, only 5 to 10 percent of all vulnerabilities are critical," Fantuzzi explained. "You're not fixing everything. Businesses just need to address criticality. Our predictive system works to identify and prevent risks before they occur."

Growing about 65 percent annually, Agiliance serves about 100 large name companies, ranging from financial services to commercial enterprises to government sectors. Customers are at high risk with vulnerabilities that could take down a government or institution. Its clients include the HHS, NASA, Fiserv, Safeway, Exelon, Cisco and a number of unnamed intelligence agencies.

"ESG believes that commercial products for IRM are now available as an alternative to traditional consulting-based customized solutions," said Jon Oltsik, a Senior Principal Analyst for ESG. "Agiliance provides a turn-key platform for customers to integrate and consolidate their tools and processes, while moving closer toward the goal of integrated governance and security risk management."

Such traction earns the company revenues between $15 million and $25 million.

Fantuzzi estimates the company could be earning $50 million in three years, and over $100 million in five years. About 15 to 17 percent of its business is international, primarily Europe with a small footprint in Australia, Singapore and the Middle East.

Based in Sunnyvale, Calif., Agiliance was founded in 2006 by Pravin Kothari, the co-founder or ArcSight which sold to HP for $1.5 billion. Kothari believed early on that the security industry would move from compliance to risk identification, and built the Agiliance RiskVision platform in about a year and half, launching to customers in late 2007 with ill-fated timing. Though mid 2008 through 2009 proved to be bad times in the face of the economic downturn, Fantuzzi joined the company in 2010 and helped it to articulate and scale in a better market climate. The company has been on a growth trajectory ever since.

The company has raised over $20 million in funding, a moderate amount for a big data company. Investors include Castile Ventures, Walden International, Intel Capital, and Red Rock Ventures. Fantuzzi is in discussions to raise growth equity to expand distribution globally and to make adjacent acquisitions.

Fantuzzi recently got a call from a Malaysian system integrator, a good sign Agiliance is solving a global problem. This is only the beginning, Fantuzzi explained.

"We have the ability to penetrate the same sectors in Europe, Asia, and the Middle East to be able to realize quite a bit of growth," Fantuzzi said. "We'll likely need to do it through partners, because they have the knowledge of the customer while we provide the technology that makes risk management streamlined and affordable."

The company competes against Microsoft IT Solutions and EMC RSA. RH

AgilOne

www.agilone.com

Omer Artun

Cloud Computing

California

Yes

» AgilOne strives to deliver predictive marketing analytics to the masses. Whereas marketing service providers like Adobe and IBM typically serve large companies with multi-million dollar marketing budgets, AgilOne provides marketing intelligence in the range of $100,000 annual subscriptions. It provides clients data driven strategies on when to send emails, when to make offers to a customer about to churn, and how to market to customers based on personal demographics.

"We open up predictive campaign management capabilities to the masses," said Omer Artun, CEO of AgilOne. "We built our system from the ground up to be scalable and easy to use in an SaaS model that addresses the mid-market rather than just the Fortune 1000 companies."

AgilOne also simplifies clients' data through data cleansing, data matching, and data deduping. It can quickly correct and standardize names, addresses and phone numbers. It clusters various client data points in order to target behavior and interests. "The more you know about your customers, the more you can predict about customer behavior in order to market proactively," Artun said. "Often, these analytics get stuck in a PowerPoint and don't see the light of day. We make it operational, available in real time at any touch point of the customer, so our clients can start communicating with these people immediately."

One unnamed $100 million general sporting goods company saw a 125 percent increase in email revenue year over year after choosing AgilOne's systems. Lumens used AgilOne to reduce its email unsubscribe rate by 50 percent.

With a $2 billion market opportunity, growing at 100 percent annually or doubling every year, AgilOne serves 60 to 70 customers and about 100 different brands. Clients include Bosch, ideeli, Moosejaw, PetCareRx, and Shazam. Most of its focus is the US, though 25 percent of its base is in Europe. It is working on expanding into China. In terms of revenue, the company earns more than $5 million but less than $20 million.

The company has had zero attrition. "Our customers really value our services," Artun said.

Artun, who founded the company, holds a Ph.D. in Computational Neuroscience and Physics from Brown University, but has a deep history in marketing analytics. He spent three years as a consultant with McKinsey & Company, consulting high-tech and retail companies on strategy development, before serving as VP of Strategic Marketing at CDW/Micro Warehouse. He then worked as Sr. Director of B2B Marketing at Best Buy at its newly founded Best Buy For Business division. "I got calls from Apple, IBM, to do similar marketing for them, and realized a lot of marketers facing these data challenges," Artun said. "I realized I could build a business against it."

He founded AgilOne in 2006. The company landed its first customer in 2008 and seriously started marketing its services in 2010.

Based in Mountain View, Calif., the company has raised $16 million from Sequoia Capital and the Mayfield Fund. Artun is contemplating an IPO in the future.

"In five years, CMOs will be spending more on IT than CIOs, but they don't have the tools they need to make sense of all the data they're collecting," said Bryan Schreier, a partner at Sequoia Capital who sits on AgilOne's board. "With AgilOne, companies can deploy an enterprise-caliber analytics system at a low cost and then rely on the system to generate recommendations and campaigns that will immediately improve their relationships with customers and grow profit margins. Every customer I speak to is blown away by the impact AgilOne made on their business."

Artun strives to reach $60 million to $80 million in revenue in the next four years.

"Most business users still don't know how to understand their own data," Artun said. "It is still being managed by IT people, not business people. This technology play is the solution to understanding data in a meaningful way." RH

Airbiquity

www.airbiquity.com

Kamyar Moinzadeh

Software

Washington

Yes

» Airbiquity's Chief Revenue Officer David Jumpa likes to point to Verizon's $612 million purchase of Hughes Telematics Inc., a provider of wireless-enabled services to cars, as a sign that the automotive sector offers "the largest market opportunity for any wireless carrier." Being able to connect specified carriers to a vehicle system can be a luring customer incentive to switch to providers compatible with that vehicle. With an average of three mobile phones per family, the math quickly adds up, Jumpa contends.

Airbiquity is the company behind Choreo, a cloud-based machine to machine (m2m) service delivery platform that enables multi-transport connectivity (GPRS, SMS, voice, digital over voice) to bring services and content into an entire ecosystem, essentially delivering software and web services to vehicles and other devices. Automakers simply cannot keep up with the app development and hardware/software integration requirements, so Airbiquity provides a platform with user portals and integrated apps to simplify management and access. It enables Google search, Facebook, Pandora, speech recognition services, safety, security and diagnostic software to be implemented in a car with significantly less effort on the part of the manufacturer.

Rather than expensive recalls, updates can be made literally with the turn of a key, automatically downloaded at the start of an engine.

Yet unlike Hughes Telematics, which is limited to Verizon as a result of their acquisition, Airbiquity can work with anybody. The company's technology is present in 50 global markets in 32 languages, and has spent millions to integrate regulatory and privacy issues in each market into its platform, enabling auto manufacturers to customize by market while adhering to mandated policies. "Going global has really been a big differentiator for us," Jumpa said. "It has been a priority since the beginning."

Airbiquity is the only company that has developed an end to end system that allows an auto manufacturer create, deploy and manage automotive telematics solutions in this way. It monetizes through licensing revenue from its IP patent portfolio, as well as subscription rates of the Choreo platform. Customers include Ford, Toyota, BMW, GM OnStar, Renault, Nissan (Leaf, Altima and Juke models) and Shell Fleet Management. It also serves other customers and partners in the wireless carrier and tier 1 automotive supplier categories, including Sprint (U.S.), Vodafone (Western Europe), Telenor (Eastern Europe) and China Unicom (China), Bosch, Continental, Panasonic, LGE, Delphi, Hitachi, DENSO, and Clarion.

Airbiquity plans to launch soon a global deployment based on its hardware and software integration expertise with a top tier OEM that will cover 50 countries in over 30 languages.

But vehicle connectivity is only one vertical of several the company can address. The company soon plans to partner with mobile operators and providers in other m2m application areas such as medical devices, home automation services, and utility services. Jumpa expects partnerships to be formed in 2014, with products and services hitting the market in 2015 or 2016.

In an effort to identify new opportunities in the connected vehicle services and broader machine-to-machine marketplace, the company recently hired Yusuf Nahmiyas as Executive Vice President of Corporate Development. He will oversee strategy as well as play a joint leadership role in Airbiquity's business development initiatives. Nahmiyas previously led a 17-year investment banking career with JPMorgan, Deutsche Bank and UBS specializing in the technology, media and telecom (TMT) verticals, and was co-head of TMT M&A at UBS.

Founded in 1998, Airbiquity began offering car manufacturers a unique technology to send data over the existing digital voice channel when analog lines prevented data transmission. It relaunched its R&D efforts in 2006 to develop a cloud based service delivery platform that allowed car manufacturers to more easily deliver vehicle services at the make and model level, and transitioned from a core

component company to a service delivery company in 2007. Today, the company has over 600 patents which decorate its Seattle-based corporate offices as wallpaper.

Airbiquity has raised over $75 million from Acorn Ventures, Ignition Partners, Kirnaf Ltd, and Shell Internet Ventures.

"Because Airbiquity's patented aqLink™ technology moves critical data across all global wireless networks, location based services and products can be developed and brought to customers and consumers alike, quickly and with more flexibility," said Petra Koselka, vice president of Shell Internet Ventures.

In addition to Verizon's Hughes Telematics, Airbiquity competes against Wireless Car, but neither share Airbiquity's breadth of services or experience with tier 1 hardware, according to Jumpa. "It is instrumental that we are working with the largest part of the supply chain," Jumpa said.

Thanks to high double digit revenue growth, the company will achieve net positive cash flow in 2013. Jumpa strives to see Airbiquity become the standard for m2m connectivity, in not only vehicles, but medical devices, homes, and any device that could benefit with a connection to the internet and services delivery. He envisions Airbiquity earning $300 million to $400 million over the next several years.

"Some of largest fortune 500 companies and the largest service integrators are entering this market," Jumpa said. "They recognized it is big enough to be a controlling point for other machine to machine markets. We are going to have so many tier 1 providers using our API that it allows us to expand partners across the board." RH

AirWatch

www.air-watch.com

John Marshall

Mobile

Georgia

Yes

» As more businesses move from computer-based data systems to their own mobile devices, a comfortable and secure mobile management system becomes crucial for a company's operations, and the Mobile Device Management (MDM) market becomes more competitive. AirWatch is a growing enterprise-grade company for MDM, Mobile Application Management and Mobile Content Management solutions that attempts to become one of the main global players in this market over the next few years.

John Marshall and Alan Dabbiere founded the company in 2003. They are both former employees of Manhattan Associates, a supply chain solutions provider. The company first helped organizations manage heavy duty devices (unlike today's smartphones) found throughout the supply chain. "In 2003 mobile wasn't as developed, but the management market was maturing quickly. As I met with the Apple team and as I saw that they were shifting to smartphones, that was the pivot point of the company- we saw the industry ahead of time and from there we've never looked back," says Marshall, today the CEO of AirWatch.

By 2006, when smartphones and tablets entered businesses, access to corporate information on mobile devices became crucial. AirWatch changed its focus to manage the security, email, applications and mobile content, where it is still engaged today.

The AirWatch platform was developed to integrate with existing enterprise systems and has the flexibility of being deployed in the cloud or on-premise. This helps companies reduce costs and strengthen customer relationships, while mitigating security risks through data loss prevention. In addition, AirWatch's support network integrates with complementary players in the mobile ecosystem, including leaders in network access control, unified communication, WLAN, certificate-based authentication and public key infrastructure, directory services, business intelligence and telecom management.

"AirWatch allows us to set security policies on our group of mobile users and more importantly allows us to remote-wipe a phone or tablet if lost or stolen," says Darin M. Adcock, CIO at Dowling Aaron law firm in Central Valley, which uses AirWatch as their provider of Mobile Device Management (MDM) software. Some of the security policies include prompts to enter passwords, automatic wipe after 10 failed password attempts, and a screen lock after 5 minutes. "We have had attorneys' phones lost and stolen, so the ability to remotely wipe the phone back to factory specs is important," he adds.

"One surprising benefit was the decrease in need for corporate laptops since users (attorneys) are becoming more productive on their personally-owned mobile devices," Adcock says. Dowling Aaron firm won a Nucleus Research ROI award showing a return of 442 percent they earned using AirWatch's MDM solution.

Even though the software is sold on a traditional license, about 80 percent of AirWatch's more than 7,000 clients prefer to use it on a cloud basis, paying a monthly fee. Today, the company has at least one data center on each continent.

The company does not disclose any financial information, but "see[s] an IPO down the road," Marshall says. In February 2013, AirWatch raised $200 million a Series A led by Insight Venture Partners (Accel later added $25 million to the funding pot when AirWatch expanded the round). The company aims to make more acquisitions and grow globally. Indeed, AirWatch recently acquired the management platform for Motorola at the end of Q2 2013. "We only gave up 15 percent of the business, and now with the extra funding we are ready to push ahead globally," Marshall says.

The company grew its employee base from 100 people to 300 people in 2006 as it entered European markets that same year. "When we go into a market we want to be the market leader," Marshall explains, "We decided to scale much faster than our competition, especially since we were not the first ones in most of those new markets." With its 1,300 employees today, the Atlanta-based company faces competition from players such as SAP in Germany and Blackberry around the globe.

According to Marshall, AirWatch's local presence and support services are its main benefits compared to other companies in the industry. AirWatch has clients in 150 countries and supports more than 18 languages. Apart from its Atlanta headquarters, it has active offices in Bangalore, Hong Kong, Melbourne, Milton Keynes (U.K.), Singapore and Washington, D.C.

In a competitive market for mobile management services, AirWatch has to fight hard, but its growth rates bode well for the future. RH

Alteryx

www.alteryx.com

Dean Stoecker

Software

California

Yes

» On the highway of big data, speed is king. To make sense of it in real-time, however, analysts must circumvent the potholes of multiple data platforms like Hadoop, various relational databases, flat files, or social media streams. The challenge is how to streamline this data into a single interface so data analysts are not weaving all over the road.

Alteryx specializes in blending data from a variety of sources onto a single central platform. It centralizes data from Hadoop, flat files, social media streams, relational data bases and other formats. In real time, it can launch predictive analytics against the centralized data. Its software suggests strategies for proactive decision making from a variety of streams of complicated data, no call to the IT department required.

"We provide a very seamless workflow for data analysts to be able to blend, model and publish without an intensive programmer required to be able to do their work," said George Mathew, President and Chief Operating Officer for Alteryx. "Our focus is on the data analyst and her ability to be productive as an individual."

Alteryx's differentiation is its ability to empower a single data analyst to accomplish the analytics of large teams through a DIY spirit. Its secret sauce is its lightning fast analytics engine, packaged with a world class user experience that essentially turns data analytics into a real force for better decision making.

Walmart uses Alteryx's solution to analyze profit and social media data by its global analytics team. The company was able to recognize that it was actually Feb. 13, not Feb. 14, that had the best Valentine's Day sales, and that date could vary depending on which day of the week it fell on the calendar. Retailers are able to use Alteryx's approach to data to be able to judge the effect of weather patterns on sales and how that can vary according to region. Nine out of 10 of the top telecommunications companies in the US use Alteryx to understand the relation between drop call volumes and customer churning, gaining an ability to target dissatisfied customers with special offers and rewards before they leave for a competitor.

Alteryx currently serves over 300 enterprise customers and approximately 25,000 users, growing significantly at 40 to 50 percent per year. Its clients include retailers, telecommunications companies, consumer package goods companies, pretty much anyone driving customer analytics. It has a 96 percent renewal retention rate.

It's Alteryx's steadily growing client roster that cements its place in the market, contends Jai Das, Managing Director of SAP Ventures, an investor in the company.

"The biggest advantage for Alteryx is that they have a set of very happy high-profile customers. All these customers have given Alteryx scale in revenues and number of customers that no new start-up can match," Das said. "The technology that Alteryx has developed gives them an unfair advantage against the larger incumbents. Just like Tableau has enabled the knowledge worker to visualize data easily, Alteryx is enabling knowledge workers to easily analyze all the data that they have but can't use since they don't have a Ph.D. in Statistics."

Nearly 91 percent of Alteryx's base is in the US and Canada, but many of its customers use its solutions on a global basis. McDonald's entire growth strategy for China is based on data Alteryx quantifies. The company has also seen tremendous interest from the UK, and seeks another funding round for its UK expansion by early next year. So far, it has raised $18 million from SAP Ventures and Toba Capital.

And the potential for growth is huge. Mathew compares the well-over $10 billion market for business intelligence analytics to the CRM market before Salesforce turned it upside down. "CRM was an active and significant market back in early 2000s. Salesforce came in and disrupted both the high end and low end of the market very significantly," Mathew said. "The next big area of disruption in the business intelligence analytics space comes when companies like Alteryx bring more affordable and innovative alternatives to the traditional BI vendors."

Growing at 30 to 40 percent per year, Alteryx earns revenues north of $20 million and has been profitable for several years. Mathew expects the company to reach $70 million to $80 million over the next few years. He strives to make Alteryx the next great business analytics company to earn several hundred million dollars in revenue.

“If you look at the sheer magnitude of the generational shift that’s underway, the next big thing in this space is the analytics space,” Mathew said. “We are in the early innings of that shift.” The company is based in Irvine, Calif. RH

Asigra

www.asigra.com

David Farajun

Software

Ontario

No

» As a pioneer in the cloud backup market, which keeps growing as companies store more data, Asigra aims to serve the top of the industry pyramid. With its 26 years of experience, this company’s cloud backup, recovery and restore (BURR) platform now powers over 550,000 sites worldwide. And according to its management, this is only the beginning.

Cloud systems are easier to deploy and support compared to regular backup systems. Traditional backup softwares require several steps to perform their duties. For example, a company has to take an inventory of all servers and applications that need to be protected, and then disclose the network information and share it with the service provider using the non-cloud system.

However, Asigra backs up systems and applications using the network, or the cloud, so there is no need for agents and upgrades are “silent.” Since the platform is agent-less, major security risks are eliminated because Asigra’s system does not require an open port. Moreover, Asigra meets the most stringent compliance requirements of healthcare and government enterprises, having National Institute of Standards and Technology (NIST)-approved Federal Information Processing Standard (FIPS) 140-2 certification.

The company started when David Farajun, Asigra’s founder, had a hard drive crash on him. He realized people would lose more data as computers evolve.

By the time the market started to move, Asigra was already established. “The cloud started about five years ago, but we were the first ones in the world to do backup using the Internet, which wasn’t even called the cloud back then,” says Eran Farajun, EVP for Asigra.

“Interestingly, Asigra almost singlehandedly invented the cloud backup business 20 years ago,” says Steve Duplessie, founder and senior analyst at Enterprise Strategy Group, who has been part of the data storage industry for 25 years. “The market is now catching up and running right at them. As the market continues to evolve, they will probably become more and more dominant as the arms dealer to those who wish to provide this service to customers,” he says.

Asigra still focuses on Canada where its 100 employees operate, but has customers all over the world. That list includes HP and Verizon, as well as end customers such as GoodYear, Red Cross and Toyota.

According to Duplessie, Asigra stands out compared to other players in the market. “They have the most customers backing up the most data in the cloud by a mile and their technology is way ahead of anything else out there,” he says.

But Asigra’s real killer, Duplessie says, is its pricing model. Most companies charge for the backup service; Asigra charges for recovery. And the customer only pays if recovery proves necessary. “The velocity of the growth of data is fast and in the current model you pay more for recovering more data, but you don’t really recover more,” says Farajun. “Lowering the price per unit doesn’t solve the problem, it’s a race to the bottom. Today you pay per megabyte that you backup, so your cost goes up as you create more data, inevitably. Eventually, you’ll stop using this service.”

“Asigra, a private company that answers to no one but themselves, can afford to disrupt the entire industry’s pricing practices, the same way Amazon has done for the backup market,” Duplessie says. “Once people start paying for recovery, they will never go back.”

Currently, Asigra has three main competitors, all strong players in the market; but none use the same pricing model. CommVault Systems and Symantec Corporation are both United States-based publicly traded software companies, with Symantec a member of the S&P 500. EMC’s Avamar data store systems also provide competition.

Asigra’s tracking software can keep tabs on specific information. For example, if only a company’s Dell computers fail, Asigra can isolate those machines and fix them. “The backup business doesn’t want you to know how much you recover so you won’t realize how little you recover,” Farajun says.

The company does not sell the platform directly, but partners with managed service providers and resellers. Farajun bootstrapped the company with no contributions from venture capitalists, and the company is not looking for additional investments. Asigra doesn’t disclose details about its revenue.

“We could have sold a company a while ago and we declined it,” Farajun concludes, saying that the biggest challenge for Asigra is marketing the recovery license model.

“The only issue for them is how fast will the market continue to evolve in their favor,” Duplessie says, “I don’t see backup and recovery problems going away — quite the contrary, so it's just a matter of how much longer will companies struggle with doing it poorly by themselves, especially as data becomes more remote and dispersed." RH

AtHoc

www.athoc.com

Guy Miasnik

Security

California

Yes

» In a moment of crisis, communication is vital. And the more people that are involved in the crisis, the more important it becomes. For companies and organizations with a large number of employees, communicating with all of them during an emergency can be extremely challenging. However, one company in California has made it to the forefront of the crisis communication industry, and has developed a system that can save time, money and, most importantly, lives.

AtHoc has offered mass crisis communication systems since 2005. The technology it utilizes was originally aimed at a different sector, before the company realized the huge potential latent in the crisis communication field. AtHoc took off when it won a contract with the U.S. Department of Defense. The U.S. Air Force had previously used sirens and radios as its primary form of communication in a crisis, but wanted a better solution, more suitable for today's connected world.

"The Department of Defense contacted AtHoc based on their market research and industry referrals and, based on the requirements, we initially developed the capability for several facilities in the U.S. Air Force," says Guy Miasnik, president and CEO of AtHoc.

The company now provides enterprise deployment for the entire U.S. Air Force, the Navy, and the Marines. It is also in the process of supplying solutions for the Army. Working in this challenging environment has allowed the company to develop its services further.

"It allows us to fine tune the capability in a very demanding environment — an environment where the organization is very focused on emergencies and critical communication. Critical communication is an integral part of the crisis management work flow and we've optimized very much how this should work in a very skilled organization," Miasnik says. "If you think about the millions of soldiers worldwide, the system is protecting all of them in a very robust manner."

The AtHoc Interactive Warning System leverages IT networks, and any other infrastructure it can use, to send out information to every individual in an organization, or in an area. Every device that is connected to the network of a military facility, for example, can be used to alert individuals. Every individual who has a smartphone, tablet or other connected mobile device can send information about the danger back to the system administrator or emergency services.

If, for example, a fire were to break out at a university that used AtHoc, students would be notified of the emergency using multiple communication devices. Those students could then aid emergency services by supplying information like videos or photos of the fire, or could simply use the system to confirm their own safety. Management and safety professionals would also be able to quickly establish that employees, students or soldiers were okay using the personnel accountability system AtHoc offers.

Another organization which employs AtHoc;s technology is Eastman Chemical Company, a global specialty chemical company headquartered in Kingsport, Tennessee. Eastman uses the system to warn employees about severe weather events, business-critical information and emergencies that could occur at the site such as fires, chemical spills or active shooter situations. Eastman previously used a mix of systems to relay information to employees, including 250 phones at fixed locations, 3,500 hand-held radios, and a pager system. The company asked AtHoc to provide a solution that would integrate existing devices into the platform and also used new technology to notify all its employees.

"We have implemented an alerting system that ties in legacy devices but it also supports new technology. When you include traditional telephone, cell phone and text message devices, there are now nine different ways that we send out messages to our employees and contractors," says Keith Bennett, area supervisor for plant protection services at Eastman.

"The AtHoc system allows us a single user interface, so in our dispatch center we have one person who enters the message, from a pre-built message template, and that one message goes out to all devices simultaneously," he adds.

AtHoc is not a supplier of communication infrastructure, but instead leverages the existing infrastructure in whatever way it can. The local network is one of the primary infrastructures AtHoc uses, but if this is not working due to the crisis, then the AtHoc solution can also work with the area's carrier network to reach mobile devices. AtHoc can also tap into mobile applications and older technology, like the radios used by Eastman.

AtHoc has been funded by major investors including U.S. venture capital firm Greylock and Intel Capital, the investing arm of the technology giant. The firm has been profitable since 2008 and has grown at a rate of 50 percent a year for the last seven years. AtHoc currently employs roughly 130 people and generates revenues in the tens of millions of dollars. The company still places high value on research and development, and around 40 percent of staff works in the R&D department. "We are strong believers in innovation and what we are seeing is that there is a huge opportunity for innovation in this space," Miasnik says.

The firm has enjoyed considerable success over a relatively short period of time. It holds a 65 percent to 70 percent share of the federal market, but its goals now include expanding into additional sectors. "The capability is not just governmental-orientated, it applies to any industry or any organization that has the mandate and the responsibility to communicate and take care of its people," Miasnik says.

The company also aims to grow its international presence and to continue launching new technologies that can be used in its communication system.

AtHoc can legitimately claim that it improves the safety of soldiers, nurses, students, teachers, employees and the general public every single day. And the impressive array of clients it boasts means the firm's investors must be feeling pretty safe as well. RH

Autonomic Technologies

www.ati-spg.com

Ben Pless

Medical Devices

California

Yes

» For cluster headache patients, thinking itself can be a debilitating process. Those afflicted suffer an average of 15 acutely painful headaches per week that can bring any day to a screeching halt. Cluster headaches are one of the most severe pain syndromes known. The standard current therapy involves injecting sumatriptan, a synthetic drug that doctors recommend not using more than 12 times per month in order to not worsen the extent or frequency of the headaches. As patients typically experience four times that amount of headaches, the approach barely touches the surface when it comes to pain management of cluster headaches.

Autonomic Technologies offers a reversible and adjustable option in treating the debilitating pain of cluster headache. The company alleviates chronic headache pain through the electrical stimulation of the sphenopalatine ganglion (SPG), a nerve bundle located deep in the face, behind the root of the nose, that has been a clinical target for pain relief for over 100 years. While prior therapies treated the SPG through lesional and pharmacological approaches, Autonomic Technologies uses neurostimulation through physiologically-blocking higher frequencies on the SPG, directly targeting the neural site associated with the generation of cluster headache pain. The procedure involves inserting the ATI Neurostimulator in a minimally invasive operation through the mouth in a noninvasive, non-scarring operation. A hand-held remote controller then provides the electrical simulation when placed against the cheek until the pain stops.

"Autonomic Technology's approach provides acute relief for many patients and has been observed to reduce the number of headaches in some patients as well," said Ben Pless, CEO of Autonomic Technologies. "For these patients, it's life changing and there's really no other option for them."

Clinical studies indicate that 65 percent of the device's users experienced clinical benefits, with 40 percent experiencing an 80 percent reduction in the number of headaches, and a large number in the study alleviating the headaches altogether. The company received the CE mark in February of 2012, and has been selling in a controlled release fashion to half a dozen sites in Germany and Denmark. It has a feasibility study approved by the FDA, and is in discussions on the possibility of going to a straight pivotal trial due to the success it has already had in Europe, rather than doing a feasibility trial followed by a pivotal trial.

"The ATI Neurostimulation System is well tolerated and can be used as often as needed, without daily limitations or stimulation-induced side effects", said Prof. Dr. Rigmor Hoejland Jensen, Director of the Danish Headache Center at Glostrup Hospital in Denmark. "Based on the results of the study, this new treatment option offers a significant improvement in quality of life to the majority of patients."

In the US and Europe, the cluster headache market alone offers a $3.5 billion opportunity. Often thought to be a rare disorder, cluster headaches are actually as common as Parkinson's or multiple sclerosis, Pless said. The company expects to offer limited release as it develops the market, addressing cluster headaches first. In the future, it plans to also adapt the technology to migraine headaches, a much bigger opportunity for revenue.

Competitively, the Leiden University

Medical Center is conducting a sizable occipital nerve stimulation study to treat cluster headaches, with completion expected in the next couple of years. The occipital nerve stimulation approach provides only preventative benefits, while Autonomic Technologies provide acute and preventative benefits, Pless said. Occipital nerve stimulation is also more invasive, Pless indicated. "We really think as this market develops, there will be room for multiple techniques," he added.

Founded in 2007 and based in Redwood City, Calif., the company has raised $52 million from Aberdare Ventures, Novartis Venture Funds, Kleiner Perkins Caufield and Byers, Versant Ventures, InterWest Partners and the Cleveland Clinic. It expects to raise another round of $20 million to $30 million to fund growth and further US studies. Pless expects its European business to be profitable by 2016. In the next five years, he hopes the company will reach $100 million in revenue. RH

Avalara

www.avalara.com

Scott McFarlane

Cloud Computing

Washington

Yes

» Avalara's Founder and CEO Scott McFarlane remains ambivalent about the potential passage of the Marketplace Fairness Act of 2013. Not because his company's tax automation services are not poised to make a lot of money if states require out-of-state businesses like Amazon to collect sales tax, but because the company already faces plenty of demand dealing with tax codes as they currently stand. With more than 11,000 taxing jurisdictions in the United States, small businesses have plenty on their plates already. Tax code can differ by the street or the block. Businesses next door to each other could conceivably face a different tax code. It's enough to keep an accounting department up all night digging through shoeboxes of sales receipts, literally.

Avalara specializes in managing sales tax obligations end to end. Connecting tax codes by location across not only the country but on a global scale, the company automates complying with statutory requirements in real-time.

"Over the years, enterprises have built expensive on-site solutions tied into accounting systems because they had the IT departments and wherewithal to implement costly six digit systems," McFarlane said. "Avalara brings this level of automation to the common man. It provides the flexibility of the enterprise but doing it in a way that works with small business. A business using Avalara doesn't have to break the bank to know they are compliant. We revolutionize the way sales tax automation happens for small and medium size businesses."

Through automating the compliance of statutory compliance, Avalara claims to deliver its clients a 90 percent ROI within the first year. It primarily serves small to medium size businesses, as well as many household names. About 20,000 clients use its calculation services for a total of over 80,000 users. The company tabulates millions of rates per year, and expects to tabulate over 2 billion tax transactions this year. Filing about 400 million to 500 million tax returns this year, Avalara will be used to process about 3 to 4 percent of all sales tax in the United States. It has been growing 50 percent annually for the past several years.

"We are web architects, designers and builders but our clients want more from us," says Amit Bhaiya, Co-founder and President at Dotcomweavers, a client of Avalara. "With each ecommerce solution we integrate, we should not only be able to share critical information that affect business decisions but also offer products that help support them. Avalara has proven services that have helped many businesses."

Though its primary focus is in the United States, Avalara can also calculate tax codes in over 80 countries. About 2 percent of its business is international, which McFarlane expects to grow significantly in the next few years.

The company was founded in 2004 by McFarlane, Jared Vogt, and Rory Rawlings. It based its technology on a working model its CTO Rawlings created. Sales began in 2005. To remain viable and get a solid chunk of the market, Avalara has steadily built its taxation automation content through acquiring other companies, most notably Tax Matrix, which provided it with over 10 million UPC codes. Other key acquisitions include New Horizons and ISPI. "We've been highly acquisitive around content because that's the best and fastest way to distinguish ourselves," McFarlane said.

Though other companies like Vertex have developed similar solutions on the enterprise level, Avalara is the only company of its kind to address the small business market. Another competitor is Taxmarc. "We don't see a lot of competition at the SMB level," McFarlane said. "We've connected to over 250 manufacturers and have locked up the middle tier market. Really, our biggest competition remains the status quo."

Tax code does not tend to be a sexy subject, so the company adds a bit of fun to its marketing pitches with a focus on the color orange. All employees are encouraged to wear at least some orange to work. It ferries guests to its offices in an orange taxi. Even the toilet paper in its offices are orange.

Yet the market Avalara faces is definitely hot. McFarlane described Avalara's potential as a "payroll opportunity. Any accounting department could do its own payroll and W2's, but they choose to outsource it because it's simpler and cheaper. Avalara is the same way. Every business must file a tax return to register in a city. I look towards the market for sales tax filing to be at least 7 million businesses in the US alone."

Based in Bainbridge, Wash., Avalara has raised about $69 million from Battery Ventures. Though McFarlane declined to give specifics, he allowed that sales and revenue are "moving towards that magic high end number mark of $100 million." RH

Awarepoint

www.awarepoint.com

Jay Deady

Other

California

Yes

» Awarepoint provides workflow automation and tracking solutions to hospitals to automatically collect and analyze data on asset management, patient throughput and compliance challenges. The company claims to differentiate from other real-time location systems (RTLS) as the first all-inclusive software and services package that handles the complete spectrum of a medical facility's needs on a single platform. This resulted from its recent acquisition of Patient Care Technology Systems.

The company's aware360Suite automates and streamlines key processes of a healthcare environment. It automates the management flow of clinical units, locates medical equipment and automates the management and cleaning of those assets, automates the distribution of medical trays, monitors healthcare hygiene practices, and manages temperature control as well as bed turnover. The company claims to be able to completely manage every aspect of a hospital with minimal hardware and no hard wiring. Sensors are simply plugged into electrical outlets, providing data on location, use, cleaning and maintenance. Battery powered tags are attached to equipment, with patient battery powered tags attached to belt clips or ID badges. Every node of the network is self-routing and able to detect other nodes, dynamically updated and optimized, enabling messages to be rerouted in the case of node failure. The solution requires no upfront investment, and can be customized to a facility's unique needs.

Awarepoint's systems are used by over 180 medical facilities, including academic institutions, hospitals, doctor offices and other institutions. It tracks nearly 300,000 radio frequency identification devices. Customers include Texoma Medical Center, Thornton Hospital at UCSD Medical Center, and the UCSF Medical Center.

Jay Deady, CEO of Awarepoint since 2010, previously served as the executive vice president of client solutions for Eclipsys, senior vice president and general manager of revenue cycle at McKesson Provider Technologies, and has held general manager and vice president positions with Cerner Corporation and ADAC Healthcare.

Based in San Diego, Awarepoint has raised over $41 million from the Heritage Healthcare Innovation Fund, Kleiner Perkins Caufield & Byers, Cardinal Partners, Venrock, Jafco Ventures, Avalon Ventures, New Leaf Ventures, and Top Tier Capital Partners. RH

Azumio

www.azumio.com

Bojan Bostjancic

Mobile

California

Yes

» With more than 30 million downloads, Azumio is a leader in biofeedback apps on mobile devices. The company creates innovative product applications that allow users to integrate personal health data to lead a healthier lifestyle.

Its apps include Fitness Buddy, Instant Heart Rate, and Argus. Released in the summer of 2013, Argus works as a life fitness app that can monitor just about any activity. By measuring multiple activities, the app makes it easier to track correlations to make comparisons. The app tracks walking, running or biking without relying on cell tower signals and thereby not draining the battery. The app saves power by using the accelerometer of the phone to track movements. Once the user is detected traveling at a certain speed, a run timeline is registered and the app switches to GPS for more precise monitoring. If GPS fails to register movement, the app assumes the user is using a treadmill and deactivates the GPS.

The app also tracks the amount and quality of a user's sleep, optimizing its alarm clock to go off at the point in a sleep cycle most suitable for waking up. The app also monitors the user's consumption of water, coffee and other drinks. Honeycomb-like cells show user behavior that can be easily scrolled for quick viewing. Holding down a cell for two seconds integrates activity data. The app can also take pictures of food and categorize it into six food categories like vegetables, dairy and grains to capture nutritional data. Photos can easily be shared on Facebook or within the Argus community. The app synchronizes with other activity tracking apps, and runs continuously in the background of the phone.

Though the Argus app synchronizes with a few devices currently, including heart rate and step track monitors LifeTrak and New Balance LifeTRNR. It also works with a Withings connected weight scale, Map My Fitness and Glucose Buddy, which it acquired from the developer SkyHealth. Future integrations are planned.

The company sells premium apps and holds a number of licensing deals with partners that use its APIs or customize its apps. The company plans to eventually implement a subscription model to provide access to its data.

The company's first app, Instant Heart Rate, measured a user's heart palpitations through a smartphone camera. The app measured heart rates when a user held a finger over the lens for 10 seconds.

Azumio was co-founded by CEO Bojan Bernard Bostjancic and Peter Kuhar. Bostjancic previously founded Telsima, a 4G wireless startup, and co-founded LiveCLIQ, a mobile streaming video service.

"Azumio's success has been based on providing easy-to-use biofeedback tools accessible on a device that more than 35 percent of all American adults already have – the smartphone," said Bojan Bernard Bostjancic, Azumio's co-founder and CEO.

The company has raised investment funding from the Founders Fund, Accel Partners and Felicis Ventures.

"Azumio's vision of providing simple solutions for the biggest health problems really resonates," stated Founders Fund's Brian Singerman. "Mobile technology is changing the healthcare industry and Azumio is part of the next generation of companies leading this transformation."

BizSlate

www.bizslate.com

Marc Kalman

Cloud Computing

New York

No

» Enterprise resource planning (ERP) tools help suppliers deal with supply and operational issues, keeping track of an item as it moves from the warehouse floor to the truck to the shop through a streamlined process. Most of the legacy solutions, however, fall far from the budget of the small to medium-sized business. While there are affordable ERP alternatives for the little guys, these are often feature light and fail to meet the unique needs of a small business managing inventory challenges.

Targeting clients in the range of $50 million to $200 million in revenues, BizSlate provides an SaaS ERP system that's specifically designed for small businesses. It helps clients get a handle on their inventory, providing greater visibility for faster decision making. Its platform delivers affordable enterprise capabilities with a core of features "written around what small distribution companies need to survive," explained Marc Kalman, Founder and CEO of BizSlate. "We are challenging the system. We looked at every single way every ERP systems have been developed and we broke that mold.

"We believe that BizSlate is the first system for the SMB market that offers out of the box tools to managing a wide range of products as if they were living breathing entities with their own unique characteristics," Mr. Kalman continued. "We provide what small businesses need, including mobility with the ability to access systems in real-time from anywhere, whether on the floor of a trade show to show to a prospective customer, or on the road or in a hotel. Our customers always have access to what's going on, in real-time, at the click of a button."

One footwear client spent weeks updating its roster to handle the different types of inventory. Through BizSlate, those same changes can be accomplished in an afternoon.

Still in beta, the company is in what Mr. Kalman termed "quasi-marketing mode," serving an undisclosed number of clients in apparel, footwear, housewares, electronics and other verticals. The beta clients form a steering committee to offer feedback on the product as the company tweaks its features. "The feedback we've gotten is phenomenal," Mr. Kalman said. "We are delivering features that have never been available at this level of the market."

Mr. Kalman estimates the company faces a billion dollar market in the U.S. alone, not to mention the rest of the world. Though BizSlate has so far only offered its platform domestically, it is designed to handle multiple currencies and languages for a potentially global offering. Kalman expects BizSlate to fully launch to market over the next four to six months.

Founded in November of 2011, BizSlate sprang from Kalman's experiences founding EZCom Software, a B2B platform that provides affordable ecommerce solutions to small to mid-sized retailers. That company served a similar customer demographic as BizSlate, and received a number of requests from small businesses to be able to manage inventory from a trading center floor. Mr. Kalman researched the issue and discovered the market lacked any viable, affordable solution for small businesses. He launched BizSlate as a hybrid between the expensive yet feature rich systems and the cheap but very limited offerings aimed at SMBs.

Mr. Kalman invested $700,000 of his own money into the company, and raised around another $300,000 from angels. The company is currently raising a Series A.

BizSlate partners with R.E.R. International to enable its customers to more easily produce high quality UPC tickets and hangtags, as well as item level RFID tags.

"Our partnership with BizSlate will help small and medium size businesses effectively and affordably manage their supply chains and create a seamless process for securing the UPC and RFID tags and labels required by their trading partners," said Daniel Etra, CEO of R.E.R. International. "We value the reputation, expertise and customer focus that BizSlate brings to the table."

Mr. Kalman plans to build BizSlate quickly into a solid player in the ERP space over the next three to five years. He views BizSlate as a billion dollar opportunity over the next several years.

"When you look at what the large scale ERPs have been doing, the opportunity is tremendous," Mr. Kalman said. "We are addressing an underserved segment of the market that's never seen much attention."

Bloomfire

www.bloomfire.com

Craig Malloy

Cloud Computing

Texas

Yes

» Social media is typically a huge drag on productivity. Studies vary, but most estimates place the amount of lost revenue from time spent on Facebook in the billions of dollars annually. Our impulse to share, comment and interact online is becoming an integral part of human behavior. For many, the solution is to block social media sites and stifle that behavior. But what if there was a way to harness our newly-developed need of social interaction as a means of boosting productivity, rather than hindering it?

That's what Bloomfire seeks to do. Bloomfire creates an inter-company social network that turns time-wasting into efficiency. News feed posts become company-wide bulletins. Youtube clips become training videos. Stylized photos of lunch become calls out for collaboration.

"Every company has this problem of sharing important business information with others, whether they're down the hall or on another continent," said Bloomfire CEO Craig Malloy. "Bloomfire is at the core of trying to solve that problem."

Bloomfire's networks are cloud-based forums that create a "time shifted, searchable and indexable place where you go to find all of the information," according to Mr. Malloy. The company's clients range from small startups to giants like Kellogg's, Comcast and Etsy.

A Bloomfire network allows a manager to, say, post a screencast explaining a problem and put it in an easy-to-find place that allows the relevant people to see and respond through collaborate problem-solving.

Mr. Malloy believes that individualized networks are the business communication tool of the future. The technology of cloud storage has allowed for the creation of a web-based, scalable enterprise without the manpower and monetary commitment of having a room full of servers.

Mr. Malloy discovered Bloomfire when using it as a sales tool in his previous position as CEO of the video conferencing company Lifesize. He was so happy with how the Bloomfire functioned that he decided to go ahead and buy the company. The choice allowed him to venture into a new territory while still utilizing his expertise in video collaboration. "I wanted to do something in cloud software, recurring revenue. I could see that was where the world was going," he said. "As we dug into Bloomfire, it is this enterprise social software world that is starting to overlap and converge with the conferencing and the collaboration space." Bloomfire's key function is organizing and streamlining the communication stream within a company, according to the company's vice president of marketing Heidi Farris. "People at work are just pummeled with questions all day long," she said. "Being that internal social network allows them to be more prepared to answer those questions."

Bloomfire was a small startup with just five employees when Malloy took them over 22 months ago. It now has more than 200,000 users, an increase of 200% from a year ago. The key, said Ms. Farris, is the low barrier to entry for the service. The Bloomfire interface is built to be intuitive to anyone who is familiar with a social media platform, making assimilation swift. The most basic service starts at just $200 a month for up to 25 users. Once users see the value of the service on a small scale, they often choose to adopt it for broader use. Ms. Harris reports that 33 percent of Bloomfire's customers upgrade their service for more users every quarter.

"For us [Bloomfire] is like sliced bread," said Tricia Dempsey CEO of the IT jobs site Agile. Dempsey uses Bloomfire as a replacement cumbersome paper documentation. "We used to have an operations manual. We printed a new one every time we hired a new employee. It was three inches thick. Oh my gosh, as soon as you printed it, it was outdated." Now all of Agile's documentation is found on a Bloomfire network.

Reid Wender of Triad Semiconductor credits Bloomfire with salvaging his company's internal communication. "I said to my employees, 'email is killing us.' I printed out a thread of emails on a subject and it was a 4000 word document that just gets lost somewhere in the bit bucket. Bloomfire helps eliminate that amnesia." Mr. Wender runs a pair of Bloomfire networks: one for his employees, another for customers.

Perhaps the best example of Bloomfire's potential is how it is used by Surfset fitness. Surfset has more than 100 global locations that teach exercise classes bringing the principles and moves of surfing to people who may not have access to the water. Surfset uses Bloomfire to connect its network of more than 600 trainers spread out as far as California, Russia, Chile and Australia. "[Bloomfire] is our primary learning resource," said Sarah Ponn, Surfset director of marketing and training. Surfset's core business is dependent on cohesiveness of its brand and consistency of its instruction. The company has to constantly update its classes to avoid staleness while ensuring that its service remains uniform in every location. Bloomfire allows Ms. Ponn to post documentation, videos and music with specific protocols for classes while allowing for questions and feedback all in the same place. "It's pretty much mission critical for us." Ponn said.

Before entering the business world, Mr. Malloy was an officer in the U.S. Navy, he said that his experiences as a leader in the military have greatly benefited his business work. "One of the core tenants of my military experience… is the skills of leadership, of rallying a team around a particular mission or objective, treating your people with respect, getting people to do things that maybe they didn't think they were able to do. The authentic presence of humble service leadership aspects that come forward in most military officers I think translates very well to business," he said.

That respect flows down to customers as well. All three companies interviewed gave high marks on Bloomfire's communication and responsiveness in adding new features.

It's that constant need to improve the service that will decide which company fills the ever-increasing market space the Bloomfire exists in. Social media will continue to increase in prominence in our everyday lives. We are constantly connected in our homes, on the road and, Malloy hopes, in our offices as well. RH

Braintree

braintreepayments.com

Bill Ready

Internet/Online

Illinois

Yes

» Mobile technology is on the rise. The number of mobile applications on the market increases significantly every single day, and people are doing more and more using their mobile devices. But there are some things that people still have trouble doing on their smart phones and tablets – making payments. Data entry can be tricky on a mobile device, and so, despite many consumers browsing e-commerce sites on tablets and smart phones, few actually pay on them. However, that could all be about to change as new companies seek to make e-commerce payments on mobile device easier than ever before.

One company doing just that is Braintree, a payment platform that is used by companies such as AirBnB, Hotel Tonight and Angry Birds. The company is headquartered in Chicago, Illinois and was established in 2007. Braintree offers a payment platform that offers tools such as single click purchasing, mobile payments, support for 130 different currencies and recurring payments, among others.

In 2012 the firm bought the peer to peer payments company Venmo. This gave the company a further boost in the area of mobile payments, and it now offers customers the chance to pay with a single touch on any apps or websites that are on the Braintree network, without having to register payment information.

"I would say this path we're on now is really helping consumers and merchants connect with one another and helping to deliver next generation purchasing experiences — that's when that really started to come together, when Braintree and Venmo came together," says Bill Ready, CEO of Braintree.

When Braintree made the acquisition of Venmo, it was acting on a long standing belief of Mr. Ready's that mobile devices would become the primary computing devices within a short period of time. "I started thinking should we build our own consumer experience? Or is there someone out there who is building a great consumer mobile payment application that could be the consumer side of this offering?" says Mr. Ready. "Then I found Venmo and I thought oh my God, this is beautiful, people raved about the application, it made payments fun."

The two teams complimented each other well, and set off on a path together to deliver fast, secure payment options that would benefit both consumers and merchants. In October 2012, Braintree raised $35 million in a Series B round of funding which was led by the venture capital firm New Enterprise Associates, and also participated in by existing investors such as Accel Partners.

"Braintree is kicking down both the technology and business road blocks that have made online and mobile payments challenging for developers and a hassle for consumers," says Ravi Viswanathan, General Partner of NEA. "We believe Braintree has the strengths to challenge all the incumbents in the payment space. This investment reflects our confidence in the technology, team and international capabilities Braintree has built."

As with all payment solutions, security is a major issue. Consumers are generally suspicious of any payment system that is simple to use, fearing it may be less secure. However, the Braintree system has made it more secure at the same time as easier to use. The Venmo touch system offered by Braintree fingerprints a device, which means it takes into account the behavior of the user, in order to spot when an uncharacteristic payment is made. If a payment is suddenly made from a different country, then previous payment solutions would automatically suspend the credit card or payment capabilities of the consumer. However, with the mobile solution, Braintree is able to communicate with the consumer through the app itself and ask for a security code for the consumer's credit card, or some piece of their mailing address and other things that only they would probably know.

"That way we can be easier and more secure because that interaction becomes more secure even than your credit card was, because had your credit card been stolen and people start running up a bunch of purchases, the credit card company has to say, do I pull the trigger and shut this down? Or is it really you?" says Mr. Ready. "So you have to wait longer before you shut it down. If we start to have suspicion,

because we can ask you simple things, we can be much more secure by addressing suspicious activity much more quickly because we don't have to be so draconian and just shut things down."

E-wallets have been available for a fair few years now, but none of them have taken off. Mr. Ready believes that is because of flawed strategy. "I think the first wave of e-wallets failed because they were solutions looking for problems. So the first view of e-wallets as tap to pay in the store, there really wasn't a problem to be solved there. There are few things in my life easier than swiping my card at the checkout counter," says Mr. Ready. "People don't want to do data entry on a touch screen. Solving that issue is a massive pain point for both the consumer and the merchant so we've provided tools for that."

Braintree has certainly made a big impact already on e-commerce, and the company has high ambitions for the future. "We think that we have the opportunity to be as impactful to the next decade of e-commerce as PayPal was to the last," concludes Mr. Ready. RH

Brand.com

www.brand.com

Michael Zammuto

Marketing/Advertising/SEO

Pennsylvania

No

» Any business operating in the modern technology era knows that marketing and brand reputation are of high importance. As a result of this, an industry has emerged where companies are managing the online reputations of firms and are seeking to help remove the negative associations some suffer on search results in particular.

One such company is Brand.com, which itself went under a change recently. The company bought the rights to the name Brand.com having previously been called Reputation Changer. The company provides a reputation management service that offers companies the chance to improve reviews and clear negatives.

"Really what we do is we pull together company's media strategy and PR strategy and help them to tell their story online," explains Mike Zammuto, President and COO of Brand.com. "Specifically what we intend to do which is very different to what a PR agency would do, is we're a technology platform for helping companies to influence and manage their people's online researching activity."

The company doesn't just serve businesses; celebrities, politicians and individuals also use the service in order to improve their online image. The majority of clients are most concerned with search results, and how to get the best out of them. "What companies have previously have done well is they've built a useful website, maybe had a good social media presence through their PR, social marketing companies," says Mr. Zammuto. "But what they haven't done is look at online search results as an asset that should be guarded and protected and grown and managed and so on, so that's where we come in."

Brand.com offers a platform for analyzing, tracking and reacting to negative online reactions of various kinds. "So in particular we will publish sponsored stories on those news sites. In addition to that we have a pretty big network of bloggers and things like that and the intent here is to come up with useful informative, educational online assets that help a company to promote itself," says Mr. Zammuto.

One user of the Brand.com service, who wanted to remain anonymous due to the nature of the problem solved by the firm, said the company had helped him out of a tricky situation. "I, like many others had a negative item sitting right on the very top of the first page of Google. This was a negative court case that I was completely exonerated from. However, since it was once public record it stuck on the very top of the first page of Google and haunted me in everything I did."

I am very glad and thankful that I made the decision to hire Brand.com. In three months they moved the one negative item. This will sound unbelievable but when they first posted all the new content I actually could not even find the negative item. It went from being the third item on first page of Google to the 11th page. It has since settled and stayed on the third to fourth page on Google."

Improving search results has been a business for a long time, but changes in the algorithms used by search engines such as Google are making it a more complicated task. "It's definitely getting more complex, the thing that is really driving the complexity is there have been a few big trends that have led to an increase in user generated content, from social media to question and answer sites and so on. A couple of years ago Google in particular saw this trend and saw people using various SEO tactics to promote content in search results that didn't add enough value to the searching. So they began making a series of algorithmic changes at an increasing frequency, starting with the Google Penguin and Panda updates that have really dramatically increased the complexity of these things," says Mr. Zammuto.

"That's very good for us, to be transparent, because our focus is on doing what the search engines want you to do. There are players in this space who have sort of taken a different route of using automated techniques or things like that, grey hat or even black hat techniques and try to trick the search engines. That will only increase the rate at which they mitigate those things and it's been very positive for us because an added complexity is added to the value of our service, its created additional barriers to entry and that's very positive for us," he adds. RH

Top 100 Companies: North America

Bright Computing

www.brightcomputing.com

Matthijs van Leeuwen

Software

California

Yes

» Bright Computing

Computer clusters come in all shapes and forms. They can include HPCs (high performance computers), Hadoop clusters, server farms, private clouds, storage clusters, and database clusters, and each can operate on a different platform. These clusters need continuous provisioning and management, monitoring and virtualization.

Bright Computing removes some of the frustration associated with clusters by providing a universal and user-friendly platform to manage them. The business-to-business software company specializes in IT systems management, specifically bare metal and cloud provisioning, as well as the monitoring and management of cluster systems in a data center.

"Cluster tools are rarely designed to work together," said Matthijs van Leeuwen, CEO and Founder of Bright Computing. "Migrating the multiple learning curves requires tremendous expertise and scripting from expensive administrators. We start with a single cluster management agent that provides all the functionality required. You don't need to roll your own anymore. With one piece of software, Bright computing provides you everything you need."

Bright Computing's single cluster management provides all the functionality required in a single, centered relational database that stores all configuration and monitoring data. The system is easy to use and maintain, scalable, reliable and secure. All deployment and provisioning issues are solved for the lifetime of the system, user-friendly dashboards enable monitoring and visualization and workload management, security and application-specific functionality is included.

Bright Computing is based in San Jose, California and serves over 200 customers, 50 percent of which are sold to through resellers. It also sells through OEM partners like Dell, Cray, Cisco, and Acer, and over 30 system integrator resellers across the world.

Bright Computing has been firmly established as the go to solution for Boeing, Cisco, Dell, and Cray. Dell and Cisco in particular have been ramping rapidly, with a quarter of the company's revenues coming from Dell alone. Bright Computer's earnings have doubled annually for the last couple of years. Customers include Oak Ridge National Laboratory, Texas A&M University, and Lincoln Financial Group.

"I think partnering with Bright was pretty much a no-brainer," said Paul Del Vecchio, Sr. Technical Marketing Engineer for Cisco. "They made doing business with them so ridiculously easy I would have been foolish not to engage. When something just works, it leaves you free to focus on customers, and that's exactly the reason why I engaged them in the first place. From where I sit, the decision to utilize Bright Cluster Manager has been the smartest move I've ever made."

The company's solution is sticky, as its clients tend to rely on it heavily and changing vendors would require a refitting of the entire database. It competes against heavyweights such as IBM, HP, and SGI, but is the only universal offering. "Really, our biggest competition comes from the internal systems administrator who has spent all this time scripting together various solutions," van Leeuwen said. "It's his baby, and maybe his job, that is on the line. That competition has proved far more significant than our actual competitors."

Bright Computing was spun out of Cluster Vision, a $20 million cluster design company founded by van Leeuwen in 2003. That company spent four years building the foundation for Bright Computing's technology before Bright Computing was launched in 2009, followed by an ING undisclosed investment in 2010 of several million dollars. 2011 prove to be the breakout year as the company doubled in size with a 100 percent annual growth rate, which it has sustained ever since. RH

Caring.com

www.caring.com

Andy Cohen

Internet/Online

California

Yes

» Rarely does one plan to become a parent to a parent. When seniors require assisted living, it often results from a sudden event- a doctor's diagnosis, a broken hip, or the sudden realization that the Alzheimer's has reached a critical level where independence is no longer possible. Adult children who suddenly find themselves being parents to their own parents are often caught up in an isolating pattern of confusion, feelings of ineptitude and guilt, with little resources to help and nobody to confide in.

Caring.com provides a resource for adult children caring for seniors. It provides not only original sourced articles on senior care, medical issues, or lifestyle advice, but also a detailed rating and review system on assisted living facilities in the US, essentially a Yelp or a TripAdvisor for nursing homes. It also serves as an anonymous social media center for families to connect and discuss concerns, questions and frustrations.

"Caring.com in a sense provides on the job training for people who suddenly find themselves responsible for caring for a loved one," said Andy Cohen, CEO and Co-Founder of Caring.com. "We give our visitors peace of mind and let them know they are not alone in this. We have a very strong social mission. The ad dollars pay the bills, but the thank-you notes keep us going."

Launched in January of 2008, Caring.com receives 2 million unique visitors every month, a number that has doubled in the last two years. It focuses entirely on the US market, though Cohen imagines the company will eventually expand internationally.

After launching its referral service in January, Caring.com has signed referral contracts with seven of the top 10 assisted living providers. The Assisted Living Federation of America promotes Caring.com list of providers as "a preferred provider of Internet referrals." The company's revenue stream has been doubling annually with an increasing base coming from local advertisers. Over half of its revenue now comes from the assisted living industry.

The company was inspired with Cohen and Caring.com's CTO Steve Fram's experience caring for their own mothers who faced debilitating diseases. Fram was the CTO of BabyCenter. "We realized you needed the same type of handholding when taking care of a parent," Cohen said. "Our vision was a BabyCenter for elderly care. We offer low beam headlights to tell them what to expect financially, legally and emotionally."

After raising money in 2007, the company launched in 2008, and reached a million unique monthly visitors in its first four years.

With 43 million people caring for a senior in the US, the assisted living industry eclipses the wedding and baby businesses at nearly a trillion dollar industry. As populations continue to age and seniors living into the 80s and 90s become increasingly common, several public companies will certainly emerge in this space, and Caring.com hopes to be one of them. The company's user base and extensive reviews of assisted living facilities are unmatched on the market, giving it an easy two to three year head start.

Based in San Mateo, Calif., Caring.com has raised $23 million from DCM, Intel Capital, Shasta Ventures, and Split Rock Partners. Cohen expects the company to be profitable by next year. He anticipates the company earning $100 million in revenue in the next three to five years.

"Online advertising and marketing for senior care is probably three to five years behind the rest of the market, with the vast majority of the advertising dollars still being spent primarily on print media," said Tom Blaisdell, General Partner at DCM. "Caring.com is creating the first online 'level-playing field' advertising platform for all the senior care facilities and services that will enable them to shift their print dollars to online, finally allowing them to realize the benefits of online advertising that so many other segments of the economy have embraced. The disruption for this industry will be seismic." RH

Causata

www.causata.com

Paul Wahl

Software

California

Yes

» Causata turns every website into an informed but savvy salesman who knows how to make the perfect pitch at exactly the right time. The company provides intelligence and insight around customer data to create more meaningful digital experiences, and in turn, deeper shopping carts.

It collects first party information from owned websites, email campaigns, marketing campaigns, CRMs, and social media applications, pretty much the entire gamut where a customer has optionally interacted with a company. It brings all this data into a single view. Using pre-built connectors to web and social media analytics systems, it then maps or stitches an individual identity for that user, creating a customer timeline in real-time which is then ran through a predictive analytics engine to anticipate customer behavior. Causata enables personalized marketing based on real-time user behavior in order to pitch the ideal offer.

"Ninety percent of the time, you shouldn't place the ad or make the offer," said Brian Stone, Causata's VP of Marketing. "Causata helps marketers take advantage of the very specific window of time when a consumer is ready to buy. We provide a 365 degree holistic view of each customer, in real-time, to help marketers predict the customer's mind and intent."

The results are measurable and meaningful. Financial services customers typically experience a 20 percent increase in application conversions using the software. Marketers see a 20 percent increase in application conversions when making personal offers. Subscription renewals typically see a 5 to 10 percent reduction in churn, simply by pitching a special offer right at the anticipated point of cancellation. Automotive dealers typically see a 10 to 15 percent increase in conversion rates for test drives or quotes.

Causata serves customers that number in the double digits, typically large Fortune 1000 companies. It has been doubling its client roster on an annual basis. Clients include a top 10 global auto manufacturer, a leading global digital agency, and a leading anti-virus software provider.

Based in San Mateo, Calif., the company was founded in 2009 by Paul Phillips, a pioneer of data driven analytics who previously founded Touch Clarity, an online content targeting platform used by Amex, Wells Fargo, and Bank of America. He spent four years building the platform to include data integration, predictive analytics and real-time decision making. The company landed its first customers in 2010, adding a customer or two for the next couple of years. Today, it typically recruits five to 10 new customers per year.

Causata competes against IBM and Adobe, but features a homegrown software program, rather than a best of breed model based on numerous technologies achieved through multiple acquisitions, for a platform that is more ubiquitous, Stone contended.

With $23 million raised from Accel Partners, Causata has already had its exit through an acquisition last August by NICE, the customer analytics platform, for an undisclosed amount.

"Many of our customers interact with consumers in a siloed environment, leading to a disconnect between different touch points such as the company website, mobile app, stores and contact centers. These organizations are looking for the ability to tie together Web-based and contact center interactions for better and more efficient customer service," said Zeevi Bregman, President and CEO of NICE. "The acquisition of Causata is another important step in executing on our strategy to help organizations get closer to their customers by providing real-time solutions which address the entire customer journey across touch points." RH

Celladon

www.celladon.net

Krisztina Zsebo

Life Sciences/Biotech

California

Yes

» Despite its $40 billion annual cost to the healthcare system and an annual 300,000 deaths in the US alone, heart disease has yet to see any major medical breakthroughs in the last 20 years. Heart failure results when the heart cannot pump enough blood to keep fluid out of the lungs, causing frequent and expensive hospitalizations at an estimated $20,000 per visit. More than half of those who suffer a heart attack are dead within five years. Science has identified a key enzyme deficiency in advanced heart failure: SERCA2a, which controls contractions and relaxations in the heart. A number of traditional drug discovery methods have targeted the enzyme and failed.

Thanks to new advancements in gene therapy, Celladon hopes to be the first to succeed and change the nature of heart disease forever. It is currently developing MYDICAR, a genetic enzyme replacement therapy of SERCA2a that has demonstrated an 88 percent risk reduction in heart failure related hospitalization in Phase 2a clinical trials. By providing patients with the much needed enzyme, the therapy improves heart failure symptoms and quality of life with no drug related toxicities observed.

"This therapy essentially translates to improved survival," said Krisztina Zsebo, CEO of Celladon. "It's a cutting edge solution that's a win-win for the changing healthcare environment. This is not an incremental benefit. This is a paradigm shift in terms of heart failure management."

With an estimated 450,000 potential patients in the US alone when the product finally gets to market, the solution has multi billion dollar revenue potential.

The company was founded in 2004 based on scientific research on animals that showed a genetic approach could successfully target the enzyme. Celladon conducted Phase 1 and Phase 2 studies in 2007 and 2009, and launched a confirmatory study with 200 patients in August of 2012.

Depending on the results of the studies, Zsebo expects the therapy to be on the market by 2017.

Celladon has raised $120 million from a number of investors that include Pfizer Venture Investors, Johnson & Johnson Development Corp. and GBS Ventures. It is currently in discussions to partner with a pharmaceutical company in order to accelerate time to market.

"MYDICAR has demonstrated clinical benefit in human clinical trials and we believe that it has the potential to be a much needed new treatment option for patients with advanced heart failure," said Barbara Dalton, a partner with Pfizer Venture Investments and the chair of Celladon's board.

Celladon filed for an IPO in October. The number of shares and price range have yet to be determined.

Running multiple studies in Europe and Israel, Celladon is expected to launch to market in those regions by 2017. It is based in San Diego.

A biopharmaceutical veteran with 24 years of experience, Zsebo remembers how back in 1992, nobody paid attention to monoclonal antibodies.

"Now, after 50 years of failure, monoclonal antibodies are one of the major drivers for the biotech industry and pharmaceutical industries," Zsebo said. "We think gene therapy heading the same direction." RH

Centric Software

www.centricsoftware.com

Chris Groves

Internet/Online

California

Yes

» Retailers typically introduce tens of thousands of new products every quarter. Rather than the traditional four seasons, brands market up to 10 to 12 seasons annually, constantly churning out new designs and products. This can be its own juggling act. And with 90 percent of a brand's revenue coming from new products, the stakes are high.

Centric Software simplifies the process of product lifecycle management with an automated system that synchronizes the development process. Its Web 2.0 software manages every part of the process associated with launching a new product. The company designed its software so that anyone on the team, from designers to engineers, can use it; no programming knowledge required. In addition, the system is easy to customize while still prioritizing industry best standards.

"For our customers, new products are the lifeblood of their business," said Chris Groves, CEO of Centric Software. "We provide a way to seamlessly integrate all the processes and manage all of them in a six legged race. We build software that can show the designs in implementation, so they can quickly be altered. We create Agile Deployment, which allows customers to be fantastic critics while being part of the process. From day one, we implement software that can be personalized."

Centric Software typically triples its clients' productivity without adding to their headcount, essential for any brand dealing with robust growth but with no room to hire. Administration, meetings, and data checking are reduced to a minimum, freeing the team to concentrate on the core product. "They get to exercise their skills, rather than attend endless meetings to check the status of a design," Groves said.

Gianni Donati, Production Manager of Triple Aught Design, Centric Software's first customer to use the software to deploy to the Amazon.com EC2 cloud, said the platform's flexibility is key. He added that this enables customers to evolve with the demands of the market.

"The system is able to grow with us and be continually modified for further requirements," Donati said. "Over the last two years of integrating the system to our design and development process, Centric's (one) source of information has greatly improved our ability to accomplish our business goals."

Triple Aught Design is only one of Centric Software's success stories. United Stationers tripled its business while improving on-time delivery to customers from 68 percent to 98 percent. Eastern Bell gained several million dollars in its first year of using the software by improving product margins. Vasopro Sporting Goods improved its productivity by 70 percent.

"In this industry, 18 months is an eternity, six seasons or maybe more," Groves said. "The ability to invest the system quickly and get the ROI immediately is an extreme advantage."

Addressing a $15 billion market with over 70,000 prospects for its software worldwide, the company serves over 50 customers on a global basis, mostly fast-moving consumer companies above $50 million in revenue. Revenue grew 80 percent last year and will likely grow 70 percent this year.

Groves expects Centric Software to be a $100 million company in the next three to five years, with the potential to be worth several hundred million dollars. The company has raised $54 million from Oak Investment Partners, Masthead Venture Partners, and Boston Capital Ventures. It is seeking a Series D to expand into China and finish its European expansion.

Founded in 2004, the company is headquartered in Campbell, California, with offices in France, Italy, London, and Spain. The company competes against SAP and Siemens. RH

ClearPath Networks

www.clearpathnet.com

Cliff Young

Virtualization

California

Yes

» Founded in 2002, ClearPath Networks had its head in the Cloud long before cloud computing was coined terminology. The company launched the world's first cloud managed network services platform in 2004, two years before Amazon released its Elastic Compute Cloud that made the Cloud a household computer term. ClearPath Networks provided the first on premise network & security services managed from the Cloud. The company enables clients to leverage multiple mobile devices across multiple networks securely, guarded by strong authentication security measures. Providing seamless transparent access to the user, its systems feature innate scalability at an affordability that costs as little as 20 percent of the industry standard.

"With the proliferation of end points driven by our mobile society, the customer has spoken," said Cliff Young, Founder and CEO of ClearPath. "They want to access any device from wherever they are. The cloud offers numerous benefits for enterprise as well as the consumer. As we move towards a user driven type of network consumption model, it is really changing the demand profile in the networking space in ways that prove highly disruptive."

ClearPath's clients typically shave their costs by five to 10 times, not considering installation, ongoing maintenance and implementation costs, shipping and other logistics associated with a traditional solution, according to the company. "The savings are prompting serious changes in a market we see ripe with opportunity," Young said.

The company's market includes consumers who purchase personal accounts to share with families, service providers, and enterprises, which Young estimates to be about 30 million to 50 million businesses globally. Consumers gain personal secure access points that can be used by multiple devices, as well as the ability to control content access for children. In an era when managers are encouraged to cut costs amidst rising expenses, enterprises gain an ability to manage a virtual distributed workforce with proliferating endpoints securely at a more affordable margin. Service providers gain differentiation in an increasingly commoditized market. "This can absolutely be a game changer for service providers," Young said.

Its global footprint includes North America and the APAC region with a focus on India. It is working on expanding its sales offices to provide more people on the ground for a more local sales presence, Young explained. Partnering with some of the largest service providers and telecoms in North America, Europe, and APAC, ClearPath grew by more than 46 percent in 2011 and 40 percent in 2012. The company was profitable last year at $1.7 million EBITA, and expects to be EBITA positive this year.

Headquartered in headquartered in El Segundo, Calif., the company has raised $21 million of venture investment. Young strives to build ClearPath to a billion dollar business in the next five years, most likely through leveraging major partnerships, he said.

"As more and more users become mobile users and networks get increasingly more complex and expensive to manage, we will see a major shift towards cloud based services," Young said. "ClearPath is a clear leader in this space with the opportunity to deliver increasingly more value to our Partners & Customers as we add additional service capabilities. This is the most exciting time in networking since the dawn of the internet. We are benefiting by tail-winds in cloud, security, mobility, & software defined networking."

The company competes against VMWare and Citrix. RH

Continuuity

www.continuuity.com

Jonathan Gray

Big Data/Storage

California

Yes

» Big data is an unstoppable trend, but in order to properly take advantage of the all this concept has to offer, applications must be built on complex, powerful software frameworks such as Apache Hadoop. These can leave in house developers struggling for the time and resources to build valuable applications, and this is why a new sector, offering platforms for developers to build on, is growing fast.

Continuuity offers an application framework that sits as a layer on top of Apache Hadoop, HBase and other Hadoop ecosystem components. "I've been doing application development in big data for as long as just about anybody, and it's really hard," says Continuuity CEO Jon Gray, formerly of Facebook."There's great power in this platform but the technology is quite low level, it's very new and it's very raw. It's difficult to manage."

This is where the Continuuity platform comes in to play. The company is mainly targeting two channels – the enterprise players in markets such as financial services and telecoms, and also the early adopting technology firms. "Companies who have already used Hadoop and have things in production, they understand more than anybody how hard it is and how there is very little reusability when you build on top of these, and it's also very difficult to train the rest of your team to use it. Often we'll go to a company, they'll have something in production in Hadoop but there's really only one person who can code it, maybe two," says Mr. Gray. "So we're able to bring in a raise up the level of traction a bit and open up the door for their developers. Now it's not just one developer who has spent the past two years playing with Hadoop, their entire team can now build applications on top of the cluster."

On the other side of their sales focus is the large enterprises, which are generally looking for a platform as a service (PaaS) layer. "In the telco and financial services today there are thousands and thousands of on staff developer so they really understand the value of having a developer PaaS to rapidly enable their development resources to develop and bring online new applications," says Mr. Gray.

Continuity's customers have found the platform to be of great help to their developers. "For our customers, the faster we can provide purpose-built applications to drive real-time insights into their data, the smarter and more informed their decisions can be, and the better the ROI on their data assets," said Jeremy Pinkham, CTO of Lotame, a data management firm. "With Continuity Reactor integrated into Lotame's DMP, our development team can focus on bringing new innovative applications to our customers faster, addressing a broader set of use cases."

The firm announced a funding round last November, when it raised $10 million in a Series A round, which was led by Battery Ventures and Ignition Partners. That brought the company's funding total to $12.5 million. Andreesen Horowitz, Data Collective and Amplify Partners also participated in the funding round.

The company has witnessed early success, but it is still operating in a challenging market. "One of the big challenges is that we want to stay ahead of the curve but the curve is moving rapidly, so we also need to be moving rapidly," explains Mr. Gray. "When we started the company we were cloud first and now we're definitely an on-premise first company. That may shift and next year things may change. Part of it is the stability and reliability of the technology."

In order to stay ahead of the curve, the company invests a great deal of its resources into research and development. Of the 24 people the firm has employed, with more joining regularly, around 18 of those are in research and development positions. The majority of people added in the last six months have been customer facing, as the company looks to expand its reach, as it only went to market with its product earlier in the year.

For the company now, its goals are clear. "We'd really like to establish and create this application server space in Hadoop and we'd like to own it," concludes Mr. Gray. RH

Couchbase

www.couchbase.com

Bob Wiederhold

Software

California

Yes

» Databases are constantly evolving, from the large mainframe databases in the '50s and '60s to the relational databases that emerged in the '70s.

And now, 40 years later, with Facebook likes, social graphs, and the massive amount of detailed data that internet powerhouses generate every day, databases are changing once again. The rapidly increasing volume, variety and velocity of data, which supports apps that must be online continuously to accommodate huge numbers of users globally, has led to the evolution of a next-generation database technology — NoSQL.

NoSQL technology leverages new data formats, such as JSON , or Java Script Object Notation, documents, that are ideal for the data behind interactive web and mobile applications. As a result, modern applications are often a mismatch for the more rigid schemas of relational database management systems because they are no longer designed to operate on low-level rigid data structures.

Couchbase emerged as a NoSQL company in 2009, and enjoyed strong early adoption among web community sites who valued the performance and scalability benefits of its distributed database technology. Today, it serves some of the largest internet companies, including Paypal, LinkedIn, Salesforce, Adobe and Orbitz, as well as a growing number of enterprise customers such as Nielsen, Sabre, McGraw Hill. It serves more than 350 customers with over 9,500 paid deployments worldwide, and thousands more deployments of its free community edition.

Couchbase gives customers a number of advantages. Whereas most NoSQL databases are optimized either as key value databases or document databases, Couchbase can handle both. It stores and retrieves JSON documents and provides a powerful key-value data store. The product also includes a built-in caching layer that provides the low latency and high performance customers need. While several competitors come from just a database basis or a distributed system basis, Couchbase provides the best combination of distributed caching and core JSON database capabilities.

The net result of its architecture and features is that Couchbase is the best NoSQL database fit for applications that require reliability at scale. For example, in 2012 when the game Draw Something went viral, scaling up from 0 to 50 million registered users in 50 days — OMGPOP simply added Couchbase servers — expanding from 6 to 90 servers to meet the capacity, without ever going offline.

"We provide the scalability and performance of a cache with the durability of a database in a single product," said Rahim Yaseen, Senior Vice President of Product Development for Couchbase. "If you simply approach the problem from the database side of the house, you won't have that. Even a large scale traditional database system is not designed to operate with tens of millions of users without a caching tier fronting the database."

Yet Mr. Yaseen does not compare Couchbase to relational databases. "This is not a DBMS replacement model," he said. "That would be a failure for us. We are addressing new markets that have yet to be created for which we need new data management solutions. For example, if you were to build future medical instrumentation systems that deeply instrument the wide range of all bio metrics that occur within the human body, you would not use a relational database, but rather a database that can support unstructured and semi-structured data."

Headquartered in Silicon Valley, the company has raised $31 million in venture funding from Accel Partners, Ignition Partners, Mayfield Fund, and North Bridge Venture Partners.

"The key issue behind the rise of both NoSQL and Hadoop is that they offer schema-less approaches that free the developer from having to predefine the data structures and thus have immense flexibility," said Robin Vasan, Managing Director at the Mayfield Fund. "In the specific case of Couchbase, their groundbreaking technology is the ability to combine in memory caching with flash or disk-based persistence –to do this for both key-value and document/JSON type data – and to allow seamless scalability and replication within a cluster and across data centers."

Company growth has been phenomenal, Mr. Yaseen said, with the first few months of 2013 yielding more business than previous years combined. He views Couchbase as a billion dollar opportunity, and the next two to three years will bring great acceleration as NoSQL goes mainstream and the company reaches mass production. RH

Course Hero

www.coursehero.com

Andrew Grauer

Internet/Online

California

No

» Aggregating quality content and distributing it to those who want it is as close as it gets to a foolproof blueprint for success in the modern entrepreneurial world. Those who have grasped the idea, and executed it perfectly, have risen to the top of their respective verticals. In 2008, Andrew Grauer, a sophomore in Cornell University, applied that formula to the education sector, and now millions of students take advantage of the services his company, Course Hero, offers.

Throughout school, teachers, students, tutors and TAs were creating all this valuable information and a lot of the time we didn't actually share it, especially students," says Mr. Grauer, CEO of Course Hero. "And I found that to be a huge opportunity where we could start taking that information in a crowd sourced way so it was affordable."

Mr Grauer's ambition was to connect students directly with content created at the school, rather than have them go to another student or a teacher. "Ever since then its been that same idea of building a quality base of content tools and services that help students succeed and learn more effectively in their courses when they are enrolled in school. That's never changed," he says.

The idea works so well in education now because of the change in the way content can be distributed, according to Mr. Grauer. As the cost of software and hardware has plummeted, more connected devices are being sold and it is much easier, faster and cheaper to distribute the content gathered by Course Hero to the students who want it. Previously, players in the education sector have been forced to sell to the large institutions such as the universities and schools, which causes higher barriers to entry. Now businesses can target the students directly.

Course Hero also changes the supply and demand dynamic of education. The students supply the vast majority of the content, and are also the consumers themselves, meaning they are both the demand and the supply.

The company is constantly evolving its product line, and pours a huge amount of its resources into development. "Over 50% of our resources are spent building new product formats that are innovative, in terms of new online flash cards, online brain games, online tutoring and other different formats. Literally, over 50% of our team are software engineers, product managers, analytics and web designers," says Mr. Grauer.

These investments seem to be working, as users of the platform have given the website good reviews. "Everyone has a different learning style and not every textbook is right is for each student. Therefore, I found Course Hero to be very beneficial during my college experience, since I could access and use materials from other courses using a variety of teaching styles on similar subject matters," says Tyler Bean, of Boston College.

Course Hero is growing rapidly, and the firm's biggest challenge is to recruit the required people to facilitate this growth. "Over 80% of our costs are people related, so human capital literally and figuratively is the most important thing driving Course Hero. So the idea of taking the time to hire great people, not just in terms of IQ, but also persistence intelligence and emotional intelligence is extremely important to me," says Mr. Grauer.

The company's focus continues to be on the products it offers and it has ambitious targets for the future. "For this calendar year we'll have about 100,000 plus paid customers, and our goal is to double again in the next calendar year. For us it's a combination of launching a number of new product formats. We'll start building out best of breed actual full curriculums of courses, we're going to start building those out as well," concludes Mr. Grauer. RH

Crescendo Bioscience

www.crescendobio.com

William Hagstrom

Life Sciences/Biotech

California

Yes

» Autoimmune and inflammatory diseases are some of the most difficult to manage as vastly different symptoms manifest in different people. Therapies that may be highly beneficial to some patients fail to work in others with the exact same diagnosis. Tracking disease progression for many of these chronic illnesses and the effect of their treatments rely on highly subjective methods that are difficult to quantify and accurately reproduce.

For example, the most common measurement for the extent and severity of rheumatoid arthritis includes a physician's external examination of a patient comprised of squeezing the joints in a patient's hands and other digits to approximate the level inflammation and pain at that point in time. This subjective assessment is used to determine a treatment plan for a debilitating disease that can lead to cardiovascular disease, myocardial infarction and stroke as well as structural issues such as joint destruction, bone erosions and cartilage degradation which can lead to joint replacement surgeries.

Given the level of disability in rheumatoid arthritis, up to 50 percent of patients leave the workforce within five to 10 years of diagnosis. With 10 biologic therapies on the market, early and accurate identification of a patient's exact disease status can vastly improve interventions and increase the rates of remission, thereby improving the lives of the more than 4 million people around the globe who suffer from the disease.

Crescendo Bioscience uses advanced modeling techniques to identify the signatures and patterns of specific biomarkers that track the biological pathways of disease and mechanisms systemically activated to provide greater insight to clinicians as they manage autoimmune and inflammatory diseases, starting with rheumatoid arthritis. It essentially makes the tracking and assessment of these diseases much more quantifiable and less subjective.

The company's first test, Vectra DA, measures inflammatory disease activity in rheumatoid arthritis patients based on 12 discrete biomarkers, by assigning an easy to understand score from one to 100, providing doctors with an objective and precise basis to assess shifts and movements in a patient status and facilitate improved treatment decisions throughout the course of disease.

"I find that the Vectra DA is a big benefit for my patients," said Dr. Alvin Wells, an MD at the Rheumatology & Immunotherapy Center in Wisconsin. "It allows me to get a better assessment of the disease activity at that point in time. It can be performed in a timely manner that does not disrupt the flow of my day."

Typically, rheumatoid arthritis patients are assessed two to four times a year in order to track the progression of their disease and the effect of interventional plans. Vectra DA provides actionable information to physicians at each step of the process including therapy response, isolating the effects of confounders and comorbidities as well as identifying patients at most risk for joint damage and those that have achieved a state of disease remission. Patients can also self-track their disease symptoms and progress between visits with the mobile app MyRA, currently available in iOS with an Android version expected in the next 12 months.

"Vectra DA provides a level of resolution, accuracy and speed to be able to facilitate better decisions for a disease that moves very rapidly," said William Hagstrom, CEO of Crescendo Bioscience. "We help the physician gain incremental clinical insight. Patients get a definitive score and can track their progress. This leads to greater patient engagement, as well as better adherence to treatment and drug protocols."

Rheumatoid arthritis is just the beginning. The company plans to develop similar tests for juvenile idiopathic arthritis, ankylosing spondylitis, psoriatic arthritis, and systemic lupus erythematosus; each starting in the U.S., then expanding to Europe and eventually into Asia.

Rheumatoid arthritis alone is a $1.5 billion market. Globally, multiple autoimmune diseases present a $3 billion to $5 billion market. "Crescendo Bioscience is clearly pursuing a multi billion dollar opportunity," Mr. Hagstrom said.

Launched in late 2010, Vectra DA is now used by more than 20 percent of the 3,500 rheumatologists in the U.S. and more than 60,000 patients have received at least one test. In the last year, use of the test has grown by over 2.5 times. It recently gained Medicare acceptance and is now available in all 50 states. So far, the test is only offered in the U.S., but the company hopes to launch in Europe over the next 12 to 24 months. It is currently working with over a dozen European collaborators that provide rheumatology samples and data.

Crescendo Bioscience's test can potentially save time and cost in the treatment of a disease, which makes their approach attractive to insurance companies. Additionally, Vectra DA provides useful information to pharmaceutical companies developing new therapies by demonstrating the speed and significance of drug response. "It's unusual in the healthcare industry to find a business model that benefits patients, doctors, insurance and pharma companies all at the same time," Mr. Hagstrom noted.

Based in South San Francisco, Crescendo Bioscience has raised nearly $100 million from Kleiner Perkins Caufield & Byers, Mohr Davidow Ventures, Skyline Ventures, Safeguard Scientifics and Aeris Capital. The company also has a strategic partner, Myriad Genetics. Mr. Hagstrom is targeting profitability in the first half of 2014. Crescendo expects to exceed $30 million in revenue this year.

"Crescendo Bioscience and Vectra DA represent not only an innovative technology in a focused market, but also have a strong business model and highly experienced management team—all critical factors in Skyline's decision-making process to invest," said Leon Chen, Ph.D. at Skyline Ventures. RH

Cvent

www.cvent.com

Reggie Aggarwal

Software

Virginia

Yes

» Cvent, a cloud based event platform, recently went public, highlighting the value of the company, and the market it operates in.

The Virginia based firm, which offers solutions to event planners for various tasks such as event registration, venue selection and email marketing, announced the pricing of 5,600,000 shares of common stock at a price of $21 per share. Shares began trading on August 9th and by the end of the month were priced at above $35 a share.

Earlier this year the company announced a new mobile application called OnArrival, designed to help customers streamline the onsite event check in process. The application works together with the Cvent event management platform which provides event organizers with real time registration lists onsite and gives them the ability to run attendance reports on the main platform.

"We're thrilled to introduce this user-friendly mobile app. It is designed to eliminate the traditionally cumbersome and manual check in process that is still prevalent throughout much of the meetings and events industry," said Brian Ludwig, senior vice president of sales at Cvent. "OnArrival will help our customers gain efficiency, minimize lines for attendees and be perceived as a cutting edge event host. With a simple swipe of a finger or a quick scan of a QR code, the app allows for simplified event access and removes the need for unorganized and out-of-date printed lists."

The firm also recently launched a new support center for its customers. The company partnered with Salesforce.com in order to offer the new resources. The support center includes a knowledge base which is fully searchable. This features training videos, step by step instructions and guides. Cvent clients are also able to sign up to online courses and in-person training session, and also submit questions.

"Our team is committed to offering our clients world-class support for our entire event management platform and helping them maximize their use of our products," said Manjula Aggarwal, senior vice president of client services at Cvent. "While our client services representatives are always available to assist our customers, the new support center provides our clients with direct access, right at their fingertips, to an extensive database of information about our products, giving them the option to search for information or troubleshoot at their own convenience."

The company's platform has proved popular among the travel and events planning industry. Cvent signed an agreement in July with Experient, a subsidiary of travel program provider Maritz Travel. Experient selected the Cvent platform for preferred use with its clients. Through the agreement, Experient is expected to use the Cven Supplier Network to source more than two million hotel room nights annually.

"Cvent's platform has proven to be a valuable resource to our planners," said David Peckinpaugh, CMP, president of Maritz Travel and Experient. "In the two years that Maritz Travel has used Cvent's platform, this unique solution has been extremely beneficial to our business by enabling our planners to research and source world-class destinations, at premier venues for our clients, and we look forward to providing the same level of service to our association, tradeshow and government clients under the Experient umbrella." RH

CytomX Therapeutics

www.cytomx.com

Sean McCarthy

Life Sciences/Biotech

California

Yes

» In the fight against cancer and other diseases, treatments sometimes target sick cells embedded in healthy tissue; meaning when pathogens are eliminated, the baby's thrown out with the bathwater.

CytomX and its Probody Platform work hard to make sure treatments don't take the good with the bad, targeting harmful proteins in cancer cells without raising toxicities.

Founded in 2010, the San Francisco-based company evolved from a 2006 LLC out of University of California, Santa Barbara. Co-founding scientist Patrick Daugherty sought to modify antibody genes to make therapies more effective. "The intellectual property coming out of UCSB, we have exclusively licensed into CytomX," says CytomX CEO Sean McCarthy. Years of research and experimentation yielded the Probody, a molecule that locks onto pathogens and gets rid of them without adversely affecting healthy tissue.

"There are many proteins made in cancer cells that are good targets for antibody therapy ... [but they] are often found throughout the body in healthy, normal tissue," McCarthy says. "The collateral damage that can ensue from dosing a patient systemically with an antibody can be that you see significant toxicities in normal tissue when what you're really trying to do is to eliminate the tumor."

CytomX drugs aim to avoid hurting patients (through raised toxicities) when trying to help beat tumors.

"The Probody idea is to make an antibody that would only be able to interact with the diseased tissue and not with healthy tissue, and that in doing so, open up what we call therapeutic [windows] for the drug and allow us to dose patients more effectively," he says.

McCarthy calls the antibody drug market "established," with companies like Abbott and Genentech promoting Humira (labeled the first $10 billion antibody drug) and Kadcycla, respectively. Bringing products to patients, he says, requires substantial funding.

Early on, angels provided Series A capital to get CytomX up and running. Venture financing came later when Third Rock Ventures led a $30 million Series B in 2010 with the Roche Venture Fund contributing. Canaan Partners spearheaded an expansion of the Series B round two years later, growing the funding pot to $41 million.

McCarthy believes CytomX's investor base helps set it apart. "Third Rock Ventures ... have been very focused on funding transformational science over the last five or six years, and funding companies in a way that they're set up to succeed," he says.

Third Rock Ventures partner Neil Exter, who serves on CytomX's board, says their meetings begin not with the books, but with a scientific state of the union. "They all start off with, let's focus on the science and let's focus on the unmet medical need, and then we can figure out what's the best partnership strategies, what's the best way [to create] shareholder value," Exter says. "We really want to focus upon those places where there [are the] breakthrough technologies ... and there is that unmet medical need. Because that, quite honestly, for me, is the coolest thing in the world."

Capital can also come from partnerships with pharmaceutical giants, who help give the company's platform legs. Funding gets traded for focused, niche scientific innovation in symbiotic deals. "Pharma is willing to put down significant amounts of capital to access this type of innovation," McCarthy says. "It's much easier for us to innovate as thirty people in south San Francisco all in one building than it is for a major multinational pharma company to innovate when their discovery scientists are spread across the globe in multiple time zones."

This past June, CytomX received a funding boost from Pfizer, who they'll partner with to create and promote Probody solutions. The deal entitles CytomX to around $635 million, put to various uses.

"That alliance for us is a huge milestone because it says that one of the major companies out there (in this case in oncology) has put a stamp of approval on CytomX technology and the Probody concept," McCarthy says.

Down the line, CytomX anticipates future partnerships and an expanded role in the biotech marketplace. "If we fast forward two or three years, CytomX will be a company that is running its own clinical trials and treating patients with Probodies under trials we'll be running ourselves," McCarthy says. "And then looking further to the future, we have the potential to become [a] fully integrated biotechnology company that, most likely through co-development and co-commercialization arrangements, has the potential to commercialize our own products to reach patients directly."

Pharma partnerships make access to global markets attainable and let CytomX grow its international footprint — but that will come later. "Realistically for an emerging biotech company we would most likely focus on the North American market in terms of any direct commercialization that we do," McCarthy says. "But the industry's evolving at a very rapid rate, and who knows what additional models might be out there and available to us in the future." RH

Drillinginfo

www.drillinginfo.com

Allen Gilmer

Cloud Computing

Texas

Yes

» Years ago, investing in the oil and gas sector was a real gamble. Funding ventures involved aiming for the right well and landu using a bunch of papers and relying on experts' advice. Today, better analysis of the market allows investors to target the right places to drill. One of these analytic systems is Drilling Info, which provides the most recent research and information about land titles, mineral leases, well-completion (which gets a well ready for

drilling) and well-production data, and allows oil and gas market participants to make well-informed decisions about their investment.

The system includes important industry data on prime acreage, lease boundaries, well histories, permits and more using interactive maps and digitized documents. The DI [Drilling Info] Geology service allows analysis of an area of interest and identifies payzones — areas that yield oil and gas. It includes scanned files that allow the user to locate major flooding areas. The Geological Data Center, a 6,000 square foot warehouse of proprietary paper assets, will be available to subscribers via the platform.

Drilling Info's Production Charting application analyzes the state of decline wells are in and project what condition they'll be in soon. Production information in the U.S., Canada and more goes as far back as the 1930s and 1950s, while the system also tracks live drilling progress in specific areas, such as Texas and Louisiana. Drilling Info's team of geologists, engineers and analysts put together current studies on shale oil and gas in the U.S. and in international markets that concentrate on where the best oil-and-gas producing acreage is and who the top operators are.

Drilling Info started in 1999 as an online permit-and-completion mapping database. "We were a bunch of independent oil and gas producers, frustrated with access to information," says the company's CEO, Allen Gilmer. In the past, most of the information was in a physical format, requiring producers to collect massive amounts of paper before turning it into digitized information. Gilmer's team wanted to change that.

In 2004, Drilling Info acquired a historical database from PennEnergy and started its own consulting group, and by 2008 the company launched into the global arena after signing a joint venture with U.K-based partners. Today, international sales make up 10 percent of Drilling info's totals, Gilmer says. "We work everywhere today but we are specifically strong in Africa, South and Southeast Asia and Central and South America," he explains. In 2009, Drilling Info acquired HPDI (now DI Desktop), a nationwide production data provider, and expanded their North American operations.

"When we tried to raise money for this we had a business plan that was not VC-friendly, because they wanted us to do something small. We gave up on them and got professional funding from people like us. Years later, I met someone from these VCs and he said 'I finally understand what you guys do,'" Gilmer says.

The company grew from zero to 40 million dollars in revenues with $6 million primary investment in pre-A rounds over the first two to three years of its existence. Initial funding came from individual investors, mostly from the oil and gas industry "and one architect," Gilmer says. He adds that the company has been profitable on a cash-flow basis in the past few years, and reached break-even in 2005. He aims to become a company that's mid-$70 million in size by the end of 2013.

Funding came in 2012 with a round led by Insight Venture Partners amounting to $167 million. "As the U.S. continues on its path toward energy independence, Drilling Info's data intelligence tools are essential for oil and gas market participants," says Deven Parekh, board member and partner at Insight Venture Partners. In February 2013, Insight led the $167 million investment in Drilling Info. The two work closely together on the company's strategy. "Insight has assisted Drilling Info with three acquisitions since our investment, the most recent of which was Transform Software, the industry leader in analytic interpretation and modeling," says Parekh.

Headquartered in Austin, Texas, Drilling info has close to 500 employees in Austin, the UK and Singapore.

The business generates revenue from one-to-three-year subscriptions. Drilling Info currently serves 3,000 customers, with a 10 percent yearly growth rate of subscribers, Gilmer says. Half of that 10 percent are new and half upgrade their subscriptions to higher level products.

One of Drilling Info's biggest competitors is the American corporation IHS, which is used by businesses and governments in more than 165 countries and had been around for years. Petroleum Geo-Services (PGS) for marine seismic and electromagnetic services and products is another competitor located in Norway. That company provides international data and has 35 offices worldwide, with employees of more than 70 nationalities. A smaller competitor is the private P2 Energy Solutions, which provides similar data to Drilling Info to both the oil-and-gas sector and the alternative energy sector.

"Drilling Info provides the most advanced data, analysis and decision-support solution for the E&P industry via an integrated SaaS-based solution," says Parekh, "All this leads to better productivity and better results for customers." As it expands internationally, adds new data products and increases its workflow software capabilities, Drilling Info's faces the challenge of continuing to achieve profitable growth while scaling infrastructure and its employee base. Insight believes that Allen Gilmer and his management team can deal with this obstacle easily.

"The whole market for decision support is worth a couple of billion dollars, and we've entered the unconventional side of it, with a predictive way to most efficiently maximize investments," Gilmer concludes. With the increasing need for better ways to analyze data in the oil and gas industry, the company's technological innovation can serve as its key to overcome the competition and grow in the future. RH

Elance

www.Elance.com

Fabio Rosati

Internet/Online

California

Yes

» As many enterprises in the world expand their freelance-based staff, hiring platforms for independent contractors become key for efficient HR systems. This becomes even more important when online hiring of professionals can be accomplished easily on a global scale.

Elance is a global online staffing platform for independent freelance professionals. Independent contractors can create online profiles, submit proposals for jobs and receive payment through the Elance website. Businesses, on the other end, can use the website to post jobs and search for freelancers while evaluating them according to their qualifications, work history, ratings, portfolios, and skill test scores. Once a contractor is selected, the project's files can be exchanged through the Elance system.

In 1998, Elance founder Srinivas Anumolu was inspired by a single article titled: "The Dawn of the E-Lance Economy", published in the Harvard Business Review. He recognized the need for technology capable of supporting virtual work and created the first version of the site in 1999. Two years later Elance introduced a vendor management system (VMS), and in 2006 Elance sold its enterprise software division and began to develop its current web-based platform for online work.

"I made a decision to sell since I saw an opportunity," says Fabio Rosati, Elance's CEO. "We presented a plan to our investors to build a direct-to-talent platform, and similarly allow individuals to be directly hired." The new company was bootstrapped until the first round of investment took place in 2012.

In the past, the vast majority of freelancers were hired by aggregators. In a market where 90 percent of businesses in the U.S. hire contingent workers (data from the American Staffing Association) there was room for more hiring platforms.

Freelancing has become the "sole source of income" for 48 percent of respondents according to a survey of freelancers conducted by Elance in 2012. Some think freelancers lack specific skills or education. Elance's survey proved them wrong, as 69 percent of respondents held at least a bachelor's degree. In addition, the "Elance University" tool helps freelancers develop skills that are in high demand through their 400 online tests.

According to Elance, the skills most demanded of freelancers in 2011 were PHP programming, WordPress programming, article-writing, graphic design, and HTML programming, all of which can be done remotely, or a world away.

Which freelance jobs pay the best? Information technology jobs such as web and mobile programming and development account for the majority of earnings on Elance (59 percent), followed by creative jobs (24 percent), marketing (7 percent), and operations (7 percent).

Contractors and businesses pay commission fees to Elance for every job, making for a simple business model. The service can measure both hourly-rate jobs with automatic timesheets and project-based jobs, with statements of work or milestones. Elance automatically includes a service fee of 8.75 percent in every salary offer that contractors send out to potential employers. Additional revenue comes from paid membership plans, which allow contractors to submit more than 40 job proposals per month.

The company raised money in 2007 to expand into more markets such as Europe, and is currently not profitable. "We're making a lot of investments today," says Rosati. He explains that 50 percent of the company's investments account for market expansion and 50 percent for infrastructure and new technologies. "If we're able to collect and analyze more data, and personalize the matches, we can reduce time-to-hire and be more efficient," he says.

"They had a great workflow process to manage our jobs and keep track of hours, and a 'work view' option to follow along our contractors to see their work," says Xan Hood, founder of Buffalo Jackson, an American clothing and leather goods company that has worked with Elance to find subcontractors in areas of SEO, branding, accounting, and programming. "We have been able to keep our overhead low by hiring more specialized sub-contractors instead of full-time employees, saving our small startup costs, but still allowing us to grow and expand into more contract workers than we could have otherwise in specialized areas," he says.

Other sites that provide similar services are Guru, Freelancer and oDesk. "We focus on high-quality clients and have higher community earnings than any other system," Rosati says. Elance freelancers have earned nearly $800 million to date, altogether, $300 million of which was earned in the past year, according to the company.

In addition, Elance provides payment protection for fixed price and hourly-basis jobs. "We have the most sophisticated workforce management system, and companies are actually bringing their own contractors on to our system," he says, mentioning that Mozilla chose to manage its net of freelance engineers on the Elance platform.

Elance estimates its market at $1 trillion, at more than $400 billion in U.S. and $400 billion in Europe. "We're growing at 50 percent year-over-year, with almost $200 million in revenues in 2012 and $300 million in 2013," Rosati says.

The company is headquartered in the U.S. with additional offices stationed in London, Oslo, Berlin and several U.S.

cities. Countries with a large enough user-base get an "Elance ambassador," of which there are currently more than 100 spread across different markets.

As of February 2013, about 500,000 businesses use Elance. Despite 2 million freelance professionals from more than 150 countries already registered on the site, Elance still pushes to build market awareness. "The numbers are still small compared to the size of the market, and we know that there are a hundred times more freelancers and businesses," Rosati says. RH

Evolven

www.evolven.com

CEO: Sasha Gilenson

Software

New Jersey

Yes

» IT operations teams can confront overwhelming and dynamic data that may disrupt the performance of their business operations. Evolven aims to solve these issues using innovative analytics.

"I saw how many enterprises were frustrated with critical business systems going down or underperforming, and how complexity and gaps in IT operations created problems that no technology filled," says Sasha Gilenson, Founder and CEO for Evolven. Gilenson founded Evolven in 2007 after spending 13 years at Mercury Interactive (which was acquired by HP), developing the company's Business Technology Optimization (BTO) strategy and establishing Mercury Interactive's Software as a Service (SaaS) group, and more.

Evolven applied a new analytics approach to resolve change and configuration challenges and dramatically minimize the risk of downtime and slash incident investigation time. Evolven's IT Operations Analytics help accelerate incident resolution, avoid harmful and risky changes, and assess and optimize IT operations performance.

Based on the size of the managed technology environment, a subscription model and licensing are available for customers. "We operate using a 'land and expand' approach," says Gilenson, explaining that from the subscription moment, the solution can grow in two dimensions, either through additional teams that start to use Analytics results to get insight into areas of their responsibility, or through the distribution of Evolven to additional environments to include them into the analysis process.

In three rounds of funding, the company raised a total of $16M from Pitango Venture Capital and Index Ventures. The company reached profitability in 2012. However, the management decided to utilize its investment to expand the team and focus on continuous growth. "Our decision on the timing of additional funding will be defined by our ability to fulfill the growth opportunity. Current feeling is that we will not be able to address market demand without significant expansion," Gilenson says.

"We need to grow and expand very rapidly in all dimensions," he ads, as he mentions the sales teams, product and marketing. "The entire sales team has names starting with J, so there is an unofficial belief in the company that a salesperson should have 'the right name' to succeed," Gilenson ads.

Evolven has 25 employees and serves about 50 customers in the U.S., Europe, and the Middle East.

"Using Evolven we're able to know exactly what has changed in our environment, investigate incident root-cause, maintain environment consistency, validate changes, and eliminate configuration drift," says Dave Chivers, Vice President and Chief Information Officer of VSE Corporation, which focuses on improving governmental systems and located in Alexandria, VA. VSE installed Evolven's application and had a complete operational system in less than one day, and above the initial requirements that VSE had, according to Chivers. "As a Federal Contractor supporting the Federal Government, VSE competes all procurements, and during the procurement process we have found that Evolven was the best value for the services that it provides compared to other vendors with similar applications," Chivers ads.

The company is developing new products, while finding new partners across the globe. "Our focus is on growing revenues from software licenses while our partners expand their value added services including or based on Evolven's technology," Gilenson says.

IT Operations Analytics was identified by Gartner as an on-the-rise, strategic area of IT management. The change and configuration management segment, where Evolven started, was estimated around $6B last year, by various industry analysts. Gilenson estimates that the company will reach the size of $30M by 2015.

The key indirect competitors the Evolven has are Splunk, headquartered in San Francisco with 600 employees worldwide, and TripWire, headquartered in Portland, Oregon, which has operations in 15 countries. Gilenson says that the company doesn't have direct competition, "Our differentiation lies in applying analytics to the change and configuration challenges," he says, explaining that this application to IT analytics doesn't exist in other solutions.

"Evolven's solution turns a pile of data into actionable insights," says Rona Segev, a General partner at PITANGO. Pitango decided to invest in Evolven due to a strong and growing market need, unique technology that can really disrupt the industry and a strong founding and management team. "Evolven is really at the beginning of a strong growth curve. With dozens of blue chip customers already on board, technology that is way ahead compared to any other company in the market and strong and growing market demand — we believe Evolven is well poised to disrupt the industry," Segev concludes.

Fiksu

www.fiksu.com

Micah Adler

Mobile

Massachusetts

Yes

» Fiksu's first customer for its mobile app marketing platform was itself. Founded in 2008, the company was originally founded through the marketing efforts of its own app, Fluent News Reader. That app was lucky enough to have a successful launch and was featured in the New York Times, resulting in tens of thousands of downloads. However, the flow soon dwindled to a trickle, dropping from thousands of daily downloads to a mere handful practically overnight.

Such experiences are typical with apps — even those with heavy traction initially soon find themselves spinning their wheels. Micah Adler, Fiksu's CEO, was not about to give up, however. A former tenured professor of Computer Science at the University of Massachusetts, Adler helped launch four successful companies that used computer science and algorithms to make digital marketing more efficient. He observed the inefficiencies inherent in marketing an app. Fluent News Reader was marketed through three different companies, for example, costing the company $3 per download, an expense that made monetization nearly impossible.

"We found tremendous inefficiencies in how mobile apps are marketed, and realized we could do better," Adler said. In six months, the company developed a marketing platform to minimize its costs, dropping its price per download to a mere 26 cents.

It then developed a corporate product that provided a complete network to all app advertising sources, a complex system that varies according to the type of ad as well as the type of app.

Through a simple SDK with a user-friendly data interface, the product optimizes performance results for expense and effectiveness. It improves not only the rate of downloads, but the quality of those downloads as well. Whereas only 20 percent of downloaded apps are used beyond the first day, and only 5 percent of apps beyond the first month, Fiksu's users see a 50 percent adoption rate for their apps. Typically, Fiksu improves the cost for marketing an app by a factor of three.

"We make it very easy to reach mobile users through a single platform," Adler said. "We establish a great degree of efficiency so our customers do not pay more than they can afford. And we provide visibility into the true value of users so our clients can optimize every cent."

The Boston-based company first launched in beta to 10 customers around 2010, with a full public launch in April of 2011. Last April, Fiksu marketed its billionth download, generating over 100 billion launches, registrations, and in-app purchases. Growing over 300 percent annually, Fiksu today serves over 400 customers, including Groupon, which uses its marketing to improve download quality.

"We're a commerce business, and we need our advertising to be efficient," said David Katz, Vice-president of Consumer Mobile at Groupon. "We don't just want downloads — we want new customers who are going to love the app and hopefully buy Groupons. We look to Fiksu to help us find the pockets of ad inventory with users most likely to become loyal Groupon customers."

The company has raised $18 million from Qualcomm Ventures and Charles River Ventures. It employs 140 people and competes against Taptica.

With the mobile app market expected to be $80 billion to $100 billion over the next few years, Adler anticipates tremendous opportunity for his company. As apps transition into cars and televisions, and digital downloads for goods and music become more popular, Adler does not see why Fiksu could not eventually be a multi-billion dollar company.

"We're starting to see larger clients enter the mobile app market with more serious investment potential," Adler said.

Finovera

www.finovera.com

Purna Pareek

Internet/Online

California

No

» The mailbox is a money pit for consumer businesses. Businesses send out over 30 billion paper bills, statements and notices every year, costing more than $30 billion in postage and handling fees. Despite pushes from financial services and utility companies, paperless adoption currently lingers below 11 percent. Most people simply do not have the time to sign up for paperless billing with every provider, leaving the bills to pile sky high on the kitchen table.

Finovera makes that proverbial pile of bills obsolete. Within a single ten minute sign-up process, the company's software automatically signs a user up for paperless billing with every provider she does business with. The user simply logs in to Finovera, and the company's software automatically goes to each business's website to complete paperless billing sign up, downloading all available documents for the past year to create a digital file cabinet. The inbox features digital copies of a user's bills and relevant due dates. A premium version of the service also enables automatic bill pay.

Aside from the premium bill pay function, the service is completely free, with the bill providers picking up the tab, saving at least $1 per bill in postal and handling fees off their own balance sheets.

"Ultimately, the household is going to go paperless. The writing is on the wall," said Purna Pareek, CEO of Finovera. "The mail is the last digital hold out. Finovera provides a digital file cabinet in the cloud with all bill statements, notices, or what you ever you choose to upload and store."

The company competes against Dropbox, PayTrust, eBills and BillingOrchard, but these services require the user to make a connection to the provider. Finovera provides a one-step, simplified approach that makes paperless adoption as simple as setting up an email account. "Most of these solutions are time consuming, which is a huge barrier to adoption," Pareek said. "Finovera uses very complicated, sophisticated technology so that set-up is a simple one step process."

Finovera beta user Toby Salgado described the setup process as "a breeze," though it required a verification by his bank because he had not previously used Finovera servers. "After using the service for a while I have found it extremely useful," Salgado said. "I have actually saved a bunch of money because of Finovera. When I only got paper statements I never really looked at them, and now because I have 12 months of statements I have found myself digging through them."

Taking its time to get the process right, the company only recently came out of a private beta program with 1,000 users. "We're early in the process, but we're seeing a lot of pent up demand," Pareek said. "Pretty much everyone we talk to are excited about the service and want to use it. It's a service that can make just about anyone's life easier."

A founder of three successful previous companies, Pareek was inspired to launch the company from his own frustrations with bill pile-up. His most recent company, AdviceAmerica, was a wealth management enterprise class platform. He understood the problem of bill management, and when he looked into existing solutions, found that most services required the user to register with each company, which proved too time consuming. "We knew that digital was the way to go, but it had to be an easy service to join," Pareek said. "The more we looked at the problem, we realized it was indeed solvable, but difficult. It required a complex solution."

Finovera will first concentrate on the US market, and then adapt the software to other countries. Digital bill pay is further evolved in Europe, with many national post offices implementing their own digital alternatives to cut costs.

The company has raised seed and angel investment, and plans to soon raise a Series A of around $5 million.

"It is clear that digital billing is the wave of the future," Pareek said. "We simplify the sign up process, and in turn, simplify the lives of our customers significantly."

Full Circle CRM

www.fullcirclecrm.com

Bonnie Crater

Cloud Computing

California

Yes

» Even in a well-run marketing campaign, only about 80 percent of the marketing dollars are actually spent correctly, asserts Bonnie Crater, CEO of Full Circle CRM. The remaining 20 percent is an experiment. How does an advertiser measure success from failure?

Full Circle CRM provides the only marketing performance management tool built completely on Salesforce.com. This allows the company to manipulate and measure data in a complete historical record so it maintains its integrity, without the standard workflows of the marketing team rendering it invalid or corrupted. The company's software enables the marketing department to accurately measure every face of a marketing campaign.

"The next big trend in marketing is being able to measure effectively," Crater said. "Often, sales and marketing teams don't have the right data to be able to have a productive conversation and work together. We solve that sales and marketing divide with our software. We can define what is not doing well so budgets can be adjusted successfully."

Founded by ex-Salesforce talent, the company grounded itself in Salesforce's platform from the beginning. Crater worked as marketing VP for a number of different companies, helping to bring them on to Salesforce, and later went onto work for Salesforce itself. She got a call from Andrea Wildt, a former product manager for Salesforce's marketing project, who worked as a consultant for companies that had difficulty measuring their marketing efforts. The two joined forces with Dan Appleton, who had written several popular Windows programming books. They built the platform for Full Circle CRM over the next year and a half.

"We realized that sales and marketing people did not have right data," Crater said. "They are only guessing. We sought to remove the guesswork."

They launched Full Circle CRM at Dreamforce in fall of 2012. Already, they have over 15 customers on the platform, ranging from tech to financial services to telecommunications, including Good

Technology and Java. It has been growing at over 100 percent annually.

The company's market is currently entirely focused on the US, though it plans to expand into Europe by 2014. It raised seed funding and is currently raising a Series A.

As Salesforce is an open source model, a competitor could try a similar approach, Crater admits. Full Circle CRM has built a robust platform, however, that would take at least two years to duplicate, giving it a considerable head start. Plus, the company's previous roots in Salesforce also give it an edge on the market. "Our company is an expert at building products on the Salesforce platform," Crater said. "We know Salesforce customers. We are Salesforce customers. We know the ecosystem personally."

Though the company is early in its inception, Crater expects it to be earning $50 million to $150 million in the next three to five years. She views Full Circle CRM as a billion dollar opportunity.

If implemented early, the Full Circle marketer can adjust its outreach to optimize customers, maintained Denis Pombriant, Managing Principal of Beagle Research, the CRM analyst firm. Proactivity is the point of big data, Pombriant said.

"Analyzing the sales data isn't going to change it, but the resulting information will inform future sales processes and improve the probability of success," Pombriant said. "At its core, data is just data. It doesn't become useful until someone transforms it into information that people use to create knowledge upon which they make decisions."

The company is based in San Mateo, Calif. RH

Gainsight

www.gainsight.com

Nick Mehta

Software

California

Yes

» Gainsight, which was formerly known as JBara, helps companies reduce customer attrition by leveraging big data. The company performs customer success management. Its tools monitor customer satisfaction and use of a product in order to predict customer behavior.

The company utilizes big data from sales, usage logs, surveys, and support tickets to establish a customer health score that identifies churn risk before the client jumps to a competitor. It monetizes on an SaaS model, with priced based on the number of users per month. In addition to reducing attrition, Gainsight, which is based in Mountain View in California, also works to identify clients with potential up-sell opportunities.

"Data is transforming industries and business processes around the world. Yet many companies today still don't leverage data to understand their existing customers after they come on board," said Nick Mehta, CEO at Gainsight, which was founded in 2012. "Companies, from healthcare to financial services to retail, are moving to a model where financial success depends on customer success. Gainsight's mission is to help businesses of all sizes reduce customer churn, drive up-sell and maximize customer satisfaction by using big data analytics to power insight and action."

Gainsight's early customers include well established names in the SaaS space, such as Marketo, Jive Software, Informatica, and Eloqua. It has raised $9 million from Battery Adventures. "Recurring revenue business models have permeated most industries and companies are realizing that customer retention is just as strategic as customer acquisition," said Roger Lee, general partner at Battery Ventures. "Gainsight, with its innovative technology, is helping businesses navigate this transition and maximize revenue from existing customers."

Gainsight's founder, Jim Emberlin previously created Host Analytics, a provider of cloud-based corporate performance management software. With its latest round of funding and its name change last April, Gainsight hired Nick Mehta, formerly CEO of LiveOffice, a cloud-based archiving company that was acquired by Symantec. RH

GainSpan

www.gainspan.com

Greg Winner

Other

California

Yes

» The number of wirelessly connected devices on the market in 2012, reached 10 billion, according to recent research. The report from ABI Research also forecast that this figure will reach around 30 billion by 2020. These connected devices all make up one concept – the internet of everything.

The internet of everything, also called the internet of things and machine to machine (M2M), has long been discussed in the technology community, and in essence means connecting pretty much everything through the internet. However, until now the concept has not taken off, mainly due to the limitations in technology and infrastructure. But now all that is changing.

"In the past it's been a concept that has been around for many years, but there's not been the technology available to actually push it forward," says Peter Cooney, Practice Director at ABI Research. "So I think being able to connect wirelessly is the main thing driving it forward."

One company which is supplying the tools for the internet of everything is GainSpan, a Californian firm which designs and markers low power Wi-Fi semiconductor products and solutions. "We support the internet of things market. The company was started in 2006. It was incubated inside of Intel," explains Greg Winner, President and CEO of Gainspan. "What we're not doing is phones, TVs, PCs and tablets, that's not us.

A thing [in this sense] is really something that's powered by a microcontroller. There are more than 10 billion of those."

Examples of the appliances which use Gainspan technology are smart plugs, air conditoners, body fat scales, wireless speakers and many, many more. The company doesn't design the actual products, it embeds its technology into them, which means it works closely with manufacturers. This can sometimes be a challenge for the company. "One challenge is the development cycle is longer for these types of products. Number two — the customers don't have a background in WiFi and the IT content, the networking and mobile apps. Maybe the third thing is you're going in an explaining how WiFi can actually be a low power. We were one of the first companies out there explaining that there's maybe a better way to approach this stuff," says Mr. Winner.

Aside from better infrastructure and wireless connectivity, there are other factors which have spurred on the success of the internet of everything, and also Gainspan. We connect things to the internet and then people to those things, the consumers have got more sophisticated," says Lew Adams, CTO of Gainspan. "Consumers are used to connecting to the internet instead of just making phone calls and so now they are connecting to devices like something as simple as the home scale, to know what their weight trend is or what their health status us."

A typical client of GainSpan's will order between 25,000 and 100,000 pieces of its technology per year, according to Mr. Winner. An example would be a firm launching its first thermostat that is WiFi enabled, while around 30% of the firm's customers are starting on their second project.

The draw to work in this area was not just the obvious potential for riches, as Mr. Adams explains: "When you see a new technology that has the chance to change the way people do things and improve not only the energy consumption, the way people live and can make a positive impact, you want to be involved in something like that."

Mr. Adams was involved in the company when it was being incubated at Intel, while Mr. Winner was working for a competitor for just short of a year. This gave him the opportunity to see the market and the customers, while Mr. Adams was primarily involved in the technology.

Gainspan sets itself apart from the competition in the market in many ways, one of which is security. There is an emphasis on security in this field as the items in the internet of everything are connected to people, and as such can be very personal. Something as simple as a thermostat in a house, if accessed by an outside source, could tell a stranger when someone wakes up and goes to sleep. "That's something that are competitors, they probably do not spend enough time on, if you connect things that are very personal to you to the internet, the security that needs to go with it can't be underestimated," says Mr. Adams.

It's clear this a growing market, but the evidence is not quite in the high street on a large scale. "Even today people are not shipping smart appliances in any kind of volume. So, it's still one of the emerging application spaces," says Mr. Winner. "Even today, you go to the store, you don't see smart appliances or smart air conditioners. Over the next three years, that should change. But everybody is working on it, right. So, you'll see those things over the next two or three years." RH

Gen-E

www.gen-e.com

Casey Kindiger

Software

California

Yes

» Gen-E makes it easier for companies to step into the automated world of information systems. The company's Resolve Social IT process automation (ITPA) speeds up the adoption of process automation by providing administration services for Resolve and Tivoli Automation softwares. For example, Gen-e arranges critical IT processes across different systems and cloud environments. Once administration is better taken care of, businesses can focus on other improvements, such as innovation and customer service.

Gen-E was founded in 1999, with a focus on ITPA and later on IT service management (ITSM). Since then, the company has created an enterprise software for hundreds of telecommunication service providers, financial services firms and large enterprises. Headquartered in San Clemente, California, the company currently operates with 100 employees in North America, Europe, Australia and Asia. The number two credit card processing company in the U.S , the third largest wireless carrier and the fourth largest bank in the world are also part of the client list, according to the company.

"One of our large wireless carriers uses our product every time someone calls the customer care server. They pull up our product to diagnose the customer's issue, it looks at the network to see the clients performance, billing information, changes on the infrastructure, the product takes all the information and put it in a non-technical way. This way, it reduces the problem of 'let me take the information and get back to you'," Casey Kindiger, Gen-e's President and CEO, explains.

A large part of the company's management team earned their business skills while previously working for Deloitte. Kindiger, for example, was a consultant for leading companies at Deloitte's Enterprise Systems management practice and later served as the Vice President of Professional Services for Tidal Software, Inc. (purchased by Cisco in 2009), a provider of intelligent application management and automation solutions. Maybe thanks to that, Gen-e has teamed with Tidal Software in the past.

From Tidal Software, Gen-e went on to foster alliances with other leading ISVs including Micromuse, Remedy, InfoVista, Peregrine and IBM. IBM's Tivoli Automation software soon became the main software that Gen-E's centers of business focused on.

"We started as a service display, that was the fastest way to make impact, and then partnered with companies and built the service solutions on top of that", says Kindiger. Gen-e pivoted to software in 2009, when it bought its Resolve Social ITPA software and hired the founder of that startup to launch it.

The business model is based on an initial license with an annual maintenance contract. Gen-e has over 100 customers in the U.S. and Europe, and two large customers in South East Asia as well, through its alliances.

The company was profitable from 2003-2011, according to its management. "We ran a profitable bootstrap business," says Kindiger. Revenues went down in 2012 since the company invested a lot of money in marketing, but Kindiger expects profitability in 2013. "We expect to be at or near 15 million revenue by 2015," he says.

"Me and a couple of other founders organically built the customer base" Kindiger says. In 2012 they partnered with a California-based private equity partner, Solis capital partners, which invested in the business. The company isn't looking for any specific funding at the moment, but Kindiger is "exploring all options."

"We're good at making existing customers buy more products," he says. "The challenge is to scale and get new ones at a faster rate." One way to reach that goal is offering a community edition for free so customers can trial the software, and another is creating a software-as-a-service version during 2013.

Gen-e faces competition from companies such as ServiceNow, which launched its IPO last year for $1 billion size, one of the largest IPOs in 2012 in this space. ServiceNow provides cloud-based services to IT operations, focusing on the internal help desk, with a ticketing tool that captures information.

As the need for better IT systems grows, Gen-e will face more competition, as well as a growing market for its products. RH

Glassdoor

www.glassdoor.com

Robert Hohman

Social Media

California

Yes

» The inspiration for Glassdoor's approach to company transparency was the complete result of a screw up. Robert Hohman worked as an executive at Microsoft and Expedia, which hired a firm for annual employee surveys. He accidentally left the company's executive book in a conference room, complete with printed off employee stock options, salaries, comments, and other qualitative data, information definitely not meant for public consumption.

An assistant found the book the next day, no harm done. Yet the question burned in Hohman's mind: So what? If one left photocopies of anonymous salaries, stock options, and critiques from each company employee on every desk in the office, would the world stop spinning?

"We had always claimed to value transparency as official public policy because it made people do their jobs better," said Hohman, Glassdoor's Co-founder and CEO. "We've always tried to run the company so we could look anyone in face and explain why their salary was different from anyone else. We realized that this information, while rather uncomfortable at first, ultimately make individuals and the company perform better."

And so Glassdoor was born. Since its foundation in June of 2007, Glassdoor has grown to a community of 20 million members with 13 million unique visitors every month. Over four million pieces of content have been contributed to the community, including salary information, opinions on management, and insider interview tips. The service provides input on over 250,000 companies from over 190 countries and 100 currencies around the world. "We serve far more than just a North American need," Hohman said. "There is incredible global demand."

That fact was clearly evident from day one. When launching, the company had speculated that if it could just get 10,000 company reviews in its first year, it would be off and running to a respectable start. Yet Glassdoor managed that benchmark in its first 48 hours, with reviews on companies from over 89 countries. The company has steadily tripled its base every year for the last six years.

Yet it's the employers who are reviewed that pay Glassdoor's bills, not the employees doing the reviewing. The company is actually in the job recruitment business, and it is Glassdoor's transparency that gives it a leg up. A Glassdoor Whitepaper found that when an employee researches a job, she is 22 percent less likely to attrite out of the company than someone who never researched the company. "Glassdoor's 13 million unique monthly visitors tend to be very educated, more selective and the kind of person who can be choosy about where they want to work next," Hohman said. "Our audience makes an attractive market for employers to recruit."

Glassdoor's products are designed to bring employers in contact with candidates best suited for each hire. The company is paid on a performance based advertising model.

Glassdoor serves 750 clients, including big name corporations like Facebook, Amazon, Groupon and Pepsi, but also smaller mom and pop operations of fewer than 30 employees. Over the last four years, revenues have grown 196 percent CAGR.

With $14 billion spent on job advertising annually, Glassdoor strives to be the largest job posting website with revenue in the billions, similar to LinkedIn or Monster in its heyday. "2008 was one of the worse times in history to launch a job website, yet we managed triple digit growth rates," Hohman said. "If we can do that in a year the world falls off a financial cliff, we clearly have a huge opportunity as the economy accelerates out of the recovery."

Headquartered in Sausalito, Calif., Glassdoor has raised $42.2 million from its founders, Benchmark Capital, Sutter Hill Ventures, Battery Ventures and DAG Ventures.

"The key to Glassdoor's long-term success lies in its continued innovation and investment in its workforce," said Neeraj Agrawal, a Battery Ventures General Partner. "The company has consistently worked hard to push the envelope in the employment industry, and no other online jobs resource has been able to cross the chasm and offer this type of value to both job seekers and employers. We chose to invest in Glassdoor because we strongly believe in the direction the senior leaders are taking the company and future for the business." RH

Grammarly

www.grammarly.com

Brad Hoover

Cloud Computing

California

No

» Grammarly's English grammar tool was developed by people who speak English as a second language but wanted to write like it was their first. A cloud-powered grammar tool, Grammarly is the brainchild of the development team of MyDropBox, one of the leading detection products that was sold to Blackboard. As a reward, the founders told the development team to take a year off and solve the most intriguing problem to inspire their talents.

Deciding to tackle the complexities of the English language, the Ukrainian team developed what Grammarly's CEO Brad Hoover calls "the world's best grammar checker that's unquestionably superior" to the stock grammar or spelling checkers provided through Microsoft Office or Google Drive.

"Our developers created a product built for users by users, and that combined with the depth they've already achieved in the natural language processing space allowed us to create a truly exceptional product that's been evolving ever since," Hoover said. "Our ultimate goal is to improve communication among the world's two billion English writers. We act as a second set of eyes, available anywhere, anytime, with an Internet connection."

Hoover himself was introduced to Grammarly as a registered user. A prior venture capitalist for General Catalyst Partners, Hoover sought ways to ensure his emails and other communications sounded their best. He looked up Grammarly, and was so impressed with the company that he left his investment career to become its CEO.

The product features highly sophisticated algorithms that run on cloud infrastructure, boasting a higher degree of processing power than a desktop model such as Microsoft. The company runs on an SaaS platform, with subscriptions ranging anywhere from $3 per month to $140 per year. Most users access the service through the Grammarly website, loading content through a copy and paste function and then checking it through the cloud, or through a Microsoft Office plug-in. The paid product comes with a free trial period. The company also offers Light, a free grammar checking browser extension for Chrome, Safari and Firefox.

Santosh Mankala, a software engineer at Salesforce.com whose first language is not English, said he uses the service for nearly every form of written communication, from email to Facebook to writing letters, "pretty much anytime where grammar matters," Mankala said.

"The chrome browser plugin is very useful," Mankala added. "Nobody can beat Grammarly for ease of use and reliability. I know that I have a better chance of being successful at work now because I write English well."

The company was founded in 2008. The developers spent a year building the product and immediately launched it to market, landing users soon after. Today, over 3 million registered users use Grammarly, doubling in size annually, with 700 thousand Facebook fans. It also serves 150 institutional clients such as universities, enterprises, and other educational entities.

The company is completely bootstrapped, and in part funded from the sale of Mydropbox. The company has been profitable for over a year, but plans to invest that profit back into R&D as the product continually evolves.

"Natural language processing is part of computational linguistics, one of the most cutting edge areas of computer science," Hoover said. "We are solving a very meaningful problem in that space, which takes considerable resources to get right."

With offices in San Jose and Kiev, Ukraine, Grammarly's user base is split 50-50 between domestic and international markets. It serves not only the 1.5 billion non-native English speakers, but also the 500 million people who have spoken English all their lives. So far the company concentrates only on perfecting English grammar, a complex problem Hoover expects will take the company five to 10 years to get right. After that, Grammarly plans to address other tongues, as its code base has been specifically designed to be adaptable to other languages. Grammarly strives to conquer the world, one language at a time. RH

hc1.com

- www.hc1.com
- Brad Bostic
- Cloud Computing
- Indiana
- No

» In a world where customer relationship management (CRM) solutions have become uniform for varied business activities, a more targeted approach may work better. Hc1.com is the only cloud-based CRM solution designed specifically for medical laboratories.

"I was surprised to find that all the ambulatory service lines, like labs, didn't have a great way of communicating with their clients," says Brad Bostic, Founder & CEO of hc1.com. Bostic has founded several technology companies and built up ventures in the mobile, SaaS, and enterprise software markets. His interest in entrepreneurship drove him to create entrepreneurial spirit made him create hc1.com as he observed the changing healthcare landscape in the U.S.

More than 500 healthcare organizations across the U.S. use hc1.com today. It is a subscription service, and clients pay according to the number of users they bring to the platform. Since the company's service is cloud-based, there is no payment for hardware.

The majority of hc1.com's clients come from the U.S., but some are located in Canada, the U.K., and Europe, as well as more far-flung regions. One of its customers, for example, is an Australian company called Sonic Healthcare Limited, which provides laboratory pathology and radiology services.

Other clients include Alere, which provides health management solutions, health monitoring products, and wellbeing services for patients and healthcare professionals in more than 25 countries around the globe. The U.S.-based HCA Healthcare (corporate operator of hospitals and health systems in several parts of the country) and Alegent Creighton Health also use hc1.com's solutions. Bostic hopes to more than double the number of customers his company currently serves by the end of 2013.

According to the company, hc1.com has triple digit annual percentage growth. "We're in investment mode but we're generating meaningful cash flows," Bostic adds, "The value of all of the contracts that we're signing is increasing [at] a quarter-over-quarter percentage rate." The company does not disclose revenues, but Bostic hopes the company will be profitable by the end of 2013. For him, the focus right now is expansion, even before cash flows: "Our goal is to be pervasive and become a global platform. It's really all about adoption for us," he says.

"We've been nontraditional in that regard," says Bostic when asked about his investment funding. "We had a lot of access to investors and raised $14 million by this point, mainly through angels," he says. Other investors include Elevate Ventures. Since the company is considering accelerating expansion, Bostic may seek new investment routes.

One of the challenges for hc1.com's scaling plan is "replacing spreadsheets," a status-quo approach that has been part of the healthcare market for years. Another challenge is finding the right people outside of the U.S. to join the company. Right now, for example, the bulk of hc1.com's employees work in Indianapolis.

While hc1.com is focused on healthcare activity, its competitors are more generic CRM-type systems that focus on logging business activities, such as phone calls and messages, for healthcare systems. Among them: Salesforce.com, Microsoft Dynamics healthcare management solutions, and others. According to Bostic, hc1.com's system is also more secure than generic systems. "We go well above and beyond what the U.S. Department of Health and Human Services requires," he says.

"Unlike past CRM tools that only reach out to the sales force, we have the entire company on hc1 and leverage it for improving our internal workflow and business processes," says Ken Cerney, CEO of Manhattanlabs, a clinical laboratory in New York which uses hc1.com's solutions.

Manhattanlabs also claims hc1.com's system improved their customer service, which is critical to meeting the demands of its Manhattan clientele. "We're able to not only retain clients but grow our existing business by being a valued added partner with our clients," Cerney says, "We resolve issues quickly and have a better way of communicating that with the necessary people across our organization. We find that as a whole, we're much more proactive than reactive. The insight that it gives us is key."

"This is exciting since it's a fulfilling opportunity to impact the world, apart from making money," Bostic says. His company will help healthcare systems tailor customer service to fit digital needs. RH

Infinite Convergence

www.infinite.com

Anurag Lal

Telecommunications

Illinois

No

» Infinite Convergence Solutions provides messaging and mobility solutions to telecom operators around the globe. The solutions include call and messaging features that create an enhanced address book comprised of pictures, audio, video, and animation for messaging users.

The company is funded by India-based Infinite Computer Solutions and was created as a result of Infinite's partnership with Nokia Siemens Networks. "We recognized the value and talent that we acquired and the strength of the mobility space," says Anurag Lal, CEO of Infinite Convergence Solutions. Lal has over 20 years of experience in technology, IT and telecom services. He has served as senior vice president and global service provider at Meru Network and Chief Business Development and Sales Officer at iPass Inc. He worked at both companies as they went public. In addition, Lal was appointed by the Obama administration to serve as a Director of the United States National Broadband Taskforce.

"When you want to send an SMS from Verizon to AT&T it goes through a gateway that allows large carriers to connect with other networks on a global basis," Lal says, explaining the SMS Gateway product that the company provides.

According to the company's Mobile Messaging Trends study in 2013, 91 percent of mobile phone owners read mobile messages within 15 minutes of receiving a notification. Moreover, 45 percent of mobile phone owners use mobile messaging for business correspondence and 90 percent use texting most often to communicate with colleagues. However, only 36 percent of mobile owners subscribe to text messages from businesses, while 61 percent of them say that official information from employers is most valuable.

Infinite Convergence sells its products to the mobile operator community or to large enterprises, and the pricing is determined by the volume of traffic (transaction base) or by the subscriber base. Infinite Convergence was among the first companies to deploy commercial long-term evolution (LTE) service, or 4G LTE, a standard for wireless communication of high-speed data for mobile phones and data terminals.

The company doesn't disclose its total number of customers, but it has less than 100 clients today. More than 200 billion potential customers operate in the market.

"Infinite Convergence has the best products and services team in the messaging business," says Rich Danstrom, Director of Product Management at Nokia Siemens Networks, "These products and the development team were spun-off from Motorola and continue to serve those customers with a full suite of messaging products." Infinite Convergence supplies products that Nokia Siemens Networks resells to its cellular operator customers.

"It's always tough to be able to make an impact when you're starting up," Lal says. "It was important to partner up with the right channels." The company originally partnered with MSN and Motorola and established its legitimacy within the two companies' customer base. "We've architected it to make sure that there is solid redundancy in the product and no outages, and we believe that our product is better engineered than our competitors," Lal says.

With an average 25 percent growth rate, Infinite Convergence broke even two years ago and has been profitable since. "If you look at the state of the economy and the competition, it's a solid track record," Lal says.

"Investors look for this level of discipline," he adds. Since becoming profitable the company is no longer dependent on investment funding. "It's better to have strategic investors that help the business and add value to our position in this space," Lal comments. The U.S. is the company's main market, but Infinite Convergence also operates in Asia and Europe.

Infinite Convergence has close to 200 employees and is currently looking to expand and invest in R&D infrastructure as well. "I understand how to leverage my experience so we can scale the company and so far we have been effective. We will continue that and make sure that we don't stumble when it comes to execution… For the kind of market growth you want, you don't take the eye off the ball," Lal concludes. RH

Influitive

www.influitive.com

Mark Organ

Software

Ontario

Yes

» Sometimes a company bursts into existence as a result of one great idea, while other times it is a result of a number of realizations all coming together at the same time. For Mark Organ, CEO of Influitive, it was the latter. While in charge of his previous company, Eloqua, he drew on several different insights to inspire the advocate marketing firm he runs today.

The first of these insights was realizing the value of referral leads. A suggestion from a venture capitalist back in 2005 prompted a study into the reasons why some sales are closed in four days rather than four months. "In every case, these best-in-class buying processes were crawling with advocates," recalls Organ. "They were often referred in by multiple advocates, they saw the most relevant customer success stories on our website, and the most satisfying reference calls to help close quickly. Referral leads in particular were incredibly valuable – we calculated the value to be around 10x the value of ordinary leads, because of their speed of closing, low cost of sale and service, higher order size, and higher propensity to advocate themselves once they became paying customers."

Organ soon realized that it was not just referral leads that were valuable. "Every time a customer, analyst or investor would ask for three customer references, it would be a hair-on-fire exercise," he says. He explains that there were never enough case studies to cover all of the use cases the company needed.

"It became apparent to me that the reason why was that we were not focused on the advocate experience, the feelings that they needed to have to significantly increase their activity."

Another factor which influenced Mr. Organ's creation of Influitive was the lasting impact of the Salesforce.com city tours, which convinced him of the value in engineering meetings and conversations between relevant advocates and prospective clients of a company. Another realization was that advocacy should be the ultimate goal of the company. "After a lot of thinking, I decided that the real goal was to generate customers so delighted that they would refer us to others regularly, because these advocates help the company grow with maximum speed and efficiency. Advocacy was the goal," he recalls.

The final insight which influenced Mr. Organ regarded the power of social gaming. Mr. Organ was previously involved in a pioneering sports social gaming company as an investor and a director. While working with this firm, he realized that the gaming space was light years ahead of the B2B enterprise software market with regards to a number of features crucial to customer satisfaction.

Organ's insights have made for a successful company. Earlier this year Influitive announced it had raised $7.3 million in Series A funding from Hummer Winblad and Relay Ventures, with existing investors Lightspeed Venture Partners, New Enterprise Associates, Illuminate Ventures, Resolute VC, Common Angels and other angel investors and firms also participating.

"This is a team that has pioneered a multi-billion dollar industry in cloud-based marketing automation," says Alex Baker, principal at Relay Ventures. "We are seeing companies increasingly dependent on peer referencing for acquiring customers, and believe that Influitive's advocate-centered, self-service approach is going to win out in a new multi-billion dollar Advocate Marketing space that is forming."

For now the firm is in a unique space, and has yet to encounter direct competition in the B2B market. There are similar firms in the reference automation and case study and testimonial automation area, but Organ says no other company has made a program which is advocate-facing like Influitive yet. "There are players on the B2C side that have a campaign-like concept, blasting potential advocates once a quarter with emails asking for advocacy, but we think that is wrong-headed and instead we champion an advocate nurturing approach, with an exclusive hub tailored for each individual advocate, driving the strongest response," he says.

Influitive has new product launches on the horizon. "We have two new products that we want to see be successful: AdvocateAnywhere, which enables companies to invite users to advocate right from within their software products according to programmatic rules; and Maven, which provides advocates with a roadmap and execution service for maximizing their influence with companies they care about," says Organ.

The firm is also starting to get into other forms of advocacy, such as employee, channel partner and sales-drive advocacy. This will be done in some cases through partnerships, and the firm has already integrated with companies such as DoubleDutch for mobile event automation and review sites like Salesforce.com's AppExchange, G2Crowd and TrustRadius. The firm is also considering acquisitions in order to obtain the technology it needs to expand into other areas, as it has done previously when it acquired Engagio, for advocate discovery and tracking functionality. RH

Intacct

www.intacct.com

Robert Reid

Cloud Computing

California

Yes

» At its core accounting is a simple principle. The income of a company on one side, and it's expenditure on the other. But in practice, it is much more complex, and through this complexity it is able to give companies the means to make their operations more efficient and profitable. This has led to a number of firms attempting to make accounting easier through software and tools designed to make the whole process smoother and simpler.

One company working in this arena is Intacct, a Californian bases company specializing in financial management tools offered through the cloud. "We are providing the tools to be able to help the companies that we serve understand what their overall expenses and what are their overall revenues," says Robert Reid, CEO of Intacct. "We help them automate those processes to collect that information so you don't have to have as many accountants on staff and it also gives you more integrity of information. Most importantly, what most organizations want from their finance departments, is getting insights into what's going on with the business."

These insights include finding where there are opportunities to take advantage of and where there are potential risks which need to be mitigated or eliminated.

One of the company's customers, Tandem HR, has enjoyed numerous benefits since switching to the Intacct system. "With Intacct, our finance team now has much more time to analyze data, as opposed to worrying about data entry and processing spreadsheets. We can look at trends, manage compliance and auditing, and focus on strategic changes, such as our current initiative to move to a rolling 12-month forecast," says Sam Kashy, Director of Business Development at Tandem HR. "Intacct has proven invaluable in giving us a single version of the truth, as opposed to financial data stuck in spreadsheets and different accounting software packages."

The company attempts to differentiate itself from a competitive field in multiple ways. The cloud solution gives it advantages over the legacy providers, as it delivers real time information, more insight into the business and more visibility than on-premise solutions. Mr. Reid also says the firm has an advantage over other cloud based providers as the company's offerings have "more depth of functionality in the accounting areas and financial areas." This claim has been backed up by the American Institute of Certified Public Accountants, which gave Intacct an exclusive endorsement. "The people that know the most about accounting, they are the ones that are endorsing our solution and it's really because of that depth," says Mr. Reid.

Intacct works in a crossover of two fairly technical markets – software and financial management. One challenge for the firm has been finding the right people. "We view ourselves as being a partner with our customers and we've created a customer centric organization," says Mr. Reid. "So finding people that understand accounting, that understand software and automation and also provide a great customer experience is what we need to get in regards to our employees, and that's probably the biggest challenge — finding all those elements together."

Intacct has set itself targets over the next 18 months to expand its offerings to its customers. The firm is also looking to expand its partner network by finding other best in class providers. The network is currently made up of about 120 members today in different areas such as customer relationship management, tax and professional services automation. The firm has ambitious targets and is looking to make the most out of an ever growing industry. "Financial management is the largest business applications sector and what's so cool about it is every company needs financial management," concludes Mr. Reid. RH

Invuity

www.invuity.com

Philip Sawyer

Medical Devices

California

Yes

» When surgeons operate in the dark, the right technology can light the way. Invuity's proprietary Eigr Technology provides illumination in the operating room where it is needed most.

An orthopedic surgeon and optical engineer, Kenneth Trauner and Alex Vayser, founded Invuity in 2004. Currently, the company focuses on providing surgical visualization devices for spinal, orthopedic, breast and thyroid oncological procedures.

For breast cancer patients, Invuity's tech could make all the difference. Proper in-situ lighting may spare patients an extra (and more visible) incision scar and enable surgeons to perform nipple-sparing mastectomies (breast surgeries) more effectively—with huge psychological and cosmetic benefits to the patient.

But to pick a procedure, women first have to know what their choices are. "Nipple-sparing mastectomies have become a very hot topic, in particular after the Angelina Jolie [double nipple-sparing mastectomy] announcement," says Phillip Sawyer, CEO. "Prior to that announcement 70 percent of women didn't really have a good sense of their options when they were told they had to have a mastectomy." Invuity's breast cancer surgery site launched two days later.

The company tries to make the lives of patients and surgeons easier through their technology. Sawyer knows that with small incisions come big challenges, and these problems will only grow more complicated with minimally invasive and minimal access surgeries on the rise. "We're doing more and more nipple-sparing mastectomies," says Dr. Beth DuPree, breast surgeon at Holy Redeemer Philadelphia. "You're kind of operating in a cave."

"It's very hard to see well enough to be able to do the procedure through one small incision," Sawyer says. "[Leading surgeons] ... say it can be done without our technology, but it's really difficult to do without our technology because we so brilliantly [illuminate the deep surgical cavity]."

When DuPree switched to Eigr tech, she traded a headlamp for Invuity illuminated retractors. Because they do not conduct heat and they retract tissue without harming it, the company's retractors protect skin and reduce tissue trauma, she says. In addition, a constant and reliable source of light gets patients off the table more quickly, as surgery no longer stops each time nurses had to adjust DuPree's headlamp. "My OR time got faster because when you can see, you're not stopping to reposition constantly," she says. "In today's healthcare climate, saving an hour in the operating room is a huge savings because you're not wasting the healthcare dollars by keeping the patient on the table longer."

Invuity has an ear to the ground and really listens to what surgeons need, DuPree says. Currently, the company is working on a new type of illuminated retractor she asked about. "From the very beginning, they said, 'If there's anything that we've missed in the design or anything else that you need, please tell us because our goal is to try to make your life easier,'" she says.

Invuity's tech is more effective for its latent potential. Development took several years, which Sawyer says the founders were not happy about at first, but played to their advantage. A recent deal with Novation puts Eigr Technology within the grasp of 65,000 member hospitals and affiliates.

Last March, Invuity set out to raise $10 million in fundraising and ended up with $25 million. The Series D round, led by Valence Advantage Life Sciences Fund II ("Valence Advance") joined previous investors, Kleiner Perkins Caulfield & Byers and InterWest Partners, with new funder Wexford Capital. Sawyer says Invuity has already reached a $9 million run rate and that he expects the company to grow by at least 100 percent each year.

The near future may bring new products, new specializations, and both vertical and horizontal growth for the company. Right now, Invuity sells to more than 150 hospitals, but the company sees that number growing significantly every quarter. He also anticipates digging deeper into the hospitals Invuity already serves. Sawyer puts their primary target U.S. market (spine, ortho and breast oncology) at $836 million; when Invuity breaks into other segments, that market grows to $1.7 billion. And though the company is concentrating on perfecting their model in the United States, that is just for now. "Over the next couple quarters [we're] going to be getting to more and more critical mass in our initial domestic efforts, and I think we're going to start focusing more on international [sales]," Sawyer says. "We have made some recent forays in talking with some Japanese distribution options." Going international will approximately double Invuity's market to $3.4 billion.

As for Sawyer, he is motivated by the power his company's critical technology has to facilitate minimally invasive and minimal access procedures. "It's an interesting progression, the more [people] learn about what we do, all of a sudden, excuse the pun, but a light goes off in their head," Sawyer says. "[...] [Surgical] illumination itself was not in the past seen as such a sexy area. But when you learn about what we're doing and see how sophisticated it is, and dynamic, people realize just how enabling it is." RH

Jasper Design

www.jasper-da.com

Kathryn Kranen

Software

California

Yes

» "If you were trying to test a car, you would have to think about all the different scenarios to break its functionality. That's what people do with chips," explains Kathryn Kranen, President and CEO of Jasper Design Automation, an Electronic Design Automation (EDA) company for the design and verification of electronic systems and semiconductors. Kranen has over 20 years EDA industry experience, but rather than joining the older players in the market, she chose to join Jasper, which targets specific and complex software verifications.

What is the EDA industry all about? Mathematical software verifications explore every possible corner case to see if it's possible to break a software's functionality in order to make sure that a chip or a piece of software works. When a company builds a chip, that company needs it checked for various potential bugs — which is where Jasper comes in.

Jasper is involved in three main markets, which cap at $8 billion altogether. The largest one is the $7 billion Electronic Design Automation (EDA) and intellectual property market, essential to the development of semiconductor chips and electronic systems.

Other markets include formal verification (based on mathematical algorithms) and digital functional verification, focused on the verification of expected behavior, debugging and the correction of defects.

Founded in 2003, Jasper has been profitable since mid-2010, for 12 consecutive quarters. With 35 percent compound annual growth rate (CAGR) since 2007, the company is growing about seven times faster than the EDA industry. The business model is based on subscription software, with a more than 90 percent renewal rate, according to the company. "We expand about 25 percent per year per customer because they get more products," Kranen adds.

Four rounds of funding have yielded $33 million in paid-in capital for Jasper. Its investors include Accel Partners, Cambrian Ventures, and Foundation Capital.

"I felt that Jasper had the opportunity to be the next major EDA company because the focus was verification, not physical design. Jasper was not saddled with the business model anchor that plagues several of the larger companies," says Mike Schuh, general partner at Foundation Capital, who has been working in the industry for over 40 years.

Jasper competes with three major public companies in the EDA industry: Synopsys, Cadence and Mentor. "Jasper wins because of superior technology and a winning sales process," says Schuh. All three competitors sell hundreds of products within the same domain, while some are sold to the same customers that Jasper serves. But each only produces one product that challenges Jasper's specific technology.

"We have a high-end self-service, where the customers make the methodology change, accelerating the time-to-methodology change." Kranen says. "Most companies in our industry will deliver responsive support, have a technology class or a number that you can call, but we walk in and help customize the support and training."

Jasper has direct sales in the U.S. and Europe, with a distribution network in Japan, Asia and Israel. Its clients include top consumer electronics companies and the top 10 out of 15 semiconductor companies in the U.S., Costa Rica, China, U.K., France, Germany, Canada, India, Japan, Korea and others.

Finding talent and growing fast is the biggest challenge that Jasper faces. "Since it's a very specific domain, we find the talent where it exists and we grow it there," Kranen says. The company is headquartered in California, with R&D located in Brazil, Sweden and Israel. In 2004, Jasper acquired SafeLogic, a Swedish formal verification software company, and established a team there. The company also grows its own team, marching employees through the quality assurance department. Some even move to application developing.

Bringing all of these 120 employees together isn't easy, but the company puts a lot of effort in multi-national events for them. "People need to mix in order for the diversity to be effective," says Kranen, explaining company events that bring its international employees together allow for faster response to customer needs, as answers can be found from different sources around the world. "If people weren't connected and didn't have someone's Skype address, we wouldn't be able to respond so fast," she says. RH

Jumio

www.jumio.com

Daniel Mattes

Mobile

California

Yes

» Purchasing items face to face can be as simple as swiping a credit card. Mobile shopping, in contrast, requires jumping through multiple hoops of complex card entry and password validations, which can lose many shoppers along the way. A 2013 Consumer Mobile Insights study found that nearly two-thirds of mobile shoppers abandon their purchases, about 40 percent of which dropped off due to a difficult checkout process that took too long.

Jumio can complete an online or mobile transaction in as little as five seconds. A customer presents their card and/or I.D. to the camera of their device or computer, the company then digitally scans the card or I.D., testing holograms, letter shadowing, and pixels for distortion or alteration as a means for authentication. The company can authenticate credit cards, I.D.'s, and passports from more than 60 countries, providing a secure verification process that's fast and seamless with minimal effort required by the consumer. About 7 to 10 percent of the payments that Jumio assesses are deemed fraudulent.

Embedding its technology within e-commerce websites and mobile apps, the company features two products: Netswipe, which turns a shopper's mobile device into a credit card scanner; and Netverifiy, which enables real-time I.D. scanning and verification.

Mobile payment fraud cost businesses and consumers hundreds of billions of dollars a year. "Yet it can be too easy to let the medicine kill the patient," said Marc Barach, CMO of Jumio. "A bank wouldn't ask you to walk into their branch to verify your identity when signing for an online loan, for example. You need to find ways to reduce fraud while improving the customer experience. Ours does both. We minimize fraud by bringing a fun and exciting payment method to a typically boring process."

As a result, Jumio's clients typically see a 15 to 30 percent improvement in their shopping cart drop off rates, with an average of 20 percent. Its payments and identity authentication platforms serve a variety of markets, including the financial sector, the sharing economy, retail, and the travel sector. Customers include Western Union, Fab.com, and Travelocity. The company expands monthly at double digit growth rates. "We're in the very early stages of this, and frankly the market is too, but we see this as a very broad and relatively horizontal market which touches virtually every mobile user," Mr. Barach said.

The company serves about 60 percent of its base in the U.S., and 40 percent in Europe, with plans to expand into Asia over the next year.

Jumio was founded in 2010 by Daniel Mattes, who previously set up JaJah, a VoIP service provider that was an early competitor to Skype. JaJah had been a target of cyber criminals, so Mattes developed fraud control procedures that eventually became the company's chief selling point when it was later acquired by Telefónica. The idea for credit card and I.D. verification came to Mattes after he spent five hours trying to verify his identity while buying a friend a plane ticket shortly after he had moved to a new country. With his passport beside his phone and computer, he asked himself why he couldn't just show the website his credentials just as he would at the front desk of an airline. Jumio's name is actually an acronym for Just Use My I.D. Online.

Based in Palo Alto, the company has raised $40 million from Andreessen Horowitz and Facebook investor Eduardo Saverin. Barach expects Jumio to be a multi billion dollar company in the next three to five years. It competes against IDChecker, IDology, and RSASecurID.

"Mobile commerce is on fire around the world; e-commerce growth rates in nearly all markets are between 10 to 30 percent per year," said Scott Weiss, a Partner at Andreessen Horowitz. "Jumio is well-positioned to capitalize on this growth by working with the main ecommerce providers in each market to provide them with services that reduce payment friction and fraud potential. Jumio is in the unique position to digitize and certify every credential we own." RH

Kargo

www.kargo.com

Harry Kargman

Mobile

New York

No

» A recent report on online trends showed that the mobile is one of the most underserved media in the world right now. Kleiner Perkins Caufield Byers partner Mary Meeker released her annual report in May this year and revealed that while total internet advertising spend reached $37 billion in 2012, mobile ad spend was only around $4 billion. But people spent 12% of time of their time on mobile devices, which accounted for just 3% of advertising spending. This marks a large potential profit area for any businesses working in the mobile sector.

One firm operating in this sector with considerable success is Kargo, a mobile publisher platform, headquartered in New York. For a long time the age of mobile has been approaching, but it finally appears to have arrived, and has brought with it a new set of challenges for publishers and advertisers alike. When internet advertising and publishing broke through, some major publishers reacted slowly, and were left behind as the internet revolution took place. Today, firms are scrambling to make sure the same doesn't happen to them in the mobile space. This is the problem that Kargo solves.

"We've gone into 60-65% of every major media company, and said look, this is clearly a growing opportunity, this is an area where you haven't built the resources because you haven't had time or because you wouldn't get adequate ROI on it and we think that this is an area where we can bring a lot of value in terms of driving that business," explains Harry Kargman, founder and CEO of Kargo. "We see ourselves as the single company out there that is best positioned to help these major media companies transform and adapt to this new world. And that's what we do."

Kargo was founded in 2003, but in 2008 it bought out all of its investors and has been growing organically since. The company counts ABC, CBS and Warner Brothers among its client list.

There are a number of challenges that a company can encounter when designing a mobile app or site. "One of the issues is that the market itself changes much more rapidly than any market that we've dealt with before so we see most of the mobile devices get replaced within two or three years here in the U.S.," says Ian Finley, Research VP at Gartner. "So all of the machines that you're supporting whether it's on the consumer side or the end user side, and all of the operating systems are being updated at a very fast pace. It's a very different pace to what we saw in the PC world and maybe even the web world."

"The other problem is the diversity of things you need to support. In a typical year over 200 new mobile devices will be released. And we don't have one major operating system that we have to deal with, there are at least two, and depending on how you count, two and a half or three operating systems that are very different that you have to support," he adds.

Mobile is also a lot more energy and resource dependent than other forms of media. "The biggest single problem both for advertisers and for publishers is they believe that if they invest in a app or site that they've met the requirement. And what we've realized is that the hardest part is not developing an app or site, anybody can do that. The hardest part is once you've developed it, maintaining it. That's the issue," says Mr. Kargman.

These issues can potentially play in the favor of Kargo, with companies being put off conducting their own mobile applications and campaigns, and turning to the companies with the most experience.

Despite this Mr. Kargman believes that, with his company free of major competition, the threat of companies developing mobile solutions in house is the biggest threat to the company's future success. Kargo offers a complete solution to companies, and this means there is a chance that companies could put together solutions through a combination of offerings from different companies.

But the company is in a very exciting period of growth, and Mr. Kargman now aims to grow internationally through an office in London in the next 12 months, and continue to build at home. "We've been growing 250-300% year over year, which is pretty amazing. We'd love to continue that growth. We have a number of really great media partners but we'd like to keep on growing that and double in size in terms of total number of ad impressions under management," he concludes. RH

Kony Solutions

www.kony.com

Raj Koneru

Mobile

Florida

Yes

» Founded in 2007 at the dawn of the smartphone revolution, Kony Solutions realized early on that software was only one of the challenges businesses faced in navigating the emerging landscape.

Kony has served as more than just a programming platform for its clients, and has become an ambassador to help enterprises adapt and thrive in the quickly evolving mobile world. The company provides a set of frameworks, tools, and backend services that allow an app to work across all platforms and ecosystems.

Kony ensures an app only needs to be built once and helps the vendor correctly generates native web experiences as needed. It also claims to be the only company to offer an app development platform with management and security tools as part of the package. The company provides mobile SaaS applications for enterprise processes, such as CRM, HR, and workflow. Its service level agreement mandates that its platform is updated within a fixed period of time of a new ecosystem release. When iOS 7 hit the market, for example, its customers did not need to change a thing.

This fall, the company released the Kony Experience Cloud, which it claims to be the industry's first product suite to cover app development, security and prepackaged SaaS enterprise applications under a single offering. As a result, Kony offers what its President Abhay Parasnis describes as "without a doubt the best in-class app development solution for multichannel app development, whether browser, iPhone or tablet."

"Most players force you to choose one or the other. Kony is only solution at enterprise grade maturity that truly allows customers flexibility and choice of covering whole spectrum, from native app development to HTML5 and web app development to hybrid," Mr. Parasnis said.

Kony is one of the fastest growing companies in enterprise mobility, according to revenue, with triple digit revenue growth for the last several years,. It serves some of the largest banks, hotels, and airlines in the world. Its apps are currently used by 20 million to 30 million active users. Apps based on Kony platforms log more than a billion sessions per year. Citibank, one of its largest customers, uses Kony to power its app in 38 countries. Three of the top five healthcare providers are Kony clients. Kony recently announced a partnership with Aetna to standardize all internal and customer facing apps on its platform.

Kony is the largest pure play vendor focused on delivering enterprise mobility, Mr. Parasnis said. Its market includes the shift towards multi-channel architecture, when apps are designed first for devices and sometimes only for devices, which Mr. Parasnis estimates to be in the tens of billions of dollars, if not in the hundreds. Kony aspires to be one of the top three vendors to capture a sizable portion of that market. "We are currently well positioned," Mr. Parasnis said. "There is no reason why we can't have sizable double digit share of that multi billion dollar market."

Headquartered in Orlando, Fla., Kony has raised more than $50 million from Telstra Ventures and Insight Venture Partners.

"Kony offers business and enterprise customers a library of innovative pre-built mobile applications including the Kony Platform that enables customers to write their own applications and deploy them across multiple channels simply and at low cost," said Telstra Ventures Managing Director Mark Sherman. "For Telstra, our investment is a win-win – we are investing in an innovative company and adding immediate value by being able to offer Kony's products to our business and enterprise customers."

New startups may develop similar point solutions, Mr. Parasnis admitted, and it will be Kony's challenge to stay ahead of them. "Our mission and focus is to come up with best of products and technology and actually get them deployed with biggest household names," Parasnis said. "We aren't really worried about next innovation because it's always a great thing for the market."

Kony competes against IBM and SAP. Rather than offering a shrink wrap product, IBM is more of a services company and does not offer an all in one solution comparable to Kony's, Mr. Parasnis argued. SAP, on the other hand, is more focused on applications without a strong platform DNA, he added. "Clearly, the market is large, so these companies are likely to come up with a similarly broad vision, but not a single vendor offers our expansive breadth of offerings.".

"Enterprise mobility is by far one of the most exciting markets in the enterprise landscape, right up there with big data," Mr. Parasnis said. "We serve a market well poised to explode. Kony is a company at the right time and place in this market. We are at the center of a significant disruption." RH

Labcyte

www.labcyte.com

Mark Fischer-Colbrie

Life Sciences/Biotech

California

Yes

» Drop by drop, Labcyte revolutionizes just about every area of life science research. The company uses a low level of ultrasound energy to accurately measure minute quantities of laboratory samples at an unprecedented degree of granularity. It transmits a sonar pulse through an acoustically friendly container into a layer of liquid, causing a specified amount to release onto an inverted plate. Controlled strictly by sound waves, every droplet released is the same as the last for an unparalleled accuracy that completely revolutionizes the degree to which laboratory samples can be studied. The technology is capable of delivering a sample down to the billionth fraction.

"No matter what area of life sciences you look at, whether drug discovery or diagnostics, where there is any kind of liquid transfer, our systems prove beneficial in ways that are pretty staggering," said Mark Fischer-Colbrie, CEO of Labcyte. "You get incredibly better data results while reducing costs and increasing reliability and throughput. The benefits are amazing for all areas of life science research."

A Bristol-Myers Squib analysis of 1,000 compounds using Labcyte's approach led to a 46 percent increase in active drug candidates, identifying a range of therapies that would otherwise have been missed. AstraZeneca used the technology to discover a new class of cancer therapeutics, thanks to an accuracy that was up to 300x greater than serial dilution and traditional liquid handling would have allowed. The Institute of Molecular Medicine Finland (FIMM) used the approach on testing individual patient cells to determine alternative treatments for leukemia where the initial chemotherapy failed.

Its unprecedented accuracy led Labcyte to be used by the top 20 pharmaceutical firms and is now in use for molecular diagnostics and all areas of genomics and proteomics. The company's technology is used by hundreds of research companies, including the top five CROs of China. Customers include Lilly, Southern Research, and Pfizer. About 50 percent of its sales are international. The company has direct sales offices in North America, Europe and Japan. It has had a compound growth rate of 20 to 30 percent.

The company has come a long way since Richard Ellson and others started it in a garage in Cupertino, Calif. in 2000. He figured out how to focus the sound on a consistent basis for universal measurements, enabling the automatic transfer of cells, blood, serum, DNA and compounds. Over the years, he has developed the process through 62 patents.

Labcyte has raised $53 million, a relative small sum considering the extent of its portfolio. Its investors include GE Ventures, Abingworth, Alloy Ventures, Cross Atlantic Partners, Delphi Ventures, H&Q Healthcare Investors (HQH) and H&Q Life Sciences Investors (HQL).

Bolstered by technological advances, the push for greater accuracy in biological fluid samples has led Alloy Ventures to invest in a number of companies promising greater precision in biological research, including Applied Biosystems, Fluidigm and RainDance.

"Labcyte fits right in with the trends towards smaller sample size, less reagent use, and most importantly better results due to the precision of the dispensing and the lack of modification to the sample contents due to surface binding on dispensing tips or channels," explained Craig Taylor, General Partner at Alloy Ventures. "It is clearly being recognized by Pharma that better data earlier in the discovery process is critical and being off by a few degrees at the beginning of a launch is going to cause wide variations later in the development."

Because its technology can be applied to so many areas, Labcyte faces an astounding variety of markets, including genomics ($225 million), proteomics ($180 million), cell assays ($210 million), and drug discovery ($225 million."

Fischer-Colbrie expects Labcyte to be generating revenue north of $100 million in the next three to five years.

"This is a massively game changing technology," Fischer-Colbrie said. "The ramifications for medical discovery are huge. People have used this technology to discover drugs they did not know existed. This technology cannot be replaced and provides foundational benefits to a wide range of customers." RH

LeadBolt

www.leadbolt.com

Dale Carr

Mobile

California

No

» With over 1.7 million apps scattered across the iTunes and Android markets, "the chances of your app actually being discovered is practically its own lottery ticket," LeadBolt's CEO Dale Carr asserts.

Pronounced like the verb lead, LeadBolt provides a mobile and web advertising network for app discovery. It goes beyond traditional banner ads to offer ample flexibility in advertising for every phase of an app's activity. Featuring a total of 10 different ad units, LeadBolt's platform includes audio ads, in-app alerts, videos, app walls, and banners.

"As a user plays a game or interacts with application, they are receptive to different advertising messages, in different formats at different times," Carr explained. "We give the developer the opportunity to implement different formats at specific points in the app lifecycle. We are disrupting the mobile advertising space by providing real opportunity for greater discovery. We deliver quality users who will truly engage with an application."

Proof of its approach is in its exceptionally high click through rates of 8 to 9 percent, and conversion rates of 5 to 6 percent. Comparatively, typical CTP's in the industry are less than .5 percent, Carr said.

In addition to app discovery, LeadBolt also provides apps with a valuable means of monetization through the advertising of other apps.

Serving the mobile ecosystem estimated by Gartner to be $25 billion in 2013, LeadBolt has over 15,000 applications on its platform, with a growth rate in the triple digits. Recently surpassing Millennial Media in terms of integrations, the company is one of the top three most integrated Android ad networks, just behind Google. "Our challenge is to make our name synonymous with becoming the solution of choice, and the way we do this is to continue to innovate," Carr said. "Google is really good at what they do, but their focus is on Google banners. They don't have the depth or service innovations we have. For us, customer service is key."

LeadBolt serves a global distribution of customers, particularly in the US, Africa, China, Korea and Japan.

Carr co-founded LeadBolt alongside his brother Marc Carr after his own experiences in the mobile ad industry. "Looking at the pain points of application developers, we recognized early on that most in this space simply took what they saw on the web, put it on a mobile device and called it online advertising," Carr remembered. "We saw inherent problems with banner blindness and dismal click-through-rates, so we designed a mobile platform uniquely tailored to the mobile space to disrupt the industry."

The brothers spent about 12 months designing the platform in a garage. Once it launched to market, however, the company attracted 10s of thousands of applications in its first several months simply through word of mouth. "It grew beyond our expectations, mostly through organic means," Carr said. "We hardly spent a dime on marketing."

Bootstrapped, the company is based in Los Angeles. Carr looks towards LeadBolt as a multi billion dollar opportunity.

"When you look at the success mobile has had, the revenues on the mobile side could easily be hundreds of millions of dollars," Carr said. "Without any advertising whatsoever, we've gotten our name out there. The challenge will be evolving into a sizable company that can still offer that one-on-one service." RH

Linkable Networks

www.linkablenetworks.com

Tom Burgess

Marketing/Advertising/SEO

Massachusetts

Yes

» Linkable Networks makes clipping coupons passé with its card-linked offers. The service keeps deals latent on your card until redeemed via debit, credit and PayPal transactions. Co-founder and CEO Tom Burgess is taking couponing paperless, and disrupting established industries at the same time.

"It's not another mousetrap. This is something brand new," he says. "And it is going to have a multi-billion dollar impact on marketing and advertising."

Burgess is used to shaking up the status quo. Before the company's founding, Burgess saw two factors guiding the trajectory of the coupon industry, and hurried to capitalize on their convergence. "We try to be skating all the time to where the puck's going to be as opposed to solving today's problem," Burgess says. "With Linkable ... part of it was due to the fact that there's a new banking regulation termed the Durbin Amendment ... the other was that in the couponing and promotional space of retail, it is all heading digital."

The 2011 Durbin Amendment limits interchange fees (i.e. transactional costs) to consumers using debit and credit cards. Burgess knew this new regulation would cut down bank revenues from these fees, and that banks would need fresh ways to make up the difference. "The consumer using their cards to spend, the need for the banks to drive us to spend, the interest in the retailers wanting us as consumers to spend; all those things are connected," Burgess says. Now, Linkable Networks serves as the tie that binds them together.

Pre-Durbin, credit card companies used bank-funded loyalty programs to convince customers to use their card over their competitor's card or cash. But Linkable Networks does that job for companies, persuading consumers to swipe cards that offer deals. So now, instead of bankrolling cash-back programs, financial institutions connect with product marketing departments who pay for ways to get digital coupons to consumers—and card companies get a place of honor in customer wallets.

To couch deals in transactions, Linkable started with major payment companies. Currently paired with industry giants like MasterCard, Visa, PayPal and American Express, the company has leveraged its partnerships into massive market reach. "Today we serve every cardholder and Paypal account holder in the U.S. market," Burgess says — i.e., the 180 million people, give or take, that use payment cards in one form or another.

Linkable's patented capabilities set it apart from competition. The service offers promotions at the SKU (stock-keeping unit) level, while others do not. Promotions at the SKU level mean customers get deals on individual products instead of entire baskets. So instead of $10 off your purchase, milk rings up $1 less, without a word to the cashier.

Though the gamble to focus on SKU paid off for Linkable, Burgess calls his decision to sell specific deals a nailbiter. "In this card-linked offer space, we're the only company that built, from the very beginning, that ability to provide a promotion on a specific item," he says. "We made that decision when the rest of the marketing world was going after local." LivingSocial and Groupon glittered as the newest and shiniest things in the digital coupon space; but Burgess stuck to the potential of SKU, selling investors on his idea.

"We sat down as a team and said, 'We're not gonna do that, we're gonna go after this item level, this SKU capability," he says. "Now picture sitting in a boardroom with all your investors sitting around you, all watching the entire market exploding."

Specializing in SKU put the company on a path less traveled. Luckily, it led to success.

"Everybody in the room looks at the team and is like, 'Okay, if you guys really think that's a good idea,'" he continues. "Fortunately for us, a complete risk has turned out to be easily the best value profit and biggest differentiator that we have now in the market."

Though Burgess is not new to the funding game, he still finds it difficult. "At Linkable, we've gone through the first stage of a funding effort where you're selling a dream and a promise," he says. But that promise has yielded results. This year, Linkable increased customer basket size by 50 percent for Minnesota grocery Lunds & Byerly's. And the company has raised nearly $20 million to date through venture capital investment.

"What's really exciting now is they actually have product, they have the service live in the market today," says Eric Hjerpe of Kepha Venture Partners. "As Tom said, [before] it was a PowerPoint presentation. And now they've proven that they can actually link the banks, the credit card holders, the card networks—the Visas and MasterCards, and the advertisers."

As for the future, Burgess says it is too early to think of an exit, but Linkable is happy to have nabbed the worm larger companies are now checking the ground for. "It's likely we will see overtures from potential acquirers ... after we reach that metric of showing our success," he says. "It's gonna be an interesting 2014 for us because the big companies are starting to sniff around and we're meeting with them already." RH

Manta

www.manta.com

Steve Jaffee

Social Media

Ohio

Yes

» Small businesses often share the same problems. Although different industries offer a wide variety of challenges, many have found collaboration can help achieve better results. Manta, an Ohio based company,offers a network dedicated to small businesses to help them grow, find new partners and ultimately generate more profit.

"Manta is in a very unique position as the online hub for small businesses to engage with their entire network and ultimately sell more," said Pamela Springer, CEO of Manta, last year. "Small businesses are a critical ingredient for the nation's overall economic success, which is why we're committed to continuing to evolve our platform to deliver innovative and easy-to-use tools to help SMBs grow efficiently."

The company's services have gone down well with users. "Having my business on Manta gives me the peace of mind to know that my customers and partners can find me online and on the go — and that I can find them," said Timothy Schar, CEO of K-9 Patrol LLC. "I'm making better connections and I'm getting advice from experts, it's helped me grow my business exponentially."

In April 2012 Manta secured $44 million equity investment from Norwest Venture Partners. "Manta is the de facto platform for small businesses to connect with customers and each other, as evidenced by the company's more than 25 million unique monthly visitors and over 3,000 business owners joining the community daily," said Jon Kossow, general partner, NVP back when the investment was announced. The website has more than 11 million registered users and 87 million company profiles. RH

mBlox

www.mblox.com

Tom Cotney

Mobile

California

Yes

» "Our market is comprised of brands that believe that mobility is a useful way to talk to their customers, and that they can do business via the phone," says Tom Courtney, mBlox's CEO, who believes that a mobile relationship with customers, via apps and text messages, provides a more effective way to connect than most methods used today.

mBlox provides a mobile engagement platform that enables companies to reach mobile device users worldwide with SMS, push and rich push messaging, according to a customer's location and activity. The company has reached more than 800 operators in more than 180 countries so far, which adds up to 6 billion mobile devices worldwide. Customers include financial institutions, retailers, transportation firms, entertainment and media companies, and consumer brands.

Many of the company's customers are banks, which use text messages for a variety of services, including fraud alerts. "If you have a debit card that's been used in a city that you don't usually visit, you might receive a text saying 'are you in Indiana today?'" Courtney says. Retailers, on the other hand, can use text messaging for their rewards programs. "A mobile reward service can ask you to text JOIN to a specific number to join the rewards program, instead of holding the line at the [register] while signing up," Courtney explains.

Analytical tools measure real-time campaign performance and allow business owners to change them accordingly, while a map shows where they perform best. Messages can be created according to past or present behavior, location, or user-defined events. "If you are doing business in the U.K., France and Australia and you have a loyalty app, but you want to target a specific geography, we can draw a radius around your store and send messages within that radius," Courtney says. In addition, in-app rich messages can deliver text, pictures, HTML, audio, video, YouTube videos and Twitter feeds.

While emails have been used for consumer relations for years, text messages may be more effective. According to research conducted by mBlox, text messages are opened 95 percent of the time, within 14 minutes of being delivered — unlike emails that are read within 6 hours once they're received, with an opening rate of 11 percent. "In the early days, the email was abused by all kinds of advertisement, and now you can see how [much] less effective it is," says Courtney, explaining that the amount of spam and advertising via email caused users to immediately delete emails. But text messages get read. "We are used to getting emails from sources that we didn't approve, while SMS are more personal," he says.

mBlox focuses on improving relationships with existing customers. They stand in contrast to businesses that charge users for text messages sent to them, unasked for. Regulation on text messages also helps to preserve the value of this medium. Many countries have very specific restrictions on text messages. The U.S. and the U.K. have aggressive privacy policies, while developing countries have adopted similar rules especially in the past two to three years.

"If you spent 30 years building your brand you would want me to use the science about consumer's behavior without alienating your client," Courtney adds.

Investors in mBlox include Norwest Venture Partners, Scale Venture Partners, Novus Ventures, Trident Capital, Avanti Capital and EDB Investments, all of which have invested in a few rounds through 2010. NXT Capital, an independent commercial finance company based in Chicago, invested $14.5 million more in mBlox recently.

The company made about $141 millions in revenue for 2012, according to Courtney.

"Our challenge is to make it easier to do business with us," Courtney says. Merging an in-app capability with many telephone companies' infrastructure and making it seamless for the end-user can be very difficult. "It shouldn't take a long time to execute a marketing strategy, and people in the marketing business sometimes need to react to competitors immediately, so we'll have to speed up that process," he says.

However, the company is committed to reach every country, even if it means negotiating with their competitors for mobile routes, while their direct connection with telecommunication companies gives them much lower costs.

mBlox is the FIS enterprise platform for SMS messaging to millions of end customers through FIS's client relationships with financial institutions across the globe. "This keeps FIS clients directly connected to their end customers and keeps mobile customers directly connected to their banks," says Doug Brown, SVP & GM of

FIS Mobile, adding that mBlox reaches across carriers and demonstrates a greater commitment to partnership than other providers.

Italy's CLX Europe (which provides media solutions) provides an example of an mBlox competitor in the messaging space. Companies like Xtify and Urban Airship that offer in-app messaging are becoming strong competitors as well. "They try to help a developer build an app, while we focus on brands that already have an app," Courtney explains the difference.

"We are on a rate of two markets per year," Courtney says. The company will operate in South Africa and Brazil by the end of 2013, while direct connectivity in Japan and south east Asia is coming up in 2014. Even though the competition will evolve as well, the company already has its foot in the door, or even both of its feet — a good head start in a promising market. RH

Medsphere Systems

www.medsphere.com

Irv Lichtenwald

Software

California

Yes

» Electronic health records are increasingly being used in health providers across the U.S. and the world. The benefits are clear — easier access, better efficiency and the potential to save patients' lives.

Unlike traditional industry approaches that design record keeping systems from scratch, Medsphere Systems, a San Francisco-based EHR provider starts with the VistA EHR, an open source system funded by over $8 billion in taxpayer money, which is used by the U.S. Department of Veterans Affairs and more doctors than any other EHR.

Medsphere's offering is OpenVista, also open source and based on VistA. The company continually adapts it to meet the needs of the commercial market. Medsphere has invested millions of dollars in added functionality to create an affordable EHR that can be implemented in as little as six to nine months at a fraction of the cost of industry competitors.

"Our whole philosophy is to take the best practices of our clients and add them to the pot so that everyone can share in a more cohesive platform," said Irv Lichtenwald, CEO of Medsphere. "By sharing, cooperating, and collaborating, we keep costs down for everybody. Taxpayers have already spent billions developing a system, so why not make it accessible and affordable to everybody?"

Medsphere has never had a client pay more than $3.5 million over a five year contract. Proprietary systems can cost four to 10 times as much.

The benefits enjoyed by the health care providers which use these systems have been passed on to the patients. "Medical records have been proven to save lives," Mr. Lichtenwald said. One Medsphere client saw an 88 percent reduction in Central Line Associated Primary Bloodstream Infection rates and had an average of two fewer deaths per month.

Within two weeks of implementing the system, New York City's Lutheran Medical Center had its physicians ordering 98 percent of their medications electronically. It saw such a significant reduction in the number of lab tests being ordered that employees first assumed there had been some mistake. Instead of a complicated prescription ordering system involving multiple paper faxes and reentries, orders were instead signed by doctors directly into the system, removing all potential transcription errors.

"Not only was Medsphere an order of magnitude less expensive than other solutions, but having the source code gave us the ability to affect change without the need to wait for a vendor to do the programming," said Steve Art, Senior Vice President and CIO of Lutheran Medical Center. "With this system, my customers see I.T. as being more responsive."

Medsphere's biggest client is the federal government, through which it indirectly serves 371 ambulatory clinics in the Indian Health Service. In addition to a number of state agencies, the company also serves about 25 commercial hospitals and health services with a range of 100 to 500 beds. The profitable company maintains growth rates close to 40 percent.

Medsphere's current base is primarily made up of hospitals that rely heavily on Medicaid recipients. Yet Mr. Lichtenwald envisions eventual wider spread adoption by the medical community over time. While the company is so far focused solely in the US, Mr. Lichtenwald has had conversations with a number of partners and governments to expand internationally.

Medsphere, which competes against Cerner, Epic, and NextGen, was founded in 2002, by doctors who had encountered the VistA veterans system during their coursework as medical students. They obtained the source code for the system under the Freedom of Information Act and developed their commercial solution. Medsphere's first few years proved to be what Mr. Lichtenwald terms as "the drama years," ending with the founders leaving the company.

Though Medsphere has raised a total of $53 million in investment, it has received only about $13 million since relaunching itself in 2006. Investors include Azure Capital Partners, Epic Ventures, Thomas Weisel Venture Partners, and Western Technology Investment. RH

Metamarkets

www.metamarkets.com

Michael Driscoll

Software

California

Yes

» As marketing moves from the pages of newspapers to the digital world, data can be easily aggregated and marketing managers can track their audience's reaction to different campaigns. Every second, the RTB (Real-Time Bidding) advertising industry produces millions of data events. Now, the problem is how can you take all of this data and generate an easy-to-understand conclusion? And how can you get that bottom line as fast as possible, when the market changes every half an hour?

Metamarkets provides a real-time analytics service for digital advertisers that provides information to the marketing world. The company leverages a SaaS platform which offers rapid deployment and ongoing management of campaigns, including web, video, and mobile displays of data.

"The CMO may have more budget than the CIO with all of content being online and users that need more personalized and mobile information platforms," says Michael Driscoll, CEO & founder of Metamarkets.

The company was essentially the product of a marriage between two worlds, digital media and big data technology. Driscoll is a serial entrepreneur who has built data platforms for enterprises in media and life sciences. "When I came across the data of the digital media it was like a kid in a candy store," he says. Driscoll joined forces with Dr. Deborah Rieman, a legendary industry executive and chair of Metamarkets. She has worked in the computer software, networking, and communications industries for over 30 years. "Meeting Mike and seeing what Metamarkets could do, I realized that this was transformative and this is going to be a gigantic trend in the few years," Rieman says.

The initial idea was to develop data assets, but soon the founders understood that they needed to do more — like offer visualizations of the information, making it easy to digest.

"The sources of data have been growing dramatically, as well as more highly scaled computation that are applied to aspects of life that have not been applied before. Computers are talking to computers to generate the data, but humans are out of the loop, and that's the missing piece," Rieman says, noting that this is part of what Metamarkets' product aims to solve.

An advertiser who is trying to sell a product in any in any digital form can see right away how many people clicked on the ad and bought the product, or how many of them played an online game associated with it. The information is also segmented by age groups, geographic regions, etc. "We don't just display the metrics, but we allow the users to interact with the data, as opposed to just asking questions," Rieman adds.

"Metamarkets provides us with a near-real time visualization of how our digital advertising business is performing, impression by impression, across all our audience segments. What's selling, what's not, and where the opportunity lies. They bring highly actionable insight that's accessible by everyone in the team — not just the data analysts," says Jon Slade, commercial director of digital advertising at the Financial Times. He adds that the decision to choose Metamarkets was driven by the need to build a custom tool.

"130 billion micro transactions happen on the web daily, and Metamarkets works with 10-20 percent of that flow," Driscoll adds. Out of 42 exchanges that exist in the market, the company works with large exchanges like the Financial Times and MoPub Marketplace, the world's largest RTB exchange for mobile apps.

The company is still in venture-backed, high-growth mode, and thus not profitable yet. The biggest investor in Metamarkets is Khosla Ventures (founded by the Indian-American businessman and venture capitalist, Vinod Khosla) which invested $15 million in Metamarkets. "Khosla's style is not to go for a small win, he has a long-time vision for the company, so I expect that we'll be growing the business with venture backing," Driscoll adds. Additional investment of $8 million came from AOL Ventures, IA Ventures and True Ventures.

"We yet have not seen many competitors doing exactly what we do," Driscoll says. However, many of Metamarkets' customers have already built a similar platform themselves, so Metamarkets has to compete with them. Domo, a new SaaS company launched by Omniture co-founder and CEO, Josh James, is one of Metamarkets' competitors today, located in Salt Lake City. "We are on the center of the ecosystem when others are on the edges," Driscoll explains, saying that while Domo is building a dashboard for CMOs, Metamarkets is focused on the exchanges themselves.

Tableau Public, a free software that creates interactive data visualizations for the web, is another competitor, but doesn't focus on marketing as much as Metamarkets. Moreover, both Salesforce and Adobe are also building technology for advertising.

Technology, speed and scale remain key to Metamarkets' success, as they provide customers infographics with real-time data in a fast-moving marketing world. "A lot of technologies are built for a world that moves in minutes, hours and days, but we build for milo-seconds," he says, "For a long time people worked with data have [used] spreadsheets, but we've built a visual interface for working with data, changing the way people deal with it."

The current goal of the company is to stabilize itself among its current customers, becoming the main tool that they use in order to look at their data.

Metamarkets has a loft-like office space in the heart of San Francisco, made with bricks and beams of red wood, covered with the team's favorite charts and visualizations. These charts are "mathematical looking pieces of art," Driscoll says. The artistic side of data visualization is important to users trying to make sense of huge chunks of information. And if you can hang it on a wall, you may like seeing it on your smartphone's screen. RH

Mu Sigma

www.mu-sigma.com

Dhiraj Rajaram

Other

Illinois

Yes

» The digital revolution brought with it a vast increase in the amount of data being created every day across many sectors. For many industries this data provided a rewarding challenge, if companies could collect, manage and analyze it correctly, they could develop business insights beyond anything seen before.

For companies such as Mu Sigma, this provided an opportunity. The company was founded in 2004 by Dhiraj C Rajaram. In 2008 the company raised $30 million in institutional investment from FTV Ventures, now called FTV Capital. In April 2011 it raised $25 million from Sequoia Capital and later that year raised another $108 million in another investment round. The company, headquartered in Chicago, Illinois, received another $45 million in February 2013 from MasterCard.

"The data analytics market is rapidly growing as customers seek real time insight allowing them to better connect with their consumers through highly relevant products, offers and services," Gary Kearns, Executive Vice President, Information Services for MasterCard Advisors said at the time of the investment. "We went through an extensive process to choose the right partner and Mu Sigma's innovation labs and capabilities make them stand out as best-in-class in this field. By combining MasterCard Advisors' purchase behavior insights with Mu Sigma's expertise we will be able to drive faster innovations in data analytics solutions and deliver them on a broader scale, globally."

It's clear the company has attracted a lot of investment, and is now looking to expand quickly in the U.S. The company recently announced it was opening a new Analytics Center in Austin, Texas that will employ 300 full time decision scientists plus support staff.

"Our client base is growing swiftly all over the world, and having a large analytics center in the U.S. will help us better serve clients who need rapid turnaround on their analytics projects," said Mr. Rajaram, founder and CEO of Mu Sigma. "With decision scientists in both Austin and Bangalore, we'll essentially have 24-hour coverage for clients."

"We believe that low-cost experimentation is going to be key to any organization's success with analytics, and our new Austin facility provides an environment that fosters this culture," Mr. Rajaram added.

The company's big data analytics services are offered over a range of verticals, including technology, healthcare, pharmaceuticals and banking. Mu Sigma is growing at a rapid rate, and is hoping to declare itself the undisputed king of big data analytics in the future. RH

MuleSoft

www.mulesoft.com

Greg Schott

Cloud Computing

California

Yes

» This is the dawning of the age of APIs, where developers have one main problem: too many endpoints. With so much data in the ether and growing use of mobile and cloud technology, it's difficult connecting dots and directing information along digital routes. MuleSoft "provides a packaged integration experience for enterprises in need of a comprehensive and simple solution to connect the explosion of endpoints," according to the company.

Currently, the company reports MuleSoft's products reach 3,200 companies in production, and 35 percent of the Global 500. More than 150,000 developers use their systems rather than custom code––or, put another way, developers use MuleSoft to skip out on digital drudge work. In 2003, Ross Mason created the "Mule project," named for the so-called "donkey work" put into API integration. Now, the company, headed by CEO Greg Schott, links SaaS and enterprise apps for a long list of big-name clients. Used in production, processing transactions, and elsewhere, MuleSoft partners with massive vendors and service providers like MasterCard.

First VC funding came in 2006. Today, their list of backers includes NEA, Salesforce.com, Hummer Winblad Venture Partners, Lightspeed Venture Parnters, SAP Ventures and Bay Partners. Their most recent round led by NEA this past April brought the company a windfall of $37 million; to date, MuleSoft has raised $81 million in all.

Word on the web post-financing had news sources speculating an IPO would soon follow funding.

On the same day the company announced its financing, they also debuted news of their trademark tech, the Anypoint Platform. MuleSoft claims it's "the first and only complete integration platform to enable connectivity to any application, data service or API, across the entire cloud and on-premise continuum."

MuleSoft's Anypoint Platform puts SaaS, mobile and on-premise systems under one jurisdiction so that companies can link fragmented or separate systems. Connectivity is crucial in an age of New Enterprise, the company said in its release; and a hyper-connected world needs a simple yet efficient way to ensure data gets delivered and applications perform perfectly across the infrastructure.

According to the MuleSoft, the past year's seen tremendous growth in market penetration and revenue. From April 2012 to 2013, bookings ramped up 171 percent year-over-year; and in August, they reported a 116 percent year-to-date increase in license revenues. Also in 2013, MuleSoft acquired ProgrammableWeb, the online hub for API developers.

"MuleSoft and ProgrammableWeb share a common belief in the web as a platform," says ProgrammableWeb CEO Adam DuVander in an April blog post on the partnership deal. "The world is more connected and APIs are the conduit through which information flows between websites and to an expanding array of devices. MuleSoft helps organizations make these connections that power their own apps, or those of their partners and developers."

Accolades earned by the company include AlwaysOn Global 250 Awards, STEVIES and CODiE recognition as winners and finalists. However, the company's dedication to creating a happy work environment for employees impresses as much as its formidable financial success. In 2013, MuleSoft was named a top workplace in the Bay Area by the Bay Area News Group for the second year running. And on its leadership page, the company states a mission less to do with profit-making and more to do with providing value to customers: "Our goal is for our colleagues to say that at some point in the future, 'I'd work with that team again in a second.' By meeting that goal, our customer and company success will continue to follow."

Their philosophy turned execution strategy seems to be working just fine. Recent numbers put 10,400 integration apps on the company's CloudHub iPAAS (integration Platform as a service). And as for market potential, they've got the whole world and its various APIs at its fingertips. In June, MuleSoft announced CloudHub would be available internationally. "Integration apps on CloudHub can now be deployed with one click to any CloudHub region in Europe, Asia Pacific and the Americas with data centers distributed across the world," the release says.

MuleSoft HQ is in San Franscisco. This past April brought regional headquarters to Buenos Aires and Sydney. "In addition to the strategic expansion in these areas, the company...continues to see significant sales growth and continued momentum in emerging market territories, including Africa and the Middle East," the release states. "MuleSoft's expanded presence across these geographies is the first of the many new regional operations planned that will include sales, pre-sales, consulting services and technical support, to cultivate rapid acquisition of customers and international expansion of MuleSoft's ecosystem of system integrators and partners."

APIs allow content to flow freely across platforms, and in an increasingly digital, cloud-based ecosystem, that's imperative. And with so many clients already in their portfolio and reports of an IPO ahead, MuleSoft seems to have assumed the mantle of market leader well. RH

Myriant

www.myriant.com

Stephen Gatto

Life Sciences/Biotech

Massachusetts

Yes

» Plastics have traditionally been produced from oil. But using a process remarkably similar to brewing beer, Massachusetts-based Myriant produces the same chemical intermediates from sugar derived from plants, at a price that would still be competitive if oil cost only $45 a barrel.

"We hope that 100 years from now, our children will look back and wonder why we ever produced plastics from petroleum in the first place," said Susan Hager, Senior Vice President, Corporate Communications and Government Affairs at Myriant. "It doesn't make any sense when the chemicals to make plastic can readily be made from renewable plant matter in a way that is ecological and sustainable."

Myriant uses a fermentation process that mixes sugar and anaerobic bacteria with sequestered carbon from the atmosphere to produce chemical intermediates that can be used in a wide range of consumer and industrial products. "We've optimized a metabolic pathway in a naturally occurring anaerobic bacteria to produce more of one chemical and less of another," Ms. Hager said. "We are creating tremendous environmental benefits while producing a clean chemical."

Myriant serves the bio-succinic acid chemical market worth about $7.5 billion globally. It is also in pilot stage development to produce bio-acrylic acid, a super absorbent polymer used in paper towels, tissues, as well as every baby diaper and feminine hygiene product in a market estimated at $22 billion.

Myriant currently is in start-up operations at its flagship bio-succinic acid refinery in Lake Providence, Louisiana that will produce 30 million pounds of product every year. It is in preliminary engineering stages for another U.S., with construction expected to be completed by the end of 2015. Through partners, the company also produces bio-succinic acid at small plant in Germany that manufactures about 3 million pounds per year, and is in the process of forming a joint venture for the commercialization of the technology in South East Asia.

Myriant was formed from the research of Lonnie Ingram, a distinguished professor at the University of Florida who developed a process to produce ethanol from renewable cellulosic waste materials. He teamed up with serial entrepreneur Stephen Gatto. After first concentrating on fuel production, the two pivoted to a biological process to produce chemicals , launching Myriant in 2008. Myriant competes against Reverdia, a company that produces similar chemicals using yeast that also has a chemical refinery and is making and shipping product. Other companies like BioAmber and Succinity use similar processes. Yet Myriant is the only company that sequesters carbon, resulting in a substantially lower carbon footprint. "There is room in these markets for competition, and it only helps to further validate what we are doing," Ms. Hager said.

Myriant has raised approximately $130 million from the PTT Chemical Group. "The involvement in the succinic acid plant in Louisiana … is the strategic entry point that will not only accelerate the commercialization of bio-based products but also strengthen our competitive advantage in bio-based technology," said Veerasak Kositpaisal, Chief Executive Officer of PTT Chemical, in a statement.

The company estimates it could release 700 million pounds of product on the market in the next 10 years.

"It is a perfect storm of factors that are driving the market opportunity," Ms. Hager said. "This can be a fairly lucrative and profitable business, especially if oil prices continue to rise." RH

Narrative Science

www.narrativescience.com

Stuart Frankel

Software

Illinois

Yes

» Spreadsheets are tomorrow's punch card system, on the brink of extinction like the 8-track and pager, asserts Narrative Science's Chief Technology Officer Kris Hammond. "We will be amused and amazed that we ever interacted with a machine that way," he said.

Narrative Science creates stories from structured data, written by computerized algorithms in a matter of seconds. Its machines write prose "essentially indistinguishable from what's being written by human beings," Mr. Hammond said. "We've never had anybody read it and say this was written by a machine."

The core DNA of the company relies on a cohesive partnership between engineers and editorial staff. Programmers designed the core platform in consultation with content architects from a journalism background with a rich understanding of communication and language manipulation.

The company's technology resulted from a collaboration with Northwestern's Medill School of Journalism. A professor of computer science, Mr. Hammond led a lab at Northwestern University that partnered programmers with journalism students. They designed a content aggregation system based on data analytics over a 10 week period, and were so excited by what they leveraged that they expanded the scope of the project, launching Narrative Science in 2010.

Though Narrative Science began first serving news outlets (it writes all of Forbes earnings previews and other financial reports), the real meat of its business is financial reporting, client communications, internal sales reviews, and pretty much any instance when an understandable story needs to be told quickly and succinctly from raw data. One partner, Game Changer, produces a scoring app that writes little league softball feats with all the punch of a sports journalist, based on referee data and the bleacher Tweets of parents.

Narrative Science's programming language is easily applied to financial research reports. One agency client held over 35,000 global equities and wrote comprehensive reports based on its data on an on-demand basis, which took an analyst an average week to write. Narrative Science can produce a similar narrative in about two seconds, enabling that client to offer the service on a subscription basis to every client, with minimal expense.

"Narrative Science's artificial intelligence platform analyzes data and communicates this information in a way that is easy to read and understand," said Steve Bowsher, Managing Partner at IQT. "We believe these advanced analytic capabilities can be of great value to our customers in the Intelligence Community."

The company serves about 45 clients, mostly in the U.S. with a few in the U.K. It is focusing first on the U.S. market due to the acceleration of its growth. "We think the global market is a distraction at this point," Mr. Hammond said.

Narrative Science has yet to face head to head competition, Mr. Hammond said. Several other players are doing comparative work, but tend to have a vertical focus. Automated Insights takes a similar approach, but focuses on sports publishing. The French company EasyOp also works similarly, but through straight software installation with tools that are somewhat less flexible, Mr. Hammond said. The company's technology is well protected with several patents granted and a number pending. "We are unquestionably the leader in terms of platform," Mr. Hammond said. "It would be shocking if somebody would be able to catch up to us today."

And its technology is still in the early phases. Its content may sound human, but is still years away from winning awards. Yet Mr. Hammond was asked by the New York Times if a computer could win the Pulitzer Prize in 20 years. He actually gives it only five, and claims that it will be Narrative Science that pulls it off.

Headquartered in Chicago with offices in New York City, Narrative Science has raised venture funding, including an undisclosed amount from In-Q-Tel, the venture firm that invests on behalf of the CIA.

"Narrative Science is going to be the way through which the machine explains itself to us, and it definitely has a lot of explaining to do," Mr. Hammond concluded. RH

Neuronetics

www.neurostar.com

Bruce Shook

Medical Devices

Pennsylvania

Yes

» "I can't believe that I sit in a chair, my head gets tapped, and I want to live again," says Martha Rhodes, one of the first patients to be treated with Neuronetics' technology. "This treatment is very quite, but its very real." After years of taking medication that didn't help her depression and caused harmful side effects, she started TMS (Transcranial Magnetic Stimulation) treatment in May 2012.

Neuronetics is a medical device company developing non-systemic and non-invasive therapies for psychiatric and neurological disorders, using MRI-strength magnetic field pulses. "Many obstacles come up when developing a new kind of therapy," says Bruce J. Shook, President and CEO of Neuronetics. Convincing both investors and regulatory authorities of the tech's power, then a new audience of patients to use it, remains a difficult task. Plus, training psychiatrists to use the new machine adds another expense.

NeuroStar TMS Therapy, a non-invasive depression treatment, was cleared by the FDA in 2008, for use on patients that who have not benefited from taking antidepressants.

A recent survey estimated that 16.2 percent of the US population — more than 30 million people — suffer from major depression in their lifetime. Many patients with major depression find antidepressants unhelpful, while more than half of patients on antidepressant drug therapy report side effects such as sexual dysfunction, weight gain, sleep disorders, etc. Thus, there is a large need for a different solution.

Rhodes' treatment took six weeks. TMS Therapy is available by prescription only and is delivered under the supervision of a psychiatrist, while patients are awake. "It feels like a 'nuggi', but it's a very specific intense tapping", she describes, "I was so hypersensitive at that time that even a foot rub would have bothered me, but within a week I got adjusted to it," Rhodes says.

Magnetic field pulses are generated and aimed at the left prefrontal cortex, an area of the brain that has been demonstrated to function abnormally in patients with depression. These magnetic fields are the same type and strength as those used in magnetic resonance imaging (MRI) machines. Once inside the brain, the magnetic field pulses activate an electrical current causing the neurons to become active and the release of neurotransmitters.

Neuronetics makes profit from selling the TMS NeuroStar machines, but also charges the psychiatrists for each time the machine is used. In addition, the company generates revenues from sales of a disposable foil called Senstar, purchased with the machines and used for every treatment.

The company had 5 rounds of financing since 2003, and their backers include included some of the most successful venture capital firms in the life science industry. Among them: Investor Growth Capital, New Leaf Venture Partners, Interwest Partners and Pfizer. "We are at the process of looking for new forms of financing, such as equity, debt and combinations of the two," Shook says.

"We were completely convinced that there is an enormous need in the treatment of major depression for new and innovative therapies – that the available drugs often don't work well, and frequently have side effects that are really unacceptable and limit their use," says Sherrill Neff, founding partner of Quaker Partners, which invested in Neuronetics in 2006, when the company had their pivotal trial data, but had not yet received clearance from the FDA to market their product. "What was less clear was how the market and reimbursement would develop once FDA allowed the company to market the product," he adds.

Rhodes was denied coverage by her insurance company twice until the decision was reversed. "I was a shell of a women, but what did I have to lose? There is the fear and doubt factor, and there was an apprehension because it was new and I didn't know what to expect," she says.

According to Neff, the company has reduced its risk profile significantly since the FDA has cleared the product for sale. Neuronetics is expanding insurance reimbursement coverage for treatment and developing clinical data to provide more proof for the efficacy of TMS and researching determining what types of psychiatry practices are likely to succeed with it.

"Completely new treatment modalities often take a protracted period of trial and error – both in developing the market and in developing the data that drives the market – before there is broad adoption, but we think Neuronetics is well on its way to breaking through into broad adoption," Neff concludes.

500 NeuroStars are currently found in clinics across the U.S. In 2012 the company began selling the product in the UAE, Japan, Saudi Arabia and more. "We wanted to be in markets where we thought that there is a medical need and that there will be sufficient resources to pay with cash," says Shook, as he mentions that Europe is not part of the plan yet. "European payers are relatively difficult, and they also pay far less for drugs in Europe than we do in the states," he says.

The company had treated approximately 13,000 patients since its launch in the U.S., according to Shook. Outside the U.S., a first clinic in Japan offering NeuroStar treatment opened recently and first installations in Saudi Arabia and UAE are expected in the last quarter of 2013.

Neuronetics has two main competitors that focus on treatments other than medication or Electroconvulsive therapy (ECT). Cyberonics, Inc., which is a public medical technology company based in Texas, developed the FDA-approved the Vagus Nerve Stimulation (VNS) Therapy system that uses a surgically implanted medical device to deliver pulsed electrical signals to the vagus nerve. Another competitor is an Israeli company called Brainsway, which uses a similar treatment that is also FDA-approved. "We produce a [more] specific and targeted brain stimulation than Brainsway, while they've had more side effects and a very different approach," says Shook.

"It's not a quick fix, you've got to be patient," Rhodes says. However, after about two weeks of treatment, Rhodes says she felt a difference. "I woke up on Saturday morning and I realized that something was missing, it was this feeling of having to do with another day of living," she says. "It was a lightning feeling, very subtle but unmistakable. I got up and I looked the same but the light in the room felt different, the air was clearer for some reasons." Her Hamilton Rating Scale for Depression (HRSD) test results also changed, and went from 28 (a score indicative of very severe depression) when she started, to 0 by the end of treatment.

"Part of this treatment is that you have to do your part," Rhodes explains. She still has to keep track of her diet and hours of sleep, and she's not allowed to drink. In addition, she must undergo treatment every once in a while for maintenance.

The World Health Organization has estimated that by the year 2020 major depression will be exceeded only by ischemic heart disease in global disease burden. Even though that's unfortunate news for us, it might mean good news for Neuronetics, or the TMS market in general. RH

Nextiva

www.nextiva.com

Tomas Gorny

Telecommunications

Arizona

Yes

» A provider of VoIP communication technology for small businesses, Nextiva has a unique background when it comes to helping SMBs bridge the digital divide in phone services. Founded in 2006, the company is owned by Unitedweb, a group of investors and entrepreneurs that invests in startups that help small companies leverage the Internet with technology previously only affordable to large corporations. Other companies under the Unitedweb umbrella include Endurance International, one of the largest web hosting companies in the US, and SiteLock, a web security company.

Nextiva carries on this tradition by offering SMBs an affordable yet effective way to host their phone services in the cloud for easy, universal accessibility. On average, its customers achieve a 65 percent savings over their previous phone service, according to the company's own claims. Nextiva has offered its platform in the cloud since 2008. On an SaaS model, it monetizes its services based on a monthly rate. There is no upfront capital investment or IT knowledge required.

"Our technical expertise gives us a distinct, competitive advantage over the entire market," said Yaniv Masjedi, VP of marketing at Nextiva. "We're enabling businesses to have an affordable phone system in the cloud and work the way they want to work, whether via voice, a cell phone, on a beach or anywhere they're traveling for business. You can fax anywhere with Nextiva, manage multiple offices and virtual employees seamlessly and centrally in a way that is easily scalable. We're leading the way for phone migration."

The company's platform, Amazing Service, features high levels of redundancy with a focus on quality and reliability, according to Masjedi. This allows for little to no hold time, and 95 percent of calls to be answered by the second ring. Customer service is another focus. The company strives to resolve any issues or questions on the first customer call. "Nextiva is more than a phone provider, but a partner who helps them grow their business," Masjedi said. "We are enabling businesses to have conversations that are critical to business success."

Serving over 60,000 business customers in the United States, Nextiva focuses on the small business market, from a two person startup to a 150 employee established business with multiple locations. Though Masjedi declined to state a growth rate, he described its client acquisition as "quite accelerated," and a 2012 press release states the company has had 100 percent growth for several years. Much of its expansion comes word of mouth as its customers recommend the service to others. "We have a sizable pool of clients, but there's still lot of room to grow," Masjedi said. "There has been a great source of continued as well as new business."

Based in Scottsdale, Ariz., Nextiva is profitable.

Masjedi contends that SMBs transition to VoIP services is only beginning. "We see a lot of opportunity for cloud communication as a whole as more people recognize the benefits of business communication in a cloud rather than an office," Masjedi said. "The reality is a majority of small businesses are still using landlines."

One client, John Lepore Insurance, had its offices devastated by Hurricane Sandy in 2012. The insurance company needed to have phones up and running quickly to deal with the influx of calls from storm victims. A hardwired system would have required technicians and infrastructure.

With Nextiva, it was simply a matter of plugging new phones into the Internet. "This proved critical," company owner John Lepore explained in a testimonial. "In that period, it was important for those customers to be able to reach us, file their claims, and just know we were there. We wouldn't have been able to do that with a traditional system." RH

NuoDB

www.nuodb.com

Barry Morris

Software

Massachusetts

Yes

» The database industry is in flux. The cloud is calling to companies, and they have responded by building fresh frameworks to support a move skyward. But when a business outgrows its data solutions, it may seek a system that fits in with incumbent practices — a brand new architecture that incorporates old structural beams. In the database industry, this means a cloud-based infrastructure that keeps Structured Query Language, or SQL.

NuoDB's distributed database management system (DBMS) gives enterprises both: the capacity to run SQL and head to the cloud. The company, based in Cambridge, Massachusetts, stands alone as the front-runner in what its CEO Barry Morris calls a one-horse race.

NuoDB, now six years old, came about when co-founder Jim Starkey solved a fundamental problem for enterprises. In the past, geographic as well as technological limitations kept databases bound to one machine. Now, NuoDB's product helps businesses spread their information all over the world on systems that stay up all day, every day.

The company's DBMS leverages geo-distribution, which allows enterprises to run connected database systems on different continents. Its technology works like a flock of birds. No one node leads it, so the architecture offers no single point of failure. And the formation also allows for rolling upgrades, with businesses able to take machines off the system without compromising it. "As long as there are two machines running you've still got a running database," Morris says. That's crucial for eliminating downtime, which costs one of NuoDB's customers $1,000 a second and $24,000 to $36,000 per outage, as systems go down for 4 to 6 hours.

That same global functionality provides NuoDB customers like Fathom Voice, a Voice over Internet Protocol (VoIP) company, with the technology they need to serve customers around the world without overhauling their system. "The world was built on SQL, good or bad or whatever," says Cameron Weeks, CEO of Fathom Voice. "So Fathom can't just go in and say, 'Okay, great, we're gonna drop our SQL statements and we're going to move over to a new, non-structured data format.'"

Customers of NuoDB's product include AutoZone, Zombie Studios, and France's Dassault Systèmes, the second-largest software provider in Europe behind SAP. The company operates via a freemium model in a massive market getting even larger each year. Morris says industry research gauges the entire database market at about $30 billion, an opportunity which will swell by roughly 10 percent ($3 billion) per year. That number is set to grow, and fast, as the world produces more and more information. This past September, the company's freemium product had attracted downloads from more than 10,000 users.

Prominent customer Dassault recently became more than a consumer of NuoDB's solutions. The company invested in NuoDB's most recent, $14.2 million funding round. Prior backers include Morgenthaler Ventures, Hummer Winblad Venture Partners, and Longworth Venture Partners. Now, total backing behind the company comes to $26.2 million.

NuoDB's disruptive — and importantly, patented –– technology neutralizes competitors, though Morris says it's not for lack of trying, talent or funding they've been unable to take on NuoDB. The company has built and patented the jet engine, he says; therefore challengers have no choice but to try and make a faster propeller engine. They're trying to inflict incremental improvements upon a product which NuoDB has replaced.

With little threat from competitors, it may seem that success for NuoDB is secure. But Morris worries less about watching the company's back than he does scanning the horizon, where he sees convergence approaching. Soon, everything — from consumers' cars to their refrigerators — will be on the Internet; and all those elements will have to communicate with extremely responsive database systems that allow for large-scale concurrent access, Morris says. "It requires the database to be spread out across lots of locations and to be able to run in multiple locations so it's accessible locally, but still is a global database," Morris continues. "That's an area we've been putting a lot of time into."

Smart devices will proliferate as smart home and smart car markets explode in the future. Morris anticipates NuoDB's revenue will increase by 3-4x for "some years to come," and says the startup has the potential to build up to a company with revenues in the billions. Now, NuoDB positions itself well to serve and support a changing world, one that's leaving behind terrestrial bindings for the cloud. RH

Nutanix

www.nutanix.com

Dheeraj Pandey

Big Data/Storage

California

Yes

» Nutanix changes how enterprises store their data, enhancing operations and cohesion across virtual machines and replacing the need for a centralized data infrastructure.

"We try to bring the goodness of the consumer cloud, its central architectures to the masses," says Dheeraj Pandey, Nutanix co-founder and CEO. The company has made it their mission to spread and simplify access to storage across a connected virtual platform. There, Nutanix's software-define solutions perform data triage and optimize its movement.

"We're building and delivering and selling Google-like infrastructure for the masses to build private clouds," says Howard Ting, vice president of worldwide marketing. "Our belief is that enterprise IT, for a long time, has been way too costly, way too complex, way too hard to scale," he says. "And so we're attacking those issues."

Ting says Nutanix beats out traditional datacenter infrastructures through better economics, linear scalability and simplicity of delivery. With Nutanix's ability to host predictable amounts of virtual machines in their appliances, capacity grows as companies need it without a requirement to overprovision, the company says. "Our scalability is extremely linear, meaning as you continue to add more and more gear to your datacenter there is no degradation in performance," he says. "There is no diminishing returns of scale."

Instead of buying shoes two sizes too big, or datacenter infrastructures that don't suit storage needs, companies may opt for Nutanix's ability to stretch. "Building an elastic fabric is a very unique challenge, to makes ure that you can start with four machines and grab a fifth machine, and a sixth one, then a fiftieth one, a hundredth one, and as you keep doing this, you have a very seamless transition with growth," Pandey says. "I think it's actually one of the biggest challenges in infrastructure Nutanix is actually solving."

Founded in 2009, the San Jose-based company has strode quickly and powerfully into the enterprise IT market. This past May, after six quarters of sales, Nutanix achieved an annualized run rate of over $80 million.

Early on, Nutanix preached about their revolutionary products to unbelieving listeners. Pandey says they were evangelical in spreading the word around the market that datacenter infrastructures could be different. "Three years ago, most people would scoff at us. 'Do you know what you're talking about? Has this ever been done?' Because you're trying to collapse the entire datacenter into single server machines that everything would be virtual," he says. "A lot of people really were naysayers."

Bipul Sinha, partner at Lightspeed Venture Partners, has been involved with Nutanix since day one — before the company had a single employee, he says. Sinha seeded Nutanix in 2009 at Blumberg Capital before heading to Lightspeed. Later, Lightspeed and Blumberg Capital invested in Nutanix in 2010, raising $13.2 million in Series A. Two more rounds have brought the company's total funding to $72 million, with Nutanix reporting both Series B and C were oversubscribed. Other major investors include Khosla Ventures, Battery Ventures and Goldman Sachs.

"Nutanix's bold vision was that because of the virtualization innovation that VMware did, it is now possible to build this fabric compute layer that brings storage and other resources together in a single appliance," Sinha says. "You don't have to separately string things together to be able to provide applications and resources."

In a market filled with giants, Nutanix cut its teeth in the midmarket. After all, Ting notes, big companies can put up bigger fights when change comes their way. "I think we're starting to get into that enterprise market, that Fortune 500 market domestically, the Global 2000 market internationally," he says. "We're going to continue to build our base in the midmarket and we'll continue to do well there...then we're going to do a lot of hi-touch selling, going into those Global 2000s."

"Once we establish ourselves as the datacenter standard inside one of those large companies, then we're talking about probably hundreds of millions of dollars of buying potential over several years," he says. Though Nutanix's financials and capabilities put the company in the big leagues, Ting says there's still much to do—especially considering what he calls the TAM, the total addressable market. "When I drop that number, the $100 billion number, I'm not suggesting that entire market is available to Nutanix today," Ting says. "But if you look at all the purchases of storage and servers in the enterprise IT market, you're looking at about a $100 billion."

With huge numbers on the horizon, Nutanix stays ambitious, reminding itself these are early days."We're very proud of what we've done to date, but we're also very humble when we look out at this $100 billion dollar market, when we look out on who else is in the landscape," Ting says. "We look at companies like IBM, HP, the kind of deep pockets they have, or EMC and Netapp, look at all these startups being funded with lots of great smart people there. We say, hey it's still very early, it's the top of the second inning." Batter up. RH

OncoMed Pharmaceuticals

www.oncomed.com

Paul Hastings

Life Sciences/Biotech

California

Yes

» In battling cancer, OncoMed cuts the legs out from under tumors as they try to grow. The biotech discovery company develops treatments that target cancer stem cells, tumors' roots, in an attempt to prevent them from metastasizing.

"A cancer stem cell antibody is targeted at a population of cells or a small population of cells inside a tumor that's responsible for the growth and metastasis [of] that tumor, so the way that tumor finds its way into other organs," says OncoMed CEO Paul Hastings. "We're targeting 'the bad guy' in the tumor."

OncoMed Pharmaceuticals, located in Redwood City, CA, evolved from biological research on cancer stem cells completed by Michael Clarke at the University of Michigan prior to the company's founding in 2004. According to Hastings, that research became the cornerstone of OncoMed's discovery platform; today, the company is singular for its technology, as well as for its treatment implementation strategies and its philosophies.

"It's very unusual to have a company that is a discovery company; in other words, a company who takes its own patents and makes its own discoveries and develops those patents and discoveries into drugs," Hastings says. "It's very unusual that [OncoMed], at such an early stage, has so many products in the pipeline, what we call multiple shots on goal."

One drug's the norm for pharmaceutical companies, especially the smaller ones. The way OncoMed stacks the pipeline makes it special. "For most biotech companies, any one of these molecules would be a company in and of itself," says US Venture Partners general partner Jonathan Root, an OncoMed investor. "Imagine any one molecule being the foundation of a company [in] any other circumstance, and here's a company with only [85] people that is developing five."

From the outset, Hastings says, the company developed antibodies simultaneously, rather than take single solutions to clinic, then go back to the blackboard after deployment. The result: five drugs in the clinic and more than 16 clinical trials, "all targeting cancer stem cells," Hastings says. What's more, there's four additional investigational new drug applications (INDS) coming soon.

Unfortunately, there's no shortage of patients in OncoMed's market. Hastings says their opportunity is in the billions of dollars, and that OncoMed strives to serve all cancer patients. Any person with solid or liquid tumors; hematologic malignancies; colon, lung, or pancreatic cancer; or those "who would be candidates for not only the clinical trials of our drugs but ultimately for the commercial use of our drugs," Hastings says, falls within their target market.

Serving this sector — and doing so prosperously — requires quite a bit of capital. In total, OncoMed raised more than $360 million prior to their initial public offering. Venture capital funding came from nine firms: first, Latterell Venture Partners, USVP, the Vertical Group, and Morgenthaler Ventures in Series A; then Delphi Ventures, Phase4 Partners, Adams Street Partners, De Novo Ventures and Bay Partners, added in Series B. The latter round eventually raised $169 million according to press releases from November and December of 2008.

Monetization opportunities as well as capital infusions for OncoMed come from partnerships with giant, global pharmaceutical companies. Of the more than $360 million raised, $160 million came from the company's strategic pairings with

Bayer HealthCare and GlaxoSmithKline (GSK). According to OncoMed's website, teaming up with GSK may bring in more than $694 million, while their 2010 deal with Bayer earned the company $40 million immediately, and $387.5 million per program "for each antibody or protein therapeutic successfully developed" — plus royalties with strings attached. Bayer also pays OncoMed $112 million per program (again, plus restricted future royalties) for small molecule candidates, according to their alliances web page. Through these partnerships, OncoMed's able to reach international markets. "In essence we're already a global company because our collaborations are global," Hastings says. "We're doing clinical trials in Australia, New Zealand, and Europe and eastern Europe, as well as in the United States and North America."

OncoMed went public on July 23 of this year, selling 5.52 million shares of common stock at $17 per share. According to a company press release detailing second quarter 2013 financial results, total capital raised at the IPO amounted to approximately $87.3 million, "after deducting underwriting discounts and commissions but prior to the payment of remaining offering expenses payable by OncoMed." Collaboration revenues for second quarter 2013 were $2.9 million, which meant a net loss of $9.6 million. But Hastings says that's normal for a company putting big money into discovery.

"What these losses are, is us spending the cash that we've raised," he says. OncoMed is eight years old; and according to Hastings, drug development often takes between 10 and 15 years. So while he doesn't expect an OncoMed product to hit markets in the very near future, he's not worried about what will happen, financially-speaking, once drugs are deployed.

"We don't have revenue coming in from products yet because our products have not been approved on the market," he says. "But when they are, one swings into profitability rather rapidly." RH

OnForce

www.onforce.com

Peter Cannone

Other

Massachusetts

Yes

» Finding an IT technician can be a nightmare for any business. For this reason, OnForce developed a source for on-site tech talent and has connected more than 100,000 IT independent contractors to businesses in the U.S. and Canada.

OnForce started in 2003 with a directory of professionals that became a Workforce as a Service (WaaS) solution. The company has expanded internationally and now targets more than 20 IT and computer engineering-related industries.

"We created a valuable proposition that allows you to find, manage and pay for the entire labor event," says Peter Cannone, OnForce's CEO since 2007. The company charges a fee for the customer or business to publish an event on the OnForce platform, and collects a percentage of that event from the independent contractor.

"I was impressed with their technology platform and their ability to source on-site technicians nationwide," says Daniel Herscovici, Vice President of Comcast, which uses OnForce's services. Herscovici founded XFINITY Signature Support as part of Comcast almost three years ago and was looking for on-site tech support. "They were great partners and worked to modify their business model to meet our needs. We've used them hundreds of times a month over the past two years," Herscovici says. "Their techs have a strong technical skill and a customer-friendly approach which is how they earn their business everyday. I use them both for my residential and small business customers." The OnForce technicians present themselves as Comcast Contractors, which helps the company present one unified front to the customer.

"You can find an ... independent contractor in your area code that will pick up the event that you routed within minutes and you'll have somebody solving your issue shortly," Cannone says.

OnForce developed a mobile app for iPhone and Android with push notifications about events and instant approvals of service events by the technicians. OnForce gives the technician a GPS that maps the events. Then the technician clicks the "on-site" button so the client knows an expert is present. "Instead of an hour event, the technician is there for about 45 minutes, meaning that he can go to another event and earn more revenue, while the client saves time," Cannone explains.

"With the macro economic environment changing, more companies are looking for outsource flavor," Cannone says. According to a recent study by MBO Partners, there are nearly 17 million independent workers in the U.S. today – a population that's expected to grow to 50 percent of the American workforce by 2020. This result points out the need for better management of independent contractors in the future beyond the IT sector. Of the 1,800 individuals surveyed by MBO, 57 percent actively chose to become independent contractors.

"It's been a tough economy and businesses want to get the professionals that they need according to picks like seasonality or big product shipments," says David Orfao, Managing Director at General Catalyst Partners, which invested more than $10 million in OnForce over the past seven years. General Catalyst Partners also brought in Accel London to invest in OnForce, while other investors include North Atlantic Capital.

Even though OnForce and its investors focus on IT services and electronic devices, the company is also considering moving into the healthcare and energy markets. "The healthcare market would be the next vertical that we would go after, especially with the demographics changing, but that's the next horizon," says Orfao.

One surprising partnership is with Manpower, a staffing company that competes with companies like OnForce. "We help them deliver micro tasks that they can't deliver to some of their larger clients," Cannone says. OnForce is currently working on partnering with several other large global staffing companies. These enterprises can't deliver on short-term, outcome-based staffing solutions like OnForce.

According to OnForce, annual gross revenue amount to more than $43 million and the company reached break-even in 2012.

"We are in Canada today and looking at Europe at the end of this year or in the beginning of next year," he says. The U.K. and Germany were the first markets to implement OnForce's model. Entering the European market will be relatively easily, especially through current international enterprise clients like Apple. Keeping up with the market's demand for more professional contractors is expected to be one of the company's major challenges ahead, but a good one to have. RH

OptiMedica

www.optimedica.com

Mark Forchette

Medical Devices

California

Yes

» OptiMedica develops ophthalmic devices to improve patient outcomes in eye surgery. Founded in 2004, the company developed a non-invasive technique that replaces the inconsistent manual steps in cataract surgery with femtosecond laser technology. As a result, it improves levels of control, precision and efficiency. Rather than doing the operation by hand, surgeons using OptiMedica conduct at least some of the incisions using computer guided lasers.

Licensing pattern scanning laser technology from Stanford University, OptiMedica produces the PASCAL® (PAttern SCAn Laser) Method of photocoagulation that it claims to disrupt the retinal photocoagulation market through improved precision and control. In less than four years of launching the product in 2006, it had shipped more than 600 PASCAL units in more than 40 markets around the world. Its systems have been used to treat more than 750,000 patients and deliver more than 30 million patterns.

Last August, OptiMedica was acquired by Abbott Medical Optics for $250 million, plus another possible $150 million if certain benchmarks are met. Abbott specializes in vision improving technologies with its a portfolio of cataract, refractive and eye care products.

"OptiMedica's Catalys system enhances Abbott's leadership position in vision care with the addition of a state-of-the-art laser cataract technology to our portfolio," said Murthy Simhambhatla, senior vice president of medical optics at Abbott. "OptiMedica's technology combined with Abbott's global market presence, offer the potential to provide advanced cataract treatment options to more patients around the world."

Based in Sunnyvale, Calif., OptiMedica has raised venture funding from Kleiner Perkins Caufield & Byers, Alloy Ventures, DAG Ventures, BlackRock, and Bio*One Capital. RH

Paymetric

www.paymetric.com

Asif Ramji

Security

Georgia

Yes

» Even the most successful companies need continually to evaluate strategy. As technology advances, so must businesses. But that doesn't make changing any easier, especially for a payment solutions firm moving from a licensed software model to a Software-as-a-service model.

In 1998, two former SAP employees founded Paymetric in Houston, Texas. The firm was created to solve a problem, as enterprise accounting systems were not able to handle electronic payments as part of normal data flows and business processes. The company won SAP's Pinnacle Award in 2002 and 2008.

Paymetric provides integrated and secure payment acceptance solutions to enterprise companies, which enables them to streamline their order-to-cash process, reduce the scope of financial burden for achieving Payments Cards Industry (PCI) compliance, and improve their return on electronic payment acceptance.

It was in 2009 that the company switched to a software-as-a-service (SaaS) model, the same year that, Asif Ramji, now CEO of the firm, joined Paymetric. "I came to the business in 2009 and the objective was to transform the business from a licensed software model to a software as a service model. We were able to convert virtually every single one of our customers from licensed software to SaaS and triple the client base at the same time," he recalls.

"We created a new direction for the business and the way that we looked at it was licensed software in our particular industry was not going to solve a very

Top 100 Companies: North America

dynamic problem. Licensed software needs patches, upgrades and it's constantly an operational burden for the enterprises, so deploying through a SaaS model gave the client the leverage of being able to have updates and enhancement to their solution without creating an operational burden for them," he adds.

To Ramji and Paymetric, the move made sense. "We definitely see a trend towards SaaS," Ramji says. "The large enterprises don't want to be managing many different solutions, they would rather have domain expertise and in our situation specifically for our industry we'll definitely see more of that."

A report by Gartner late last year revealed SaaS adoption has grown dramatically among users of enterprise software solutions. According to a survey conducted by the research firm, 715 organizations have been using SaaS for less than three years.

"Seeing such high intent to increase spending isn't a huge surprise as the adoption of the on-demand deployment model has grown for more than a decade, but its popularity has increased significantly within the past five years," says Charles Eschinger, research vice president at Gartner in a press release. "Initial concerns about security, response time and service availability have diminished for many organizations as SaaS business and computing models have matured and adoption has become more widespread."

One of the company's key features is its ability tokenize raw credit card data, which means leaving tokens in the place of important data. Ramji says that there are two main problems Paymetric solves. "One is data security and the second one is payment complexity. Payments are a very dynamic, constantly evolving need. For example we solve for these large enterprise ERP deals working with solutions like SAP so we have B2B business taking place, be it call centers, be it kiosks, website, e-commerce stores, mobile device, point of sale; so as new payment channels emerge, Paymetric manages all of those different channels, secures all of those channels and integrates them back into the enterprise."

The company is eyeing international expansion in the next 18 months, and is aiming to establish a presence in the U.K. first. "We have a really deep relationship with a channel partner that's in that market today which has 16 sales people. We have some partners and resources that will provide guidance and insight on that. We've actually already identified talent in that market as well that we want to bring on board," Ramji says. RH

Pentaho

www.pentahobigdata.com

Quentin Gallivan

Software

California

Yes

» When it comes to data, customers want a steady stream uninterrupted by bottlenecks and dams. They need it for use on multiple platforms, and they need it five minutes ago. Pentaho blends data from different sources to highlight what's important and ensures users have the information they so desperately require across the distinct digital environs they hop between.

"The enterprise-driven reality is these large enterprises want to be able to build a big data ecosystem where they're using Hadoop, NoSQL databases like MongoDB and analytical platforms like Greenplum, Aster Data, Vertica, and want to be able to move data freely across those platforms," says Pentaho CEO Quentin Gallivan. "And then at the end of the data pipeline have business users analyze their data quickly in a visual way."

Pentaho's founders built their platform in 2004, long before big data became tech's biggest buzz word. Now, the company has fallen into a leadership role synthesizing and deploying big data to help enterprises strategize next steps.

Pentaho serves customers a fused cocktail of information culled from varied resources available to the company through its "tightly coupled data integration and business analytics" platform, the company says. Their integrated approach differentiates them from their competition. "Right now, no one really can do the blending in an on-demand, real-time way so that a business user can actually mash up data from their NoSQL database or their Hadoop cluster with relational data sitting in the EDW [Enterprise Data Warehouse] in order to really understand a 360 view of their customer," Gallivan says.

Though crowded, the market for big data analysis is both large and lucrative–– especially for companies that build moats and differentiate. Pentaho currently serves the Business Intelligence analytics needs of companies like Telefonica, Lufthansa, Marketo and ModCloth. According to Gallivan, the company targets two multibillion dollar markets: the big data market and the embedded analytics market. In total, they face a $16 billion opportunity, with that number growing to $42 billion by 2016, Gallivan says.

Both markets are merging; and expanding as they do so. "It's a very large total addressable market today, a fast-growing and larger total addressable market tomorrow, and the exciting thing for us is this market really is open to new entrants," Gallivan says. "[Legacy technology vendors'] technology does not lend itself to transition very easily into the new world of big data, open source databases and blending analytics on the fly."

Pentaho has a few things going for it to entice customers to try their product, such as a free download and an open source model. Gallivan says tens of thousands of companies use Pentaho's community edition, no charge, while over 1,000 (closer to 1,200) ante up an annual subscription. Gallivan says it is mostly developers that want Pentaho free, where Pentaho Enterprise offers features that developers do not necessarily need, like those dealing with customized user interfaces, disaster recovery and security.

Meanwhile, the company's open source origins fit perfectly with the architecture of other applications in the big data space. "A lot of the more popular big data tools are open source in nature...so the technologists within our customers that are putting together and building out these big data infrastructure ecosystems, they're not only comfortable with open source, but prefer open source to legacy software vendors," Gallivans says. "Reset the dial ten years ago, large enterprises were allergic to open source."

"Now the paradigm has shifted dramatically, particularly around these big data architectures and big data infrastructures," he says. "Pentaho being a commercial open source technology, there's a propensity to use Pentaho to connect, to move, blend, and analyze data from all these disparate big data stores."

Last October, the company raised what could be its last funding round before a public offering. New Enterprise Associates (NEA) led the company through a $23 million Series C, with prior investors Benchmark Capital, Index Ventures and DAG Ventures contributing. With that money and past fundraising efforts, the company is "scaling very nicely," Gallivan says.

Importantly, his reference to scale inherently covers the company's strategies for further globalization. Pentaho, with its HQ in Orlando, already does 40 percent of its business outside the United States, Gallivan says. In coming years, he would like to see that percentage increase to half of all business done. "I think a lot of it came from the DNA of the company and the fact that [Pentaho] is an open source company and open source has been very much a global movement," he says, citing Europe and Brazil for their foresight regarding open source technology adoption.

In future, Pentaho won't always serve clients who understand the nuances of the big data marketplace. Customers today do not just want a product—they want tutoring, guidance and education. And while that will require more time and effort on providers' parts, companies like Pentaho are ready to take on the teacher's mantle.

"They want the cookbook, the big data cookbook," he says. "We're working on not only providing the technology, but because we have so much experience now these in all these deployments, we're helping put the big data cookbook together." RH

Perfect Market

www.perfectmarket.com

Julie Schoenfeld

Cloud Computing

California

Yes

» In online publishing, some stories guarantee hits. Others, while not less important, prove less popular––until Perfect Market gets them into the right hands.

"When we started doing this, the conventional wisdom was that you couldn't make money on news," says Perfect Market CEO Julie Schoenfeld. "What we discovered is that it's really all about finding the biggest audience for a particular topic."

Perfect Market came out of Pasadena-based incubator Idealab in 2007. Schoenfeld witnessed rapid changes in the publishing industry as content switched from IRL to URL. Media was moving online, with money trailing slowly behind it. "It was becoming increasingly obvious at that point that traditional media companies were going through a very disruptive period because their offline property was moving online," she says. "At the same time I recognized the fact that less than 10 percent of advertising dollars were being spent online."

Perfect Market aimed to capitalize on the influx of spending online, and to help rescue an industry on its tiptoes in deep water. "I always say there will be a giant sucking sound of dollars moving up from offline to online, and that it had a kind of a noble twist to it where we could actually help an industry which I believe is very important," she says.

Perfect Market's proprietary technology increases engagement, traffic and content monetization for publishers. Its Digital Publishing Suite helps companies manage their social presence, optimize SEO and target the right readers and users for the right stories.

"We created a product called the Digital Publishing Suite, just one line of JavaScript allows publishers access to this enormous functionality which we call adaptive publishing," Schoenfeld says. "And what we mean by adaptive publishing is that we want to be able to understand where the person is coming from in order to deliver them the best experience in that moment."

With newspapers, nobody needed to read niche pieces, as long as they bought the newspaper. On the web, hits generate revenue; suddenly less buzzy stories (which make up the majority of content on sites) needed an audience. Perfect Market gave them one by promoting content in the long tail, so called because of its place on the graphical representation of stories-by-hits. "What happened particularly in news organizations is the station would create today's news and then they would be onto the next story," Schoenfeld says. "They weren't really thinking hard about, 'How can I surface that piece of content twelve months from now?'" Perfect Market pioneered a way to monetize that content and get ad money in publishers' pockets.

When Perfect Market first emerged out of

Idealab, Schoenfeld's track record alone attracted investor attention. This company is the third she's started, created and aired for fundraising. "As I learned more about the market opportunity, I was telling Julie, whenever you think the time is right we'd like to be involved," says Larry Orr of Trinity Ventures.

Schoenfeld brought them on board immediately after Idealab plugged in seed funding. Later rounds saw happy customers circling back to invest; they've raised $30 million total in venture financing and debt. "Where things started to get exciting was when our first customer, the LA Times saw such tremendous performance with our product, that they rolled us out to the rest of the Tribune property, and then the Tribune called us up and said they'd like to invest," Schoenfeld says. "When your first customer makes an investment that's always a great sign that you're on the right track in helping them solve their problems."

Schoenfeld says Perfect Market serves a massive industry: everyone who publishes content online. However, they concentrate (for now) on 2.5 percent of that space. She says though 10,000 publishers fit PM'S customer profile, they look to tap the top 250 that drive 70 percent of traffic. "These are the very large accounts like NBC and CNN," she says. "It was our goal to penetrate these markets from the large end of the business first and then move to the smaller accounts as we were growing." Among their high-profile clients: The New York Times, the Los Angeles Times, NBC News, and Business Insider. As of now, more than 200 publishers use their tools.

A 2013 report from Perfect Market announced that news sites using their tech saw 220 percent growth in visits, year-over-year. Currently, they serve approximately 292 million monthly uniques worldwide and over 2.5 billion ad impressions a month, and their revenues are in eight figures.

As the company grows, so will its audience. As Schoenfeld says, $500,000 is the new $5 million; and companies are building online publishing platforms for next to nothing. The explosion in sheer number of content providers creates upheaval, but also new potential customers.

"I think most of these organizations are strapped for resources, so they actually want us to provide full-service," Orr says. "But [as we move the] technology more towards self-service, we can expand our footprint into smaller publishers over time." RH

Pertino

www.pertino.com

Craig Elliott

Cloud Computing

California

Yes

» Pertino enables entire cloud networks to be established with the simplicity of a click. The company creates cloud networks of shared computers with a simple software installment and emailed invitations for other computers to connect. It establishes cloud networks to enable any business, no matter the size, to create secure cloud networks instantly, eliminating the need for expensive equipment or complicated configurations.

Pertino's services work similar to Dropbox, but instead of just files, it allows the sharing of desktops and applications, pretty much anything that can be shared in a local area. The company enables three individuals, using up to three devices, to connect into a shared network for free. Beyond that, the company charges $10 per month per user for an unlimited number of users. Pertino currently offers services in a limited release beta with support available to Windows with iOS and Android expected shortly. The company currently serves over 1,000 networks and 1,000 companies.

The company not only offers connectivity, but also network services such as firewall URL filtering and WAN optimization, all able to flip on and off instantly on an SaaS model. Networks can be spun up and turned off at will. With databases in Tokyo, Hong Kong, Sydney, Ireland, London, and the United States, Pertino has the ability back-up the networks on several databases to prevent an outage or a natural disaster from affecting the network.

"We offer big IT for the little guy," said Craig Elliott, CEO of Pertino. "We bring the democratization of technology to SMBs. With no configuration or hardware, we build computer networks as fast as a snap of the fingers."

Though the company began with SMBs in mind, Elliott soon realized it faced even larger demand from corporations seeking to create temporary networks. "We don't have any problem finding opportunities," Elliott said. "We're focusing on the use cases that are first in line right now."

Increasing computer accessibility has been a cornerstone of Elliott's career. To pay for veterinary school in the mid-80s, Ellliott sold a record number of Apple computers, which won him a Porsche and a personal meeting with Steve Jobs. Rather than becoming a vet, Elliott instead worked for Apple for the next 10 years before leaving in 1996. He also served as CEO of Packeteer, a company that specialized in networking appliances, through its IPO. Pertino's co-founder Scott Hankins also worked with Packeteer, and was frustrated by the company's new innovations that could not be easily implemented into already established appliances. The cloud instead provided an infinite and elastic resource. Hankin and co-founders Andrew Mastracci and Michael Cartsonis spent 18 months designing a platform that could easily be established in the cloud.

Based in Los Gatos, Calif., Pertino has raised $29 million in venture funding from Jafco Ventures, Norwest Venture Partners and Lightspeed Venture Partners.

Elliott looks at 2013 as Pertino's test market, with 2014 becoming its revenue year. He sees the company's potential to be eventually similar to competitors such as Cisco or Juniper Networks. "If we can spin up a global network in five minutes, we see real opportunity," Elliott said. "We've done a lot of market estimates, but we look at being able to charge SMBs less than what they'd pay just for the support while being very profitable." RH

Quantenna

www.quantenna.com

Sam Heidari

Telecommunications

California

Yes

» Quantenna Communications wants to make cost-effective wireless run like wireline—specifically when streaming live video. The company's chipsets help provide customers a consistent Wi-Fi connection for entertainment, surveillance and other streaming solutions.

CEO Sam Heidari knows customers feel at a loss when Wi-Fi misfires. "They walk from the living room to the bedroom; the Wi-Fi doesn't work or the performance is not as stable," Heidari says. "We have taken Wi-Fi to the next level, and we have gone from just convenience of the Wi-Fi to connecting the quality of the service with Wi-Fi."

"Something which was only achieved with wireline before now can be accomplished with Wi-Fi," he says.

Quantenna, the fabless semiconductor company founded in 2006, serves OEM customers like Arris, Cisco, Pace and Technicolor "in support of deployments at service providers including AT&T, DirecTV, Belgacom and Telefonica," according to Heidari. In recent years, high-performance Wi-Fi solutions appealed to 10 percent of a $6 billion market, he notes.

"But that 10 percent is growing while the market itself is growing, too," Heidari says. "We expect that the need for the high performance and reliability of the Wi-Fi market by 2015 becomes 25 percent, and the market size itself would grow to $8 billion."

Heidari reports one and a half billion new Wi-Fi devices were sold in 2012, and that number is supposed to jump to more than 2 billion in 2015. "Wi-Fi's not only becoming the dominant interface, it has become the sole interface for many devices," he says. Devices used for entertainment purposes primarily serve as vehicles for video streaming. Heidari states that by 2016, video will account for 86 percent of consumer traffic.

Companies create products with Quantenna's chipsets inside them to enhance connection consistency and speed. Among those products: gateways, access points, set-top boxes and outside hotspots. But the hardware is less important than the connection that gets users online — and that is what Quantenna strives to provide, perfectly. "[With cloud storage], you are using your device in your hand as a dumb screen to communicate to the storage content and computing and pull the information from that," Heidari says. "If the connectivity doesn't work, then you're just left with a dumb screen; and most of these dumb screens, their connectivity's Wi-Fi."

"If the Wi-Fi doesn't work, then you're... disconnected from the world, basically," he continues. "Given that Wi-Fi becomes dominant...it has to work."

Heidari says Quantenna tapped the ten percent of the market looking for high-performance solutions; i.e., the peak of the pyramid. In a market he says is consolidating, competitors must set themselves apart if they want to succeed. Price wars increase competition in the space as companies race to keep production costs low.

Steve Goldberg of Quantenna investor Venrock says Quantenna faced adversity in battling competitors and keeping costs low. "The biggest challenge for many semiconductor companies is chasing the rapid pace of cost reduction and technology evolution," Goldberg says. With semiconductors, the smaller the chip, the less it costs (as manufacturers fit more chips on wafers that stay the same size); and the technological process creating the chip determines its size.

"Things moved so quickly in the Wi-Fi space that it became such a great opportunity for so many companies that... demand started to rise, buying started to go up, the user started to expect lower prices," he says. Changing the technological process that makes chips can cost $10 million to $20 million—but the company's chip sizes have shrunk from 90 nanometers to 40 nanometers over the years. "They're going to have to stay on that curve," Goldberg says. "I think when the market started to move two and a half years ago, the company reacted very quickly, determined what they'd have to do to get the next chip out, and the next smallest process mode."

Funding proves helpful when the market demands capital-intensive innovations. Since 2006, Quantenna has held multiple funding rounds and raised approximately $70.7 million between Series A and E. And

company url ceo sector country vc$

in April 2012, RUSNANO, Sequoia Capital Growth Fund and all previous major investors financed a $79 million round.

"They've [changed the chip-making process] twice now in the last couple of years and went from being a little bit behind in the market to being now right in the front," he says.

Goldberg gives Quantenna's global engineering team credit for minimizing chip size. The company established itself internationally first, then tracked back to the domestic space; now, it is making moves in Asia. "Our first deployments were in Europe," Heidari says. "And we are getting a very good footprint in the U.S. and in North America now, and the plan would be to explore Asia next." RH

Qwilt

www.qwilt.com

Alon Maor

Telecommunications

California

Yes

» Qwilt's video fabric controllers ensure faster and smarter delivery of the most popular video content on the web. Whether consumers are grabbing funny videos from YouTube or streaming live TV, Qwilt lightens the network's load with its local caching capabilities.

"We make video go faster. And that video might be anything from Youtube to Netflix to Hulu to any number of sites around the world," says Mark Fisher, vice president of marketing and strategic development.

Qwilt's co-founders, Alon Maor and Dan Sahar, formerly of Cisco and Juniper respectively, united networking and storage in the company in 2010. Their background and expertise, plus helpful insight from an investor, showed online video's market potential. "One of the venture investors, Redpoint, is an investor in Netflix," Fisher says.

In 2011, Qwilt raised $24 million over two rounds, backed by Accel, Redpoint, Crescent Point Group and others. Most recently, Bessemer Venture Partners led a $16 million Series C, with Accel Partners, Redpoint Ventures, and Marker LLC contributing this past July. The capital influx will help Qwilt infiltrate international markets further and satisfy global demand for their QB-Series Video Fabric Controller.

Currently, the company's on a trajectory to hit a sales landmark: breaking into double digits. "We are very close to [hitting] $10 million [in sales] this year," says Qwilt CEO Alon Maor. "We have hit $1 million less than six months since the launch of the product, and I would say ... we are measuring success by customer satisfaction."

Those customers are well known to the networking space. "We sell to network operators of all types; that would include cable companies like Comcast, telcos like AT&T, and mobile operators like AT&T and Verizon," Fisher says. "We do that worldwide."

Online video's a big problem for network operators globally. Fisher compares the Internet to a highway. Video is transferred across the network like cars drive down roads. When a video's popular, data's sent across the network over and over again. The result: bumper-to-bumper traffic.

According to Qwilt, on average, Americans currently watch around 15 minutes of online video a day. That quarter of an hour per day (16 gigabytes of data a month) is responsible for around two thirds of online traffic. And because popular videos are sent repeatedly across the network, ten percent of titles streamed amount to 90 percent of all video traffic.

Qwilt combines proprietary innovation with off-the-shelf hardware to provide users entertainment solutions that won't break the network's back. "You may think of it as kind of video servers [farms] that are very effective, that behave and act like a Netflix server, a Youtube server," Maor says. "We have like 10 patents that are being filed today because we have been able to develop certain algorithms that allows us to do all that very effectively and in real time in the network."

The company's controller saves the network from video overload through transparent caching: the process of storing popular videos nearby so they don't have to drive across the entire network to reach users. "If you and I and all of our friends in the neighborhood want to watch the latest "Iron Man" movie there is a separate stream of that movie set up for each and every one of us," Fisher says. "We're just simply using this caching technology to take that redundancy out of the delivery system and deliver it locally."

Qwilt's tech is special because it makes judgment calls autonomously. "We make software that runs on off-the-shelf hardware and we sell it to network operators, and they put it in the network in the neighborhood or in the city," Fisher says. "They make intelligent observations about the video traffic ... and then they make intelligent decisions about what's popular or trending, and then what to store locally or cache there in the neighborhood or the city." Importantly, an adaptive brain is packed within that off-the-shelf hardware. Leaving the hardware to others allows Qwilt to "ride the technology curve," Fisher says.

Plus, Maor says deployment's simple. "It's plug-and-play in a manner [customers] were not used to [getting] up until now in the application networking environment," Maor says. "Some [customers] compare it to the change that iPhone did in the mobile space for handsets back then." .

Some people think their neighborhood's pizza is just better; with local caching tech, Qwilt says their performance really is. "We can deliver a better quality stream when we do it from nearby in the neighborhood," Fisher says. And while delivery's local, Fisher calls the need universal. Qwilt's already serving customers in Europe and Asia, and looks to plant deeper roots in other markets. With a growing sales presence in both Latin America and Europe, they're set to make the world wide web's job a lot easier. RH

Resilient Network

www.resilient-networks.com

Bill Coleman

Software

California

Yes

» One of the hardest elements of internet security is establishing identity. When a user accesses a system online, it can be extremely tough to establish that they are who they say they are. However, this is an area where the security offerings on the market are catching up.

Resilient Networks is the developer of the Trust Network platform, which aims to resolve digital identities with real world identities. The San Francisco based company has developed a system which allows its customers in education, healthcare, government and supply chain build Trust Networks which allow sharing and collaboration of information within their own ecosystem while preserving security and privacy.

In September last year Resilient was awarded one of five National Strategy for Trusted Identities in Cyberspace (NSTIC) grants, given to consortiums that demonstrate innovative identity ecosystem solutions in various market sectors. Resilient is leading 20 organizations to develop two pilots with the aim of improving information access and exchange in healthcare and education.

"2013 has been a groundbreaking year for us so far. We are now working with a leading IT equipment manufacturer in Silicon Valley, and continuing to execute delivering the healthcare and education solutions awarded by the NSTIC grants," said Bill Coleman, Chairman and CEO of Resilient.

The Trust Network platform gives customers the opportunity to use a neutral peer-to-peer system to share sensitive information securely, while maintaining the individual governance and policies of each of the participants on the network.

Back in 2011 the company announced it had secured over $5 million in funding from Alsop Louie Partners and angel investors. Stewart Alsop, the co founder of Alsop Louie Partners joined the board of directors. "I personally believe Resilient's Trust Network is the solution to the identity and trust challenges that impede data sharing across healthcare information systems," Mr. Alsop said when the financing was announced.

Privacy has become an even bigger issue in recent times, as accusations of mass surveillance by the National Security Agency (NSA) have been made following the leaks of former NSA employee Edward Snowden. It remains to be seen how these revelations will affect the trust in companies offering privacy, but the market may even see as a boost as companies look to ensure that their privacy is even more closely guarded. The constant threat of cyber criminals and corporate espionage is also a factor making this market one to watch over the next few years. RH

RetailNext

www.retailnext.net

Alexei Agratchev

Big Data/Storage

California

Yes

» When RetailNext launched its in-store tracking analytics platform in 2007, the market was wide open. Google Analytics was already a familiar part of the e-commerce landscape to measure conversion, but nobody had yet figured out a way to track similar metrics at an on-premise store.

RetailNext was the first company to provide such analytics. Using standard off the shelf video technology to watch and analyze customer behavior, the company identifies what type of person walks into a store and what catches their eye. It surveys which displays prove most successful with what types of customers. It also measures shopping behavior through point of sale systems. Though it doesn't track data on individual customers, it can identify everything a shopper does when he or she walks into a store in an aggregated manner.

The company then compiles this data into a single location with its own proprietary algorithms to suggest what steps companies can take to boost their sales. The company also offers a voluntary opt-in mobile app that allows store tracking of individuals for deeper analytics.

The average RetailNext client sees double digits sales increases in the first six months, according to the company's own claims.

About 13 competitors have sprung up just in the last 18 months, estimates Alexei Agratchev, CEO of RetailNext. This only serves to substantiate the company's market. Selling to large retailers with 30 stores or more, he estimates the business could easily approach $200 million in revenue if it can capture at least 10 percent of the market in the U.S.. Grabbing 10 percent of the global market could easily fetch a billion dollar run rate is it executes well. "We think there will be massive companies developed in this space, and at this point we are the market leader," Mr. Agratchev said.

Serving over 100 distinct retail brands, with over 30 new logos added in the last year, the company is well on its way. It has grown an impressive 235 percent for the last several years, and plans to triple its base this year. With clients across the globe, its reach extends into the UK, Germany, Spain, Italy, Sweden, France, Russia, Ukraine, Israel, Dubai, Hong Kong, Mainland China, Vietnam, Korea, Japan, Singapore, US, Mexico, Canada, and Brazil. Customers include Bloomingdale's, Montblanc and Verizon Wireless.

The company was born our of Mr. Agratchev's own frustrations developing a security system for Cisco. He researched over 70 different video analytics companies, but realized that while these companies provided detailed in-store data, there was little focus on what to do with the data once it was derived. After raising its first venture fund in 2008, RetailNext landed its first two customers in 2009, including American Apparel. The company publicly launched in 2010.

"We've been selling about three years no with a ton of R&D investment, but we feel we're just scratching the surface on what can be done," Mr. Agratchev said. "We are very much an innovation R&D business at this point."

Though it was slow going early on, the market shifted decidedly in RetailNext's position in 2012 as larger companies chose RetailNext to deploy on a massive scale.

Based in San Jose, Calif., RetailNext has raised $29 million from StarVest Partners, August Capital, Nokia Growth Partners and Commerce Ventures.

"As it often happens, RetailNext's early traction created a number of copycat competitors," said Vivek Mehra, a Partner at August Capital. "While competitors are mostly in trial with a few stores, RetailNext has market share leadership analyzing over 500 million shopping trips a year in over 20 countries." RH

Revinate

www.revinate.com

Jay Ashton

Software

California

Yes

» The old guest book that any hotel, restaurant, bar or spa used to have has long ago turned into millions of tweets, Facebook or blog posts, Foursquare tags and online reviews. Understanding what your guests think about your business is now easier and faster, but aggregating all of the data in one place can be hard. Revinate is a software platform for the hospitality industry that focuses on analyzing online reviews and social media, and allowing businesses to connect with travelers and control their online reputation.

Revinate was founded in July 2009 by two high school buddies, Jay Ashton and Marc Heyneker. Ashton was President of Five Star Alliance, an online travel agency for luxury hotels, while Heyneker was a top sales executive at Akamai Technologies, an internet content delivery and web application acceleration service.

"The genesis came when hospitality technologies used for hotels were old and there had to be an opportunity to create a better software," says Heyneker, today the VP of Sales & Business at Revinate. The two built three prototypes and did their homework for nine months before launching. Everybody that we spoke to instantly gravitated. They knew this stuff is important and didn't know how to generate useful content out of it," Heyneker says.

Instead of reading and responding to online reviews from several websites, the platform saves time by aggregating all the relevant information in one place, sorting the reviews by site, date or sentiment. Moreover, a business owner can also view reviews competitors receive.

The software includes various management options. Analysis tools that interact with Facebook allow businesses to manage all the content on their pages, track performance over time, and divide likes and users by city or source (mobile, computer, etc.). Through Revinate, enterprises can also keep an eye on social networks and similar sites in Europe, South America, Asia and the Pacific.

Guest feedback can be routed for follow-up, making engagement with guests faster and more personal. The software can be used by front-desk staff, sales and marketing executives, general managers and corporate users.

Revinate has several competitors in its market. Some are horizontal players, such as Medallia and Radian6, which deal in several industries, whereas Revinate focuses on hospitality. Cymfony in the U.S. and TrustYou and ReviewPro in Europe are smaller competitors, "They needed to deal with 18 different countries where we were the dominant player within the U.S. market and have a natural benefit in terms of being based in Silicon Valley," says Heyneker. NewBrandAnalytics, another U.S.-based competitor, is more restaurant-focused.

Revinate leverages a SaaS model, and its revenues are based on a monthly subscription, with no extra charge for training or support service.

The company doesn't disclose its revenues, but claims 50 percent to 100 percent year-over-year revenue growth. "We run it as close to profitability as possible," says Heyneker. The company went from two offices to seven offices, and increased employee count by 50 people in one year to reach 80 worldwide workers. More than 20,000 customers in 132 countries already use Revinate; on that list are chains like Hyatt, Marriott and Hilton. Bootstrapped at first, now Revinate is supported by angels.

Revinate's Series A funding round in August 2012 amounted to $14.5 million, with investors such as Benchmark, Formation8, and Rich Barton contributing. "It's possible if we need more capital, but we are financially strong with the majority of the funding from the A round still in the bank," Heyneker says about additional rounds in the future.

"With a background in travel, I know that online reputation is critical to the success of hospitality, considering that the client retention and expansion are ultimately all about guest satisfaction," says Jim Hornthal, Managing Partner at Hornthal Investment Partners, who is both an investor and a member of the board of Revinate. "With more than 450,000 hotels worldwide, Revinate has the opportunity to develop highly specialized solutions that can change the way that hotels learn from and engage with each of their guests," he says.

Revinate had to quickly invest to expand from a U.S.-centric company to a platform that delivered localized applications and products overseas. "Our customers have hotels all over the place, and because of their broad footprint, it required us to be global quicker," says Heyneker. The company has seven offices located in San Francisco, New York, Hong Kong, Sydney, Munich, Amsterdam, and Abu Dhabi. In addition, Revinate plants "ambassadors" in countries that have strong startup communities, such as Germany, Romania, Serbia, Turkey, and Egypt.

As it goes global, the company must make sure that its platform keeps consistent in all countries. "We are making sure that our folks 15 hours away feel connected to the mother ship," Heyneker ads.

"Revinate's biggest challenge is to manage and capitalize on the opportunities for accelerated international growth and to supporting it's expanding global customer base. To meet these challenges, the company is localizing products and the company is expanding its presence with seven international offices, to meet massive customer demand locally wherever they may be around the world," Hornthal says.

Online reputation has become one of the top benchmarks measuring the success of hospitality services, and Revinate aims to become the "one stop shop" for the industry. "The stickiness of the service is huge," says Heyneker. RH

ShopKeep POS

www.shopkeep.com
Jason Richelson
Cloud Computing
New York
Yes

» Small businesses have plenty of obstacles in their paths when they start up, which is why many of them use the latest business applications to make life easier for themselves. One problem for businesses with physical stores, is finding a point of sales system that is both affordable and easy to use. Now mobile applications and devices are providing an answer.

One of the companies operating in this space is Shopkeep, which was founded in 2008 in New York. The company was born out of the sheer frustration suffered by the founder and CEO Jason Richelson, who owned four retail stores including a wine store in Brooklyn.

"For seven years I was running that business and just being very frustrated with the technology available to me and Windows in general," recalls Mr. Richelson. "All the point of sales systems ran on Windows so that meant I had to have a server in the basement and multiple Windows XP machines to ring up customers."

In 2008 Mr Richelson went on vacation, and while he was away the point of sales system crashed, bringing his operations to a halt. When he got back from his holiday he began searching for a cloud based point of sales solution, only to find that there weren't any available. "I decided I was going to start Shopkeep at that time and here we are today 7000 customers later," says Mr. Richelson.

Shopkeep's offering is very simple — it takes an iPad and turns it into a cash register. The application is downloaded onto the iPad and for a fee of $49 a month, it can ring up sales and track sales, inventory and employees, all through the cloud.

The market is not without competition, and there are several other players trying to get a piece of the point of sales application space. But Mr. Richelson believes Shopkeep is standing out. "I think the most important differentiator of the big four is that we're really the open choice for small retailers. I think retailers really need that openness and the ability to choose the payment processing for their point of sale and I think that's going to be the key to us taking over this market."

"When you go into a retail store, retailers want to choose what they are going to sue for every function of their store. The point of sale is one part but everything has to integrate with the point of sale," he adds.

One of the benefits of the Shopkeep system is that retailers can have more freedom to walk around the shop, and take the point of sales system with them. "We like our guests and we like to see them, so the most important thing for me is that we welcome them right away so they never feel like we are too busy for them," says David Steingard, CEO of Laughing Man Coffee & Tea, a New York based coffee shop. "With the iPad mini we can take the extra step of taking orders further down the line, outside or where we need to. It helps move the line, but more importantly it sends a great message to our customers that we are continually working to make their coffee experience better."

Shopkeep has a good portion of a soon to be expanding market. It will surely not be long before the bigger companies see the sense in a tablet and application solution to the point of sales problem. The company, understandably is enthusiastic for the future.

"We have a great opportunity here because the way we deliver our software to our customers, basically automatically online, has never been done in this industry and over time as the industry changes we're just going to accelerate. As long as we continue to do a great job and make our customers happy, we're going to do a really good job," concludes Mr. Richelson. RH

SimpliVity

www.simplivity.com
Doron Kempel
Virtualization
Massachusetts
Yes

» In the past, IT infrastructure has required one of everything. Different products from different vendors served different purposes, leaving companies with up to 12 boxes in their stack, all with distinct functions. SimpliVity trumps disorder and offers companies a streamlined solution in one product: the OmniCube.

"If we were to summarize the fate of today's data center, what we see is customers need to buy about eight [to] 12 different products to build their IT infrastructure," says SimpliVity's founder and CEO Doron Kempel. "They buy those eight to 12 different products from as many vendors, they train as many software professionals from their companies...[which] is very expensive and complicated."

"The OmniCube offers all the functionality of all [these] products," Kempel says. "We have developed a very rich functionality stack, the OmniStack, that includes each and every function [of the other products] and all of that runs within one OmniCube."

The OmniStack's three pillar technologies — the Virtual Resource Assimilator, Data Virtualization Engine and the Global Federated Architecture — run on x86 servers. The assimilator does just like it sounds. It takes on the jobs of up to twelve other products and makes them its own. It also enables the creation of a shared resource pool and keeps Input/Output Operations Per Second (IOPS) and capacity spread evenly between servers as they are added on, Kempel says. The virtualization engine deduplicates, compresses and optimizes data through the OmniCube Accelerator "in real time and in section...in fine grain level at 4 kilobytes to 8 kilobytes, once and forever," he says. Crucially, these processes take place at all stages of the data's life cycle: primary, backup, WAN, archive and cloud.

Lastly, the federated architecture "allows... global management of all the OmniCubes and all the virtual machines that run on those OmniCubes, anywhere in the world by a single operator from VMware vCenter that is very familiar to all VMware administrators."

With SimpliVity's products, customers get more space and burn through less money building their IT infrastructure. Three or more OmniCubes cuts total cost of ownership by three, Kempel says.

Kempel founded SimpliVity in 2009 after his previous company, Diligent Technologies, was acquired by IBM. SimpliVity started selling its products in early 2013, and Kempel says the company is on track to "eclipse double digits [in the millions]" in revenues in its first three quarters selling product. Prior to this fall, the company had raised $43 million in two series. Investors included Accel Partners, Charles River Ventures and Kleiner Perkins Caulfield & Byers; as well as Kempel, who self-funded the company for its first year. Most recently, SimpliVity announced an oversubscribed Series C funding co-led by Kleiner Perkins Growth and DFJ Growth, with Meritech Capital Partners and Swisscom Ventures also participating.

Today, SimpliVity's total addressable market matches (or exceeds, depending on how you measure it) that of VMware, "which is the primary hypervisor that we support," says Tom Grave, the company's vice president of marketing. "The VMware slice alone is probably at $30 billion dollars of annual infrastructure...and then you go much further than that," he says. SimpliVity caters to companies that range radically in size: from dentist and law offices to manufacturing facilities to huge telcos, Kempel says. As of now, they have partnered with nearly 100 companies to provide their infrastructure integration services.

company | url | ceo | sector | country | vc$

Though most of SimpliVity's clients come from the United States, 15 percent to 20 percent hail from Europe, where according to Kempel, they began operations this past April. "And we just closed a deal in Africa," he says. SimpliVity, located in Westborough, Massachusetts, is currently concentrating on growing quickly, Kempel says. Adoption rate of the company's products has exceeded expectations.

Putting both big words and buzz words aside, SimpliVity makes peoples' lives easier, as it facilitates simpler solutions to infrastructure issues and emancipates employees from drudge work. Jon Bartelson, assistant CIO at Worcester Polytechnic Institute, believes SimpliVity delivered a couple of his staff from days of labor on a project. "If we...built out this document management infrastructure on our own from scratch, it probably would have taken us a number of weeks to get the baseline infrastructure set up," he says. "Whereas we had the SimpliVity engineers in here to do the deployment in a single day...so that would [have] saved probably two staff people...[about] 60 to 80 hours of physically moving equipment around and connecting it, configuring it."

Though what it does can be hard to explain, the reasons to use SimpliVity's technology aren't. "We don't have to spend extra money on storage because the data's deduplicated and it simplifies our backup processes pretty significantly," Bartelson says. "I'd say in a nutshell the data deduplication, the backups, and the reallocation of my staff resources were the big hitting points for us here." RH

Skybox Imaging

www.skyboximaging.com

Thomas Ingersoll

Big Data/Storage

California

Yes

» Skybox Imaging offers a high definition video of the earth which derives unprecedented data only visible from space. Integrating web technology and a networked constellation of microsatellites, the company enables affordable, reliable and frequent high resolution satellite imagery. As the company explains on its website, the company's goal is to "empower commercial and government customers to make more informed, data-driven decisions that will improve the profitability of companies and the welfare of societies around the world."

The company uses inexpensive consumer hardware to circle the earth with a planned constellation of more than 24 satellites that capture every meter of the earth with high resolution imagery. It enables real-time imagery of the same spot several times per day. The company can spot the number of cars in every parking lot of a commercial franchise, or the number of fuel tankers in a particular region, for example. It can track the rate of electricity in a developing country, and estimate the economies of any place on earth, purely from the photographic data streamed from its satellites.

Skybox Imaging was founded in 2009 by four Stanford graduate students. They first teamed up to compete for the Google Lunar Prize and the $20 million the web giant had offered to the first team that could land a rover on the moon and send back pictures. Though the award was canceled following the financial collapse of 2008, the team did design a satellite the size of a dorm fridge that used software based systems for easy integration and linking of imagery and high definition video. The software enables the storage of large amounts of data that can then be processed and distributed over the web.

The company, based in Mountain View, California, is on track to launch its first two satellites in 2013. It has raised $91 million in investment to date. RH

SmartDrive Systems

www.smartdrive.net

Steve Mitgang

Other

California

Yes

» Vehicle crashes happen every five seconds in the United States, resulting in a fatality every 12 seconds. Over $230 billion are spent on collision claims, weighing down 2 percent of the US GDP.

Providing operators feedback based on analytics and driving behavior, SmartDrive Systems lowers collision frequency by 50 percent. Through the company's groundbreaking video and vehicle analytics platform serving largely commercial vehicle fleets, its clients save 60 percent of collision oriented costs per year, which translates to about $1,000 to $7,000 per vehicle per year in savings, to say nothing of the countless lives saved. Its impact on a 5,000 vehicle fleet is about $5 million per year. Spending about $500,000 per quarter before signing onto the service, the average SmartDrive customer's collision costs drop to about $125,000 after implementation, according to data from Aon, the global risk management firm.

"SmartDrive believes every commercial fleet in the world has an opportunity to save lives, save fuel, and materially improve their financial performance through driving optimization," said Steve Mitgang, CEO of SmartDrive.

SmartDrive's technology monitors driving performance through video recording and driving analytics directly derived from the vehicle's computer. The company installs two cameras in each vehicle- one focused on the road, the other on the driver. Rather than simply relying on accelerometer data that can result in false positives, SmartDrive ties directly into the CPU of the vehicle, which analyzes for acceleration, speed, throttle, and other factors. Certain driving behaviors prompt the cameras to record and store video, which is then viewed and analyzed by SmartDrive. If a driver is in error, the company then contacts the client and the driver with coaching techniques for better driving.

When it comes to accidents, that data proves invaluable, often for the sake of the drivers. SmartDrive captures relevant data that actually clears the commercial driver in 80 percent of cases. In 90 percent of collisions involving a commercial driver, the non-commercial driver is at fault, despite the fact that police cite the commercial driver 70 percent of the time. "Video is absolute proof of what was done wrong, but also what was done right," Mitgang said.

In addition to collecting data designed to increase driving safety, SmartDrive also monitors data to optimize vehicle efficiency. Its smartphone apps make a game out of fuel savings, keeping score on each driver while providing tips to improve. On average, the company is able to boost fuel efficiency for its customers by 10 percent.

The company specializes in commercial fleets, with a focus on transit and commercial trucks, serving about 250 customers with roughly 30,000 vehicles on its system. It has been growing an average of 90 percent per year. Customers include The Salvation Army, Loomis, and Ampco System Parking. Mitgang expects revenues north of $60 million in the next two years.

Founded in 2007 and based in San Diego, SmartDrive has raised over $100 million from Oak Investment Partners, New Enterprise Associates, and Stanford University.

"SmartDrive clearly leapfrogged the competition and is now in a position to further its lead as they continue to build upon what is already the most comprehensive and easily scalable product offering in the industry," said Bandel Carano, Managing Partner at Oak Investment Partners.

While there are plenty of fleet management tracking systems, no competitor uses video and data analytics directly tied into a vehicle's CPU system to track safety, Mitgang claims. The company has invested over $40 million in its IP with substantial barriers to entry, including time, investment and experience.

SmartDrive's potential is as open as the road. "Data analytics is the sleepy giant in the industry of transportation," Mitgang explained. A previous senior vice president of Yahoo's advertising products as well as CEO of Veoh, the Internet television company now part of Qlipso, Mitgang understands the importance of data analytics to the bottom line. When it comes to the highway, that value translates not only in dollars but actual life. The impact on a thousand unit commercial fleet is about $5 million per year, not even considering instances of wrongful death when the commercial driver is not at fault.

With over 300 million trucks globally, Mitgang estimates the addressable market in the US is about 25 million vehicles, not including the government sector. "I am convinced there is no doubt this will absolutely be a billion dollar company in the next few years," he said. RH

SnagFilms

www.snagfilms.com

Rick Allen

Entertainment & Media

Washington D.C.

Yes

» When Ted Leonsis retired from his position as vice chairman of AOL in 2006, he pursued one of his passions and made a film. As with most of his previous projects, the film, a documentary called Nanking, was a success. It was accepted into the Sundance Film Festival and opened on the event's first night. It was then bought for distribution by a studio. It was then that Leonsis realized how broken the independent film industry was, and set about fixing it with technology.

"I shot the film in digital and then the studio told me it was going to convert it into analogue, which was amazing to me as I'd spent my career turning analogue things into digital services," Leonsis says. "It was January and they told me that my film would be distributed in December, and it would take literally almost a year to get it into cinemas. Then there were 8,000 movie theaters in North America that had 30,000 screens, and only 500 of those screens would show documentary or independent films."

"You make a movie, you wait a year and then you have to market it and advertise and promote it in newspapers. So I just said there's got to be a better way."

Leonsis, together with Rick Allen, created SnagFilms, a New York-based website which is the largest distributor of independent film that features a social media platform to provide the viewer recommendations of what to watch and an enhanced viewing experience.

The website makes intelligent recommendations for its users using a range of factors. "First is the content of the films themselves, we've really tried to be as resourceful as possible on the metadata we have on each film," explains CEO Rick Allen. "And then the algorithm gets smarter based on the individual's viewing habits and also what their friends are viewing."

"And then human intervention, in other words we've put a kind of editorial sensibility into it as well," he says. "So we're providing a range of pathways for folks to find a way into a very large collection, there are now more than 5,000 films in the library."

The SnagFilms collection of films can be viewed on its website, and also on a huge digital network of affiliated websites which include Hulu, IMDB and YouTube. For those making the movies, the rewards are plenty.

"It's been great working with them, I've been very happy," says Les Guthman, producer, director and executive producer of Outside Television. "They've gotten our films on Hulu, on Epic films in Europe, all of the means of distribution. That's something that has been extremely valuable for us. We're on every mobile phone and tablet, our viewership increases every quarter, our revenues increase every quarter for the most part."

SnagFilms has a number of revenue streams. Firstly, the films hosted on the website are done so on an ad-supported basis. There are single pre-roll ads and mid-roll ads every 8 minutes to 10 minutes, similar to Hulu. The company also provides a small set of films to paid platforms, which are made available to users who are subscription holders of those sites. SnagFilms also licenses films for television, theatrical release and for DVD release. Finally, the firm's technology has become widely prized in the media sector, so the company has begun licensing out some of it on a business-to-business basis.

The company helps to revive interest in independent and documentary films. "I think the cold truth is that the documentary-making film business is almost dead with some very obvious exceptions," Guthman says. "But this [revival] was part of Ted's original concept for SnagFilms, and I think it's absolutely great, that this gives a means of distribution."

"There will come a time very soon within five years where we will be able to raise money for documentaries based on the online distribution. Even five years ago when they started SnagFilms we didn't have tablets, now you have a great opportunity to create a production model for making documentaries. I know that SnagFilms has enterprised a few documentaries already. The time is coming because I think they're poised to take off, I'm very sure of that," he adds.

Leonsis points to other factors in addition to SnagFilms that are helping the documentary-making industry take off again. "You have Kickstarter, which is helping filmmakers get films financed and you'll see a lot of work there, and we're really the first company to create a home for independent filmmakers and documentary film makers," he says.

According to Allen, the company has been doubling revenue every 12 months and is now aiming to accelerate further, particularly with the launch of the new site. "We want to learn from people's reactions to the new site because we're rolling out all this functionality and design and new content ... and then we'll take the best aspect of that and roll it across to our applications in the mobile and home environments," he says.

This young company has already done wonders for a struggling industry, but its ambitions do not stop there. "I would like Snag to develop a library that is as large as some of the biggest cable companies out there, and I would like us to go from primarily a North American destination to a global destination ... I think we should become the place where if you love independent films and documentary films then we're your go-to place as a consumer to watch and share all these movies," concludes Leonsis. RH

Snapfinger

www.kudzuinteractive.com

James Garrett

Internet/Online

Georgia

Yes

» In the 21st century, customers want websites and other media to know their habits. Personalization ramps up engagement and even re-establishes consumer loyalty. Los Angeles-headquartered EMN8, which acquired Georgia-based ordering portal Snapfinger, provides companies with engagement and CRM solutions that pique customers' interest and provide measurable returns for restaurants in the quick service and fast casual space. Now, the company emerges with a new name, Tillster, meant to evoke mobile, millennial agility as well as unite EMN8 and Snapfinger.

EMN8 acquired Snapfinger this past summer, almost half a year before the rebrand and after raising $50 million in growth capital. The round, led by Sid R. Bass Associates with Allegis Capital participating, enabled EMN8 to both snap up Snapfinger (now a wholly-owned subsidiary) and to further pursue domestic and global development. Prior to that funding, Snapfinger's parent company Kudzu raised $7 million for Snapfinger in a 2010 Series B round led by Norwest

Venture Partners. Snapfinger CEO Jim Garrett says the company had raised about $15 million in all. In the nine years since founding, Snapfinger has provided services to upwards of 8 million people in 5,000+ localities.

Tillster CEO Perse Faily knew a combined EMN8 and Snapfinger would reach and serve a wider audience of restaurateurs. "Snapfinger had a significant footprint in fast casual; we had a significant footprint in quick service restaurants," Faily says. "We felt that coming together, we would really be the undisputed leader in serving the needs of what I call multi-unit restaurants."

Garrett, now Executive Vice President and Chief Revenue Officer of Tillster, also believed their companies were complementary. "What I [have] set out to do is to put together the types of companies that can deliver a comprehensive solution to the industry across all devices, regardless of venue, and focus on bringing together the power of customer data and customer engagement across the ordering payment and frequency, loyalty process," Garrett says. "EMN8 and Snapfinger is just phase one of that building block."

Now, newly-rebranded Tillster leverages a comprehensive platform of products and services. The company handles ordering, delivery, marketing and analytics for its clients, more than 40 of the industry's biggest players. They integrate solutions through mobile, tablet, online, call centers and kiosks, and make payment smooth for restaurant-runners, no matter which channel it arrives by. "What we have evolved and developed is a digital store platform that has ordering as one component, a second component is a digital couponing engine...the third component is loyalty," Faily says.

Tillster concentrates on the multi-unit ecosystem, franchise restaurants and chains like Applebee's, Pizza Hut and KFC. Through the company's products, customers can place orders transmitted directly into restaurants' point-of-sales systems. "We have over 15 POS integrations covering the vast majority that are in the marketplace," Faily says. "When a consumer places an order,[it] goes all the way from our system into the point of sale and appears in [a restaurant's] kitchen display systems." The company monetizes in two ways: first by taking a cut of transactions (competitive percentages lower than industry challengers, says Faily) and by operating CRM platforms for clients like Burger King, who taps Tillster for email and mobile marketing programming.

Tillster faces a massive total addressable market as it offers companies different services and penetrates an immense, international fast food and quick service industry. Faily says 2012 saw 30 billion U.S. fast food orders and 100 million globally, and measures the American fast food segment at $160 billion. "You're talking about a market that is $300 million, $400 million in terms of multi-unit side," she says. Plus, more customers are looking for digital solutions to marketing, couponing and loyalty issues around the world. Research conducted in Paris put half of customers keen to order food via digital methods, and 40 percent alleged personalization elements would bring them back to restaurants. If a brand remembers customers' favorite dish and helps them order it conveniently, across channels and locations, they'll tie themselves to that company. Tillster turns those Ifs into Whens.

Though the online ordering and restaurant marketing segment may seem saturated, Faily says her company faces no competition when customers consider the total package Tillster offers. They don't do battle with strictly ordering-oriented portals like Seamless and GrubHub, but rather with the various fixes clients employ. "[Competitors] may have loyalty solutions, they may have a couponing solution, or they may have an ordering solution," Faily says. "We bring the entire platform [that] makes it much easier for them to deploy these solutions."

In coming quarters and years, Tillster will grow both at home and globally. Faily expects that by 2014's end, half of all business coming to the company will arrive from outside the U.S. Right now, the platform focuses on APAC (specifically India through the China basin, Faily says) as well as expanding further into Europe. "We will be live in Q1 and Q2 next year, specifically around Hong Kong, Vietnam, Thailand, and some other Asia Pacific markets," she says. The second half of 2014, she continues, Tillster will reach out to Latin American markets.

A new brand name and insight into global demand will ensure Tillster sticks to an upward trajectory. Though EMN8 was listed as pre-IPO, Faily says the company now targets new markets, continuing to scale. However, Tillster bucks a trend sometimes associated with growth-stage companies: small revenue gains during periods of intensive expansion. "We're seeing 200 percent year-over-year growth in terms of revenues," Faily says. "And what we're expecting in terms of next year is probably closer to 300 percent growth year-over-year."

Spring Mobile Solutions

springmobilesolutions.com

Conor Keane

Software

Virginia

Yes

» Spring Mobile Solutions feels for field representatives: company operatives whose jobs take them out of the office. The company's mobile applications enable employees to interact with data even when they are offline; which is crucial for workers roaming cities recording product orders and other information.

Top 100 Companies: North America

Field representatives check up on customers (consumer goods companies, pharmas, banks, etc.) for answers. Do clients have everything they need? Are products displayed on the right shelves? Reps often use mobile devices to record orders, take pictures and collect data on their visits. But when the Internet connection is bad, a pen and paper replace high-tech solutions. The worst part: when the network is down, workers have no way of knowing whether products clients order are in stock or priced properly.

Spring Mobile Solutions makes its mobile apps accessible offline, allowing representatives to do business where others cannot. In addition, the company's comprehensive application platforms give employees the tools to complete all kinds of on-the-job tasks, no hassle. "We provide apps to those people in the field to be able to do their job," says CEO Conor Keane.

Spring Mobile Solutions collects, houses and deploys data to make the jobs of field representatives easier. The company's prepackaged applications allow employees to not only process transactions "on the fly," Keane says, but to recommend related products at the point of sale. "Usually we can push additional collateral [to] that [rep] onto his device, and we can talk to the store manager about new products," Keane says. "So I'm pushing information into the hands of that salesman, enabling him to be smarter."

Their mobileRetail app walks field reps through drop-ins, recommending what to look for and establishing connectivity between scouts and the home base. "It's a guided execution for that visit," Keane says. "[If] his job is to check that stock is in the right place...he would go to a series of checklists in our app and gather the information, take pictures of the display, send all that back to head office [that] then can see in real time." Spring Mobile's other products include sales, delivery, and distributor insight applications, as well as a mobileCloud Application Suite.

The company owes its origins to Sao Paulo, Brazil. Founded in 2001, Spring Mobile started out building custom apps and switched to prepackaged apps to match marketplace demand. Most of their roughly 500 customers come from Latin America and western Europe. Spring Mobile's largest client is Unilever in Latin America; other customers include CPG (Consumer Packaged Goods) brands like Kraft, L'Oreal, Nestle and Red Bull. The CPG market could swell to $2 billion, according to the company.

Investments meant the company lost out on profitability this year, but Keane says next year Spring Mobile will see plus signs on the books. "[This year,] revenues will [be] about $80 million USD. And we expect to grow that dramatically starting in '14," Keane says. "With regard to profitability... the company essentially will be profitable in '14."

New Enterprise Associates partner and Spring Mobile Solutions investor Jon Sakoda reports the company's total funding at $94 million and said major investors include Goldman Sachs, SAP Ventures and NEA.

Unlike many companies that start in the United States and branch out from there, Spring Mobile Solutions tapped opportunities in Latin America and Europe, then turned their focus elsewhere. In September 2012, the company moved into its "permanent U.S. headquarters" in Reston, Virginia, according to a related release.

Sakoda says the United States came late to the mobile party. "In the U.S., we had this Software-as-a-Service revolution, and so most U.S. companies were fixated on Software-as-a-Service," he says. "In Latin America, they skipped Software-as-a-Service and they went straight to mobile software."

According to Keane, the U.S. is unique in its attitudes towards mobile development, and Spring Mobile is now adapting to the market's particular needs and levels of concern. "I sense that we're in a position where we end up educating [the U.S.] on mobile...about offline and usability," Keane says. "We're finding we're having to do a certain amount of education which is a good thing, we're happy to do it, it just means that we find adoption is slower than we had hoped," he continues.

Spring Mobile helps its clients ramp up employee productivity. According to company research, reps complete 30 percent more visits per day using Spring Mobile's applications, ensuring the company is a friend to both field reps and the corporate offices they belong to. "We are in the early, early innings of mobile software, and every single business application has to live in a mobile-first workforce," Sakoda says. "There's a lot of business applications that need to be written for mobile, and Spring is one of the best-positioned players to do that."

SS8

www.ss8.com

Dennis Haar

Security

California

Yes

» The increasing sophistication of cyber crime has spawned countless new industries, all involved in securing the web from immoral users. One of these industries is surveillance.

SS8, which stands for safeguarding society always, provides the tools to legally monitor public and private networks. Its technology has the ability to interact with any kind of network or equipment, such as a device, switch or router, thanks to extensive partnerships with providers such as Alcatel Lucent, Ericsson and Cisco. Its tools are used by police agencies for investigative work, as well as by enterprises to identify cyber crime taking place inside of their networks.

"We provide solutions that cover a comprehensive communication intelligence solution in a very structured manner that can be used as forensic evidence in a court of law," said Dennis Haar, CEO of SS8. "That has been a big key to our success."

According to Mr. Haar, SS8 differentiates from industry leading competitors such as Verint and NICE Systems by focusing not only on voice but actual data. "A lot of network providers are only beginning to move from a traditional TDM network to an I.P. network," Mr. Haar said. "SS8 is on the cutting edge of navigating I.P. data. We became experts in how a network operates, how packets flowed through network, how we can retrieve and reconstruct them. That ability honestly comes from fact that we are a silicon valley based company with a focus on packet capture and analysis, and we turned that into a system."

Stemming from a 2001 acquisition of a company that started in this business in the late '90s, SS8's monitoring tools are deeply entrenched. It began with its first product Xcipio, a lawful interception system that enables service providers to service warrants from law enforcement agencies. The tool can handle an entire network with a single warrant entry that can be managed by multiple police organizations.

Last year, SS8 introduced Intellego, which serves as a monitoring center and reconstruction and analyzation system for voice and data communications. It sells the system to law enforcement agencies to analyze intercepted communications, but can also service enterprises to analyze activities on their own networks.

The Intellego tool opens SS8 to a third market, the enterprise world, which Mr. Haar described as "a very exciting opportunity" as there is a growing requirement for companies to monitor their network for illegal activities, whether fraud or insider trading . "We can help these companies identify criminals working inside their networks perpetrating these crimes."

The company serves customers in 35 countries around the world, with a heavy presence in North America, Latin America, Western Europe and Asia. Its business has been growing between 25 to 30 percent per year. About 70 percent of its base includes service providers, and 30 percent are government agencies. Its enterprise opportunity is just beginning, Mr. Haar said. "The potential for the enterprise is huge, and will probably become our largest segment over time."

Based in Milpitas, Calif. and employing 150 people, SS8 strives to become a $100 million business over the next three to five years, according to Mr. Haar. Since restructuring to focus solely on security in 2009, the company has raised two rounds of funding totaling $22 million. It is considering another round within the next year to build its market on the Intellego product.

"We've built a broad, end to end solution that includes the network side as well as the analytics," Mr. Haar said. "As the world increasingly revolves around networks where communication becomes so intensive, we'll see a tremendous shift at how policing is done. We are just at the beginning of a massive change that will transform the world."

Taykey

www.taykey.com

Amit Avner

Marketing/Advertising/SEO

New York

Yes

» Taykey's advertising engine determines what specific audiences are talking about in real-time, and then purchases advertisements in mediums relevant to those topics. If Britney Spears is the latest gossip for 18 to 20 year olds because of a new video release, for example, the company will purchase adverts on blogs, Facebook pages, and fan sites related to Britney Spears. When the conversation switches to the iPhone or Justin Bieber, Taykey follows on the cusp of each trend.

"Taykey finds what their audiences are talking about and put them the middle of the conversation so they are always prime time," explained Amit Avner, CEO of Taykey. "Up until now, advertising has always been planned, but plans fail to keep up with the social world. We help advertisers plan for the unplannable. Brands become more agile as their ads become more responsive to what people are talking about and sharing all the time."

One client, a recently launched mobile carrier, used Nielsen stats to measure its campaign, and found Taykey to be the number one provider in brand recall. Taykey improved results by 16 percent compared to any other provider, and ranked as the number one service in terms of actual purchases made, delivering a jump of 41 percent against any other competitor.

Taykey features three products dedicated to social, video and display and targets the 10 to 20 percent of any advertising budget that needs to be responsive and dynamic in real-time. Estimating the overall advertising market at $100 billion, Avner pegs the company's market valuation at $20 billion.

Taykey works with over 120 clients, mostly Fortune 500 companies, including GE, American Express, Paramount Studios, ABC, Miller Coors, Bell, and Mercedes. Most of its base is in the US, but it recently opened an office in London to launch its international expansion. It plans to open additional offices in the U.S. and Europe over the next year, and target Germany, Holland, and France. The company has been growing at a staggering 450 percent annually.

"Coca-Cola sells over 1.7 beverages per day across 202 countries," Mr. Avner said. "The last thing they know is how to react to all those conversations across diverse audiences. Facebook and Twitter are constant sources of chatter, and it takes technology to make sense of it all. We are at the right place at the right time."

Mr. Avner launched Taykey shortly after serving his mandatory stint in the Israeli army. He had a background in coding and building websites, and realized the trove of personal information people were sharing on social sites. "I realized if I could aggregate what people were talking about in one spot, it would be very valuable," Mr. Avner remembered. He soon observed that data alone was not enough. "I realized people didn't need another screen of big data. They needed tools to make sense of it. So we built a platform that could optimize, change and execute base on what people were talking about in real-time, and what they would talk about next." The platform was built in two and a half years.

Taykey currently earns eight digit revenues and plans to reach profitability in 2014. The company partners with Facebook, Twitter, Google, and other social tools for real-time inventory, but has yet to face any real competitors, Mr. Avner claims. It has over 10 patents protecting its technology. "Just seeing what people are talking about is easy, but excavating known data is very hard," Mr. Avner said. "Companies like Salesforce's Radian6 can help you with the data, but they don't tell you what to do with it because that is very difficult. We're really not worried about any competition."

Based in New York, Taykey has raised $17 million from Tenaya Capital, Sequoia Capital, SoftBank Capital, and Marker.

"Taykey is creating a new channel for advertising to enable brands to be agile and responsive to what their audience is paying attention to in real time," said Douglas Leone, General Partner of Sequoia Capital. "Their revenue and talent growth in the last year proves the market's desire for topical advertising."

Avner strives to build Taykey into a billion dollar business over the next two years.

"We are doing something very unique," he said. "We have the right technology with the right solution everyone needs. It's now a matter of letting people know it exists."

Tealium

www.tealium.com

Jeff Lunsford

Hardware

California

Yes

» Tags collect crucial information for digital marketing vendors, but implementing them can create problems. Tealium puts tag management back in the marketer's domain with a single tag, to the relief of companies' IT departments.

Founded in 2008, San Diego-based Tealium radically simplifies the tagging process for marketers. "We built a single tag solution that allows our customers to deploy a single tag on their website," Tealium co-founder Ali Behnam says. "Through a management console, a business user can log in and automatically deploy all the different tags...analytics, advertising, affiliates and whatever else."

Tags tell digital marketing vendors what's going on with their clients' websites and collect data that give color and context around online marketing performance. According to Tealium, tags are bits of code that can help with advertising and affiliate programs, provide analytics, and incorporate personalization services onto pages. In small numbers, tags won't give marketers too much of a problem; but as marketers mature, the number of tags they need to deal with increases. More tags equal increased IT costs, lack of marketing agility, and a negative effect on site performance, Tealium says.

In the past, tag implementation fell to technology departments, who rolled up their sleeves and dove into code. "Asking a web developer to do tagging for you is like asking a Cordon Bleu chef to prepare your grilled cheese sandwich," Behnam says. "It's grunt work." Marketers wanted to measure analytics, and IT had no problem passing the tagging torch; but both faced limited options as tag management required a technical touch.

Belying a complex problem, Tealium provides a comprehensive and easy-to-use solution for marketers. From last year to this year, their client base doubled to 300; Behnam hopes to double that number again in the next year. A growing list of customers meant financial growth in 2013, and the first half of the year saw a 280 percent increase in revenue for the company. Tealium sizes their total addressable market at $2 billion, and as of August served big-name companies like Lufthansa, The Weather Channel, Vodafone and others.

Behnam, his co-founder Michael Anderson, and much of the Tealium team worked together previously at WebSideStory, a digital marketing and web analytics company eventually acquired by Omniture (now part of Adobe Systems). Tealium evolved from Behnam and Anderson's post-acquisition web analytics consultancy charged with resolving confusion faced by companies switching from WebSideStory's tools to Omniture's. IT departments said swapping systems would take a long time — in one case, 12 to 14 man-months. "Really we're talking about [migrating] from one tag to another," Behnam says. "So we came up with...what we called universal tag at the time, but the idea is, look, it's ultimately not about the tag, it's about the data."

The company recruited industry vet Jeff Lunsford to serve as its CEO in 2013. Lunsford's history with Behnam and Anderson preceded Tealium, as he'd successfully taken WebSideStory public after a failed attempt by other leaders. "I knew if we had Jeff involved he would be able to connect us to the VC community and to guide us properly on how to raise money," Anderson says. When they decided Tealium had traction, Lunsford sent them to meet a VC contact in the Bay Area.

"Ali and I jumped on a plane, put on a suit and a tie and went out there. By the time we landed Jeff had lined up seven meetings," Anderson says. "It was premature at that time because everybody wanted to give us ten million dollars...but it was great experience for us to be in front of the VC [community]."

"More importantly from a strategic perspective, we laid the groundwork of what we intended to do and what we intended to build...when we came back to them six months later we could show them whether or not we were successful," he continues.

Lunsford and other private investors funded a $1.1 million round in January of 2012. In the summer of 2012, Battery Ventures pumped in $10 million of a $10.5 million Series B. Both the funding pot and investor base grew this past April when Tenaya Capital led a $15.6 million Series C round, with Japanese firm Presidio Ventures and Battery contributing.

Battery's Neeraj Agrawal says he was drawn to Tealium's team and their disruptive technology. "What they're actually providing is this kind of data abstraction layer," he says. "People want to spend comparable amounts on tag management as they are willing to spend on say, Omniture for web analytics. If you look at Omniture today within Adobe, it's probably a $500 million revenue business, and we believe that Tealium has the same opportunity."

Agrawal says Tealium's market opportunity, with its similar size to that of web analytics, is what brought Lunsford on board as CEO. "He talks about the market opportunity...exactly in the same way I just described it, which is: there's no reason this market won't be as large as web analytics which produced billions of equity value for investors," Agrawal says. And with Lunsford at the company's helm, Behnam says Tealium's on its way to a public offering. "We are now on the path to IPO thanks to his joining the team," he says. RH

Teladoc

www.teladoc.com

CEO Jason Gorevic

Other

Texas

Yes

» Wake up on the wrong side of a cold tomorrow morning, and you might spend several hours in a waiting room the next day, hoping for a doctor. Or you could call in Teladoc and interact online with a physician licensed to practice medicine in your area, all inside a median response time of eight minutes, for a cost of $38. The company guarantees a patient with a board certified, state licensed physician within one hour or it's free.

Teladoc is the nation's first and largest telahealth provider. The company connects patients to board certified physicians licensed in the patient's location within eight minutes of the initial call placement. It is designed to supplement, rather than replace the family physician. Patients connect over the phone, or in states that allow it, over the Internet through a smartphone, tablet or PC. The physician makes a diagnosis through the conversation or by looking at various symptoms shown through video. She can then prescribe medications electronically. Payments are also electronic, done at the time of service, saving the physician the hassle of billing the transaction.

The process is not as easy at it appears. Teladoc's platform navigates the complex medical regulatory environment, and then uses sophisticated tools to assign the best suited physician, who must be licensed to practice in that particular patient's locality.

"Our business seems simple on surface, but not it's not that easy or others would already be doing it," said Jason Gorevic, CEO of Dallas-based Teladoc. "Often, interesting innovations in the medical space have not taken off because of the lack of a full service solution enabling adoption by the patient and doctors. We are a true clinical services company that uses technology to deliver a remedy."

The company's adoption rates prove it is onto something. Serving over 5 million members, Teladoc does 12,000 consultations a month, with plans to do over 150,000 this year. Its adoption rates have dramatically increased by 125 percent year over year. For the past three years, the company's membership survey has indicated a 91 percent resolution rate. 350 doctors are on the platform. The physicians are typically semi-retired, emergency professionals on downtime, or doctors looking for supplemental income.

The company typically works with large employers or insurance plans. Customers include AT&T, MetroPCS, Aetna, and BlueShield of California.

The company is north of $10 million, south of $50 million. Revenues last year grew at 74 percent, and this year at 80 percent.

Founded in 2003, the company has come a long way from its beginnings. "The platform looked like it had been designed in a dorm room, because it was," remembered Gorevic when he joined the company in 2009. "It was a good idea but had a lot of fleshing out to do." A self-described "recovering health plan executive" who formerly was president of Empire BlueCross BlueShield, Gorevic brought experience of the healthcare industry to the company. He optimized the platform for scalability, and began to bring on new health plans to expand its client base, whereas before the business had focused solely on direct employer sales. This past year, it expanded into hospitals.

Teladoc recently formed a partnership with Healthspot, a manufacturer of healthcare kiosks, to establish medical kiosks in corporate and retail settings. It expects the kiosks to be on the market by the end of the third quarter.

The company has raised $40 million from Kleiner Perkins Caufield & Byers, Cardinal Partners, HLM Venture Partners, Trident Capital, and New Capital Partners. It expects to be cash flow positive by next year. Gorevic envisions Teladoc becoming a $100 million company within the next three to four years.

Teladoc holds an excellent market position due to a number of trends, including more mobile population, increased smartphone usage, need for 24/7 access to care, 30 to 40 million newly insured (most without a primary care doc), many using the ER as their primary care vector at a cost of $1000+/per visit, employers interested in increasing productivity and enhancing health benefits at a reasonable cost, according to Dana Mead, a partner at Kleiner Perkins Caufield & Byers who sits on Teladoc's board of directors.

"While I wouldn't characterize the service as disruptive, Teladoc[s applications can be disruptive, in that they enable highly quality, rapid access to highly trained healthcare professionals 24/7 via a PC or mobile phone," Mead said.

The company competes against 1Life Healthcare and American Well. RH

TouchCommerce

www.touchcommerce.com

CEO Bernard Louvat

Internet/Online

California

Yes

» Typical website conversion rates are less than 3 percent. TouchCommerce's website personalization targets the portion of the ecommerce audience that disappears into cyberspace.

The company targets high value ecommerce segments where the insight of a salesperson might help the customer make up their mind, such as insurance packages, luxury vacations, high-end retail items, and other valuable commodities that could require research before purchasing. TouchCommerce works to not only provide a personalized experience to better optimize sales, but to identify when it is time for a salesperson to step in to answer questions or advocate a sale.

The company provides an online personalization engine that targets user behavior to deliver personalized results at just the right moment. Its software places a cookie on a user's browser to observe the user's interaction, which products they are interested in, areas of the website they tend to linger, offerings they still need to make up their mind about. It then modifies the webpage to offer personalized content. Finally, its software follows the interactions of the user to determine when a salesperson is needed, providing an online chat option with a sales representative when the self-service model has broken down.

TouchCommerce provides a highly sophisticated targeting engine that can segment a population to deliver personalized experiences. It creates engagement applications like personalized content, targeted marketing solutions, a live assistance solution like chat or call back, and a survey engine to gauge customer satisfaction. The company also enables co-browsing which allows the customer service representative to view the webpage the user is visiting.

Typically, TouchCommerce can improve the revenue of a website by 20 percent without any increase in traffic. Customer satisfaction with the service is typically 90 percent. Fully deploying the company's technology typically drives customer costs down 20 percent.

"The results we deliver for our clients are significant," said Bernard Louvat, President & CEO of TouchCommerce. "We retain 95 percent of our client base every year. In the markets we target, this level of personalized customer service is essential. Customers expect it. Without anyone on hand to answer their questions, you'll lose them to a competitor."

TouchCommerce monetizes through a monthly fee for technology and services, as well as a performance pricing component based on measurable results. It's this key difference that separates it from competitors such as LivePerson and Oracle, Louvat stated. "We are tied in with the client for the success of the program," Louvat said. "It's a unique model. We work every day to optimize the platform, and mutually benefit from the upsides our service provides."

Focused on large customers, the company counts 10s of customers, not 100s, because its model best suites enterprises. Its top line revenue grew 35 percent last year. Operating in 15 countries, its focus includes North America, the UK, France, Germany and the Asia Pacific regions.

The company was founded in 1999 originally as InQ, offering web chat services for ecommerce sites. After landing Sprint as a customer in 2006, the company developed its approach to streamline sales service for ecommerce, rebranding itself as TouchCommerce in 2008. Early customers include DirectTV, Bell South, and Virgin Media.

Based in the US with offices in Los Angeles, San Diego, Paris, & London, TouchCommerce has raised $35 million in venture funding from Sierra Ventures, Emergence Capital, Hudson Ventures, Dolphin Equity and Partech International. It earns between $30 million to $40 million in revenue at a 10 percent profit margin.

"What makes TouchCommerce unique are the results we achieve and the business system we've designed to achieve those results," said Jeffrey Stiefler, a venture partner for Emergence Capital Partners who serves as Chairman of TouchCommerce's board. "Some firms provide only software and leave it up to the customer to figure out how to use it effectively. Other firms provide consulting or analytical services that provide advice, but not results. Almost none tie their results directly to those of their customers. This unique approach has allowed us to optimize — not just improve — results for some of the world's leading companies." RH

UniversityNow

www.unow.com

Gene Wade

Internet/Online

California

Yes

» Higher education hangs by a thread on the brink of a cliff, a $1 trillion cliff to be exact. Student debt has surpassed the trillion dollar mark, outpacing credit card debt in a bubble reminiscent of the housing crisis. Institutions continue to rely on expensive outdated models while public funding gets gutted, forcing not only the student but an entire society to carry a debt that outweighs the gross domestic product of most nations.

UniversityNow slashes costs by redefining the educational model. The social based venture is the parent company of two universities, Patten University and New Charter University, that provide competency based education, meaning a student's degree is based not on seat time in the classroom, but on a demonstrated mastery of the required skill set. Skills based, the education is obtainable at a market-transforming affordability.

Through its use of online lectures, discussions, and tutoring, the company brings down the cost of a college education to $11 a day, or $199 per month, essentially providing an accredited college degree for the price of a cable bill.

At $3,948 annual tuition, an employer assisted tuition benefit of $5,250 means that most students with employer assistance can pursue their degree for free.

Yet the company is different from most online higher education offerings because it delivers real value without diluting the quality of the education attained, contends Gene Wade, Founder and CEO of UniversityNow. If 30 students take an online course for $1,500, contributing a combined tuition of $45,000, minus perhaps $3,000 for the online instructor, where does the remaining $42,000 go, the educational innovator questions.

"It just doesn't cost that much to educate people online," Wade said. "We saw enormous opportunity to lower the price point. By doing so, we are changing the paradigm as well as the assumptions of how people learn."

UniversityNow was the first educational entity to refuse Title 4 funding, freeing its students from the financial aid requirement of taking a full course load, which helps them better accommodate a part-time schedule that can accommodate a career or family, Wade argues. The company lowered its acquisition costs with practically no spend on marketing, and empowers its students with data-driven adaptive learning software that details the areas students are having trouble with and what they need to learn. Taking exams are considered a privilege, not a deadline, which students may only take once the program knows they can pass. "The days of sitting around campus playing Frisbee in between classes is not the reality of students today," Wade explained. "We provide a better experience for people."

UniversityNow was first launched in 2010 when it acquired Patten University. It assembled a software team to develop its digital educational model. In 2012, it launched New Charter University, its flagship school that is 100 percent online and fully accredited by the DETC Accrediting Commission, the same crediting body that validates the University of California or the USC. It launched Patten University Online in March, and started accepting students in June, with several hundred students enrolled, signing on an average of about a hundred a week.

The company has raised a total of $42 million from Bertelsmann SE & Co., KGaA and First Analysis Corp., University Ventures, Bertelsmann, Kapor Capital, Novak Biddle Venture Partners and Greylock Partners.

"UniversityNow is leading the way in ushering in the next generation of online degree programs," said Corey Greendale, Vice President at First Analysis. "Given its technology and business model, it is uniquely poised to transform the higher education landscape."

About 5 to 7 percent of its enrollment is international, with students coming from Asia, India, and Africa. It should be earning revenues in the 10s of millions of dollars soon and is approaching profitability. UniversityNow intends to eventually extend its model to a larger global community.

"We have a really decent shot at being one of the most significant education companies in the US, possibly the world," Wade said. "It's not because we're geniuses, but because we showed up at the right time with a model that meets the market. We are offering education for a dime when the current system charges a dollar." RH

Vantrix

www.vantrix.com

Jim Knapik

Mobile

Quebec

Yes

» The explosion of video content being downloaded and uploaded via mobile devices has led to an unprecedented amount of pressure being put on network providers. As a result network optimization firms such as Vantrix, have been experiencing rapid growth, while providing the networks with answers.

Vantrix originally found an interesting niche aiding the delivery of multi media messages. A lot of messages were not deliverable as the sender wanted them to be seen, sometimes due to different device capabilities and screen sizes. Vantrix's original solution helped solve that by transforming how the message was composed by the sender to ensure that it could be viewed at the destination and deliver the messages with the right music, pictures, video and the right size.

"Where we find ourselves today is continuing to leverage that capability but in a much broader fashion," says Jim Knapik, CEO of Vantrix. "We're continuing to support that product line. But what we've done is we've adapted our capabilities in understanding in transforming media, not only to ensure that it shows up the right way on a destination device, but also to adhere to the policies that the operator sets forwarded."

Those policies include the prioritisation of different types of media, as one example. A large number of people have their applications set to automatically update. This means while there are other users trying to watch or stream a video, the automatic app downloads can congest the networks and make it harder for those watching videos to do so. Through the Vantrix platform, network operators can throttle and application download or delay it so users who need the higher latency more critically can have a better viewing experience.

Earlier in the year Vantrix announced the closing of a $4.5 million venture loan from NXT Capital's Venture Finance Group. The company revealed it was to use the capital to fund strategic growth initiatives. "We are excited to be a part of the Vantrix team," said Matt Eaton, Senior Associate, NXT Capital Venture Finance. "Vantrix's video bandwidth optimization solutions are backed by industry leading technologies that have been developed and honed through more than a decade of research and development."

Vantrix has positioned itself extremely well as the network operators experience a huge shift in attitudes towards their new services. "Things are changing so that operators want to ensure that they are making money rather than saving money," says Mr Knapik. "With the advent of LTE there is additional bandwidth available and it depends on the marketplace and the country and the specific location, but in some ways LTE is giving them some relief. That's primarily because some subscribers have moved from the previous technology to LTE and as a result it's kind of a shell game where the old technology has more subscribers and the new technology has higher bandwidth, but its likely to get congested as well because users continue to exceed the available bandwidth by embracing new applications."

The market is fairly crowded, but Mr. Knapik believes the company's history gives it an edge. "We feel quite advantaged in our background because from the beginning we've focused on multi media with predominance in video. We have a relationship with a university in Montreal called DPS where we have a joint development program with them, with shared support from the Canadian government. That allows us to really dive deep into techniques that allow us to process video more efficiently than any of our competitors."

Vantrix has expanded internationally and has installations in the Asia-Pak region, Europe and Mexico. The company is also starting to penetrate India and parts of Africa. The firm's goals are to keep expanding into new territories. "I expect increased penetration in regions around the world. I also expect us to be delivering the first versions of our platforms that allow us to take advantage of the graphics card processing within the Intel chipset, something that we've demonstrated up until now but we haven't deployed in a production situation," says Mr. Knapik. RH

Venafi

www.venafi.com

Jeff Hudson

Security

Utah

Yes

» For Venafi, data security's not about technology. According to the company, it's about protecting trust.

Venafi keeps eyes on companies' systems when they're not looking. Their next-generation cybersecurity trust protection solutions police access, checking the IDs of those (people, servers, virtual machines, clouds, mobile devices and more) requesting to enter or get information, the company says.

In order to protect companies from prying eyes and malicious attacks, Venafi watches over their cryptographic keys and certificates. Both keys and certificates are integral in establishing user and machine identity. "A digital certificate is used to authenticate, or to make sure that you know who the other person is that you're communicating with," says Jeff Hudson, CEO of Venafi. "They come from, in most cases, a third party that vouches for the authenticity of the person that holds the certificate."

Hudson says certificates also encrypt traffic, keeping conversations private. When individuals talk face-to-face, Hudson continues, it's easy to figure out if you're being watched or listened in on––but the Internet offers an incredible number of portals outsiders can access with ears to walls. "If you and I are typing something to each other on a keyboard, that's going to an ISP, it's going through servers, it's going through routers," Hudson says. "There's millions of places where people could actually be looking at and listening to that."

"Certificates open a door," he says, as do keys. Secure Shell (or SSH) keys allows data to proceed across secure channels and provide privileged access. Venafi connects to over 300 systems to patrol behavior and and squash threats to security.

When the web was young, certificates and keys could be managed easily through manual processes and in spreadsheets. After all, Hudson says, only one certificate existed in 1995. There are billions now, with a similar number of keys part of companies' security arsenal. Their explosive growth coincides with an enterprise's inability to maintain order for these privacy controls.

Venafi serves top companies in a massive, and growing, market. Gartner says the global security technology and services market is supposed to grow to $67.2 billion in 2013. They reported an 8.7 percent increase in the industry's size since last year. "We have like, a couple hundred of the top of the Global 2000 as our customers, all the big name brands you know," Hudson says. "They have tens of thousands of these things, and so what's happened is, they've lost track of things that authenticate, they've lost of track of these things, the idea of access."

That's a big problem for companies. Attacks involving malware that mimic or steal keys and certificates, then trick systems into letting them in, are up 600% this year––as they have been for the last couple, Hudson says. Companies aren't actively tracking their certificates and keys; and now they've been compromised.

"The bad guys have figured out that all of these little pieces that are out there that give access that aren't being tracked, and so they are exploiting that, they are attacking that, they're stealing it, they're creating the moral equivalent of fake drivers licenses for the digital world," Hudson says. The worst part: it's what Hudson calls the perfect crime. Villainous entrants fool networks into thinking they're supposed to be there.

While some companies have wised up, others just don't seem as concerned about potential attacks. Hudson says Venafi faces challenges in the form of companies unafraid of threats they can't see. "Technologists, that have grown up running these systems that we so much depend upon, don't think big," Hudson says. He describes a frustrating conversation with a senior IT executive where someone needed convincing that malicious data threats existed and could cause severe damage.

"He said, 'Unless I have proof that we've been attacked a hundred times, I can't worry myself about it. What I have to do is I have to pay attention to those things that are visible to me right now,'" Hudson says. "So I said, 'What you're saying is I'm telling you, you have early stages, or maybe even later stages of cancer but you don't feel it. So you're [ignoring] that and you're gonna pay attention to the hangnail on your little finger.'"

As web access becomes widespread and people trade a limited view of its potential for the Internet of things, attacks will only become more scary. Hudson, like others, sees our lives getting more and more connected. Tech could soon have the potential to unlock doors, or mess with your fridge or fire alarm; and as the stuff in life gets "smart," Venafi will strive to keep it safe and guide its customers to success. "I don't know how many companies there are in the world and that's how many we want to help," he says.

"We help companies secure and protect their trust that's provided through the keys and certificates that they use in the face of next-generation attacks," Hudson says. "We are an integral part of making sure that they can provide and live in a world with trust. Without us: they can't." RH

Veracode

www.veracode.com

Bob Brennan

Security

Massachusetts

Yes

» In the past, securing software meant knowing its source code––basically, its DNA. But just as McDonalds won't reveal what's in its special sauce, developers keep a tight lid on software source code. So Veracode came up with a way around trade secrets to help companies protect their applications.

"Veracode invented a technology that doesn't need the source code to be able to understand where all those holes or vulnerabilities [are] in the software...in the same way that you could take a thermal image of your home to understand where all the drafts are," says CEO Bob Brennan. "And then we go caulk them up."

Crucial to serving companies and securing their data is a little bit of distance. "We don't actually need to be in the house, we just need to be able to take a picture from the outside," he says. "We can tell where the holes are and help plug those up so you can go much further, much faster in leaning on technology to improve your business or your life."

Instead of delegating security tasks to disparate vendors, developers can use Veracode's cloud-based platform for application diagnosis and treatment. First Veracode spots weaknesses, then recommends and implements strategies for beefing up security. They've had two patents issued while Brennan says eight have been filed.

Veracode was founded in 2006 out of two computer security companies, Symantec and @stake (Symantec still owns a small piece of Veracode). Today, the Burlington, MA-based company serves a seemingly infinite market: the number of applications multiplied by the number of companies on Earth, though Brennan says Veracode concentrates on selling to large corporations and their software providers. "We have thousands of software vendors that we sell to, and hundreds of the worlds largest companies," he says. Currently Veracode secures applications for about 350 of the Fortune 1000.

They cater to the biggest and they're backed by big names in VC, including Atlas Ventures, .406 Ventures, StarVest and Meritech Capital Partners. Most recently, the company raised money in April 2012, bringing total reported funding to $74 million. Though "you could imagine it's a little bit more than that," Brennan says.

Veracode's job has become increasingly difficult in a digital age in which apps have historically been rushed to market. Developers focused on what software could do and how fast they could deploy it, rather than on potential threats to its wellbeing and the data it housed. Concerns only grow when data moves to new devices and onto foreign and somewhat unsteady terrain, i.e. mobile. But according to Brennan, Veracode's ready for what's next.

"We are further along as it relates to mobile applications security than anybody," he says. "We're further along as it relates to web applications security than anybody, [and] we're way further along as it relates to code security for applications that are written inside of a company."

That doesn't mean Veracode has it easy, helping its clients take the temperature of third party applications that may or may not pose threats to security posture. "Everybody's reliant upon so many interdependent parties to run their enterprise that that third party risk that's taken on is an enormous risk," he says. "And helping our customers meet that challenge is, you know, the days are long."

One way Veracode helps its clients navigate treacherous waters is through verification. Applications that pay attention to security and adhere to high industry standards get the company's seal of approval: a VerAfied Security Mark. To pass inspection, Veracode puts software through its paces, grading responses on the Common Vulnerability Scoring System. Those that show their mettle versus typical development mistakes pass with the company's official okay.

Veracode's industry position slightly outside the fray works in their favor. As experts, they watch over their clients from a slightly higher plane, scanning for trouble. For now, this perspective suits them perfectly––as is their related financial independence. Their compound annual growth rate has been in the 75th percentile, Brennan says, "and we're expected to be north of $50 million this year." He expects Veracode will cross into the black some time in the next year despite operating under a fast growth analysis.

In the long run, going public's not out of the question. "A possible IPO is definitely on the table," Brennan says. "We're building a business that's a compounding annuity, that over time will generate very strong free cash flows." But for now, the company's a little wary of going to Wall Street.

"We see the usefulness for our customers in Veracode being independent so that there's an independent third party that is attesting to the security of the software that runs their company," Brennan says. RH

WaveTec Vision Systems

www.wavetecvision.com

Tom Frinzi

Medical Devices

California

Yes

» Cataract surgery is one of the most common procedures in the United States. Figures from the Centers for Disease Control and Prevention (CDC) show that an estimated 20.5 million people over the age of 40 in the U.S. have cataracts in one or both eyes and 6.1 million people have had their clouded lenses removed and replaced with a lens implant. But the procedure often leaves patients still requiring glasses after surgery. The latest diagnostic technology is changing that for good.

Prior to the availability of the new technology, surgeons could only conduct pre-operative testing through the clouded lens to estimate the power of the implant the patient would need, and gauge the magnitude of the astigmatism that existed. Historically, the patient would then have to wait 30, 60 or even 90 days to understand if the surgery has been a complete success and if glasses were no longer required.

New technology now offers surgeons the chance to conduct diagnostic testing during the operation, after the clouded lens is removed. The company providing this technology is called WaveTec. The firm, headquartered in California, has developed a system that raises the bar in diagnostic devices for the eye in the healthcare sector. WaveTec's technology is called ORA (Optiwave Refractive Analysis). WaveTec recently launched an upgrade to their technology (the ORA System with VerifEye), which offers refractive information throughout the surgical procedure.

"The data clearly shows that far too many times surgeries are not hitting the target and patients need spectacles postoperatively or a secondary procedure to ensure that they can see clearly after cataract surgery," says Tom Frinzi, CEO and president of WaveTec. "We believe the time has come for cataract surgery to really perform more like a refractive procedure leaving the patient fully corrected and not in need of glasses or contact lenses."

Aside from helping improve the quality of life for millions of Americans, this technology also provides a hugely profitable market for WaveTec. "The market is certainly compelling," Frinzi says. "If you look at it from a pure dollar point of view it's close to a billion dollar market opportunity. When you look at the number of potential installation sites around the world, it's well over 14,000 opportunities for us. To put that in perspective, to date we have 224 systems installed, predominantly in the U.S. There's still a huge runway in front of us to take advantage of."

WaveTec's technology has also attracted a healthy level of investment. In June this year the firm announced it had expanded on its D2 round of funding and raised $11 million. All of the firm's existing investors participated, and were joined by a new lead investor – Foresite Capital Management, of San Francisco. Among previous investors: Accutive Medical Ventures, De Novo Ventures, Versant Ventures and Burril & Company.

It's fair to say WaveTec struggled to make an impact during its early years, and the major turning point was the appointment of Frinzi. "When I took over the company over two years ago we really took the time to re-look at the technology and we re-engineered the device to improve consistency and accuracy," Frinzi says. "We took a look at the business model and revised it to better reflect what our customers were looking for, we changed our commercial organization by bringing some new blood in, and culminated it with rebranding and reintroducing the product late in 2011 at the American Academy of Ophthalmology (AAO) meeting, and from that stake in the ground forward, the business has really taken off."

WaveTec's main competition comes from technology that offers preoperative biometry. Frinzi says there is really no direct competition, although there will undoubtedly be players entering the same space at some point. The WaveTec technology has guided well over 80,000 procedures and has already captured approximately 2.3 percent market share of total cataract volume in the U.S. since it was reintroduced in 2011.

Demographics play to WaveTec's favor – the baby boomer generation is now fast approaching the age range where procedures, such as cataract surgery, are common. This is a generation that has witnessed great leaps in technology, and as such their expectations for being glasses-free after surgery are much higher.

"I think all of this has come together at a perfect time to create consumer demand, as well as professional demand to improve clinical outcomes. A technology like ours fits well into what's been happening in the marketplace. We think that the demand is going to continue to be strong and we really look at our technology as a gateway technology for those whom want to improve the refractive outcomes of cataract surgery in the next five to ten years," concludes Frinzi. RH

YapStone

www.yapstone.com

Matthew Golis

Other

California

Yes

» Though it powers online payment, ePaaS (ePayment as a Service) company Yapstone doesn't directly compete with e-commerce transaction platforms like PayPal, BrainTree or WePay. Instead, the company's coming for what's in customers' pocketbooks: checks.

Yapstone serves verticals where payments made are normally check-intensive, like for apartment and dorm rentals, nonprofit donations, vacation rentals and storage facilities. Yapstone pops up everywhere clients pay with pen and paper, urging them to make payment easier on all parties via the company's platform.

In 1999, Yapstone CEO and co-founder Matt Golis founded RentPayment, Inc., funding the venture with his own money and that of two other angel investors. With money running out in late 2000, Golis saw an opportunity to team up with another company in their market headed up by co-founder Thomas Villante: Yapstone. Today, Yapstone remains the corporate holding company, with RentPayment the product in the apartments market, he says.

In the dotcom boom, property managers refused to throw their lot in with providers deploying services limited to web platforms. "Back [in 2001], 99 out of 100 companies shut their doors [to] the ones that were restricted to only online commerce, and it was only because we realized...we could grow the company by offering offline payment methods...that we really survived."

Now, the majority of payments comes via the web or Yapstone's mobile app. Last year, the company's revenues reached $68 million, with business "growing substantially this year and next," Golis says.

Yapstone differentiates with its focus on distinct verticals. Through partnerships and acquisitions, the company has grown from an apartment rental payment portal to a comprehensive API that powers payment processing across industries. In 2011, Yapstone teamed up with HomeAway to facilitate debit, credit and e-check transactions paying customers for use of their vacation homes listed on HomeAway and VRBO. Last year, Yapstone brought ParishPay, LLC into its fold in order to further facilitate customers' electronical donations to churches. Though niche, this division of the non-profit sector proves substantial, as ParishPay serves 1,000 parishes and according to Golis, is the largest payment processor in the Catholic Church.

The service fits verticals' individualistic needs, unlike a more generalist platform. Apartment rent payments to property managers via credit or debit cards "involves a number of different very specific rules around the recurring nature of it, how to treat things like deposits, how you treat things like the expiration of a lease," says Sameer Gandhi, partner at Accel Partners (which invested in Yapstone). "All those specific rules are built into the platform... so that anybody in this vertical can literally sign up and use it."

Though Yapstone eschewed venture money to start with, the aforementioned deals and acquisitions––plus the prospect of building an international office in Dublin––convinced Golis and Villante to bring in outside capital. "It was on the heels of the HomeAway partnership, where it was pretty obvious that we would have great visibility into what our revenue growth was going to be for the next several years," he said. "We thought this would be an opportunity to get a great valuation, and at the time we had a couple of acquisitions that we had our eye on, as well as our expansion to Europe."

In June 2011, the company announced a $50 million financing round led by Accel Partners and Meritech Capital Partners. Today, Golis says that the with the company's current growth rate, a public offering presents not just a possibility––but could be attainable 12 months out.

Though Yapstone serves segmented markets, split up from property and non-profit verticals, in total they face a $700 billion opportunity. In the future, Golis says they'd like to create a product that interacts even more directly with the consumer. "After 14 years, we have such phenomenal SEO results as far as renters just wanting to pay with a credit card online, that we want to make it even easier for them to do so," he says.

Thanks to partnerships and market development, the company, headquartered in Walnut Creek, California, currently makes payment a piece of cake for its customers, though those clients call varied and disparate countries home. "We still have not seen a company that's either in the payments industry or even a technology company that can handle a lot of the cross border types of issues that you see internationally," Golis says. "In the case of a vacation rental, where you may have a traveler coming from Australia that needs to pay [a] homeowner in London, we can do things to make it easy and very painless for that homeowner to receive their disbursement in pounds regardless of what currency the traveler wants to pay them in."

If Yapstone has its way, checks meant for property payment will be replaced, rather conveniently, by pieces of plastic. RH

Zend Technologies

www.zend.com

Andi Gutmans

Cloud Computing

California

Yes

» Coining the company's name from a combination of their forenames, Andi Gutmans and Zeev Suraski founded Zend Technologies on the web's most popular programming language the two had helped develop in the late '90s. They wrote the parser that formed the base of PHP 3, and later developed the Zend Framework, the open source web application framework for PHP 5, as well as Zend Engine, the open source scripting engine that interprets the PHP programming language that powers over 40 percent of the web. Internet powerhouses like Facebook and Yahoo are standardized on PHP, a language designed for mobile and web that is quickly becoming as ubiquitous as the English language to the programming world.

Founded in 2000, Zend offers value added services to the PHP programming language ecosystem. A leading developing tool for building business critical PHP applications, Zend Studio provides modern open API architecture designed to write faster code for mobile and cloud integrations. Its Zend Server provides storage specifically designed for PHP applications to prevent performance degradation as well as detect and fix problems faster. The company also offers PHP training and certification.

Zend works similar to Red Hat, the software company that provides open source products it monetizes through additional services and support. Zend delivers a supported subscription of PHP that provides value added functionality not available in the open source space, such as application management capabilities, better performance and scalability. It monetizes on a subscription model, either through an on-premise per-server basis or on a capacity basis in the cloud through providers such as Amazon and IBM. Zend is unique in its ubiquitous partner ecosystem that includes Amazon, IBM and Red Hat, providing customers a wide choice of deployment with dependable consistency.

Considering the PHP market alone, Zend addresses a market easily worth billions of dollars. As it continues to add more mobile API capabilities, Zend is really addressing anyone building cloud applications or mobile apps, contends Gutmans, who has served as the company's CEO since 2009.

"As the mobile and cloud disruptions put pressure on business, more are realizing that technologies like Java are not the most suitable," Gutmans said. "Everyone is rethinking how they generate apps. PHP has always specialized in the web and mobile. Now that the world is moving its workload into the cloud, it's a very good time for us."

Zend serves over 40,000 customers. About 70 percent of its revenue comes from larger corporate accounts, a shift from a few years ago when 60 percent of its base included smaller businesses.

"We've gotten into a very good spot as enterprises are looking to take advantage of the next generation of apps moving into the cloud," Gutmans said. Its enterprise base has been growing 40 percent annually.

The company serves a global market, split 50-50 between the US and Europe, with strong presence in Germany, France, UK and the Netherlands. It also has a small revenue base emerging from the APAC region.

The company faces competition from other software development platforms such as Oxagile. Being designed by some of the creators of PHP gives Zend a formidable edge in the market, Gutmans contends.

"Since we helped create PHP, our understanding helps us help others innovate in the PHP market," Gutmans said. "This is just the beginning. We're helping to change the world as PHP continues to build momentum."

Profitable, Zend has raised about $56 million from Viola, Greylock Partners, Index Ventures, Azure Capital Partners, Intel Capital, and SAP Ventures. The company is headquartered in Cupertino, Calif., with offices in France, Germany, Ireland, Israel and Italy.

"We are excited about Zend because it is in the right market at the right time," said Cameron Lester, a General Partner at Azure Capital Partners. "PHP is the enterprise environment for web applications. The fact that mobile applications need to be integrated with their brother or sister apps on the web gives Zend a clear advantage. Zend has been able to take advantage of its market position within the PHP community with a strong technology base, backed by strong partnerships with all the major cloud providers." RH

ZestFinance

www.zestfinance.com

Douglas Merrill

Big Data/Storage

California

Yes

» To loan or not to loan: that is the question faced by many lenders. Applicants go up against data informing banks' decisions; but when that data is missing or incomplete, sometimes the deserving get rejected.

ZestFinance looks to make credit widely available for people that need it via its disruptive underwriting models that incorporate big data. Before, lenders caught bits and pieces of candidates' financial histories when considering the chance they could pay loans back. ZestFinance shows them the big picture.

Founded in 2009, ZestFinance (formerly ZestCash) has received attention and praise for its disruptive underwriting models. "Since the company's inception, we've increased net repayment by 90 percent over off-the-shelf industry scores and more than doubled the number of underbanked Americans we can serve," ZestFinance founder and CEO Douglas Merrill wrote in a November 2012 release. The same statement claimed the company's latest underwriting had default rates 54 percent lower than "the best-in-class industry score."

Merrill's sister-in-law inspired the mission behind ZestFinance when she called him with some bad news: she had a flat tire. Vick, a single mother of three and full-time student with full-time job, needed a little financial help, as she couldn't cover the cost of fixing her tire. "She called me back that night, and I said, 'Hey Vick, what would you have done if I hadn't answered my phone?'" Merrill says. "She said, 'Oh that's really easy. I would have gone and taken out another payday loan.'"

At the time, Merrill had no idea what a payday loan was, or that there were 25,000 payday loan store in the United States. "So I dug into this because I was interested, and I discovered this weird underwriting problem that was creating these incredibly expensive, opaque and unfair loans called payday loans," he says. Today, Merrill puts the payday lending market at around $8 billion.

Merrill thought people like his sister-in-law deserved better credit options. "There ought to be a fair, transparent and lower cost way to allow [a] person to get their tires," he says. "And I decided to build a company to provide one."

ZestFinance has raised three major rounds since its launch, totaling more than $112 million in funding, debt and credit facility. And though the company doesn't disclose revenues, Merrill confirms between 2011 and 2012, they grew by a factor of five.

ZestFinance's model combines old-school underwriting views with the more modern idea of big data and its objectivity. In the late 1950s, two men (Bill Fair and Earl Isaac) put a new mathematical model called logistic regression to work identifying good candidates for loans. "What they were able to do was using roughly 10 to 12 pieces of data, decide whether anybody could get credit," Merrill says.

Before Fair and Isaac made the process data-oriented, lending decisions fell to credit officers, Merrill says. Fair and Isaac's model revolutionized the old system by making lending objective (if credit officers didn't know an applicant, they'd be less likely to make them a loan). With FICO, judgments behind loan-making decisions depended on data at hand.

Merrill says the underwriting model hasn't changed fundamentally since Fair Isaac turned it on its head decades ago. "Despite the fact that there really has been an explosion of computation since then, and a huge explosion then of data available, there's still the problem of missing or incorrect data," Merrill says. "[It] causes perfectly good borrowers to be unable to get credit. I see that as fundamentally a math problem."

To solve that math problem, Merrill, formerly of Google, put sophisticated tech in place to vet candidates utilizing tons of data.

"We take tens of thousands of pieces of information and we pass them through 10 independent artificially intelligent algorithms," Merrill says. "And each one of those algorithms decides should we give [someone] a loan or not. We then take those 10 decisions and we do what's called ensembling them together, we apply another piece of artificial intelligence to join them together to make a final recommendation about whether or not to make [someone] a loan."

"The cool thing about this is it grabs the best part of what the dude behind the desk did well, which is sort of broader view of the applicant, but it does it with getting the best thing out of FICO, which is credit availability," he says. A fuller picture of the consumer could go a long way to helping with life's surprises, including flat tires. RH

Zetta.net

www.zetta.net

Ali Jenab

Cloud Computing

California

Yes

» Disaster recovery and backup has been one of the most important and profitable sectors of the IT industry for decades, and is a crucial part of everything done on computers. The more data is consumed and created every year, the bigger the task becomes to ensure it is all backed up. This challenge makes the market an innovative space, and one which, like many other areas in IT, has embraced the cloud.

One company offering a cloud solution is Zetta.net, a provider of backup, disaster recovery and archiving technology to small- and medium-sized enterprises, distributed organizations and managed service providers.

"We look at backup, disaster recovery and archiving today as being three different buckets of software purchase with complicated integration, wanting operating every night," says Ali Jenab, CEO of Zetta. net. "We're simplifying that process by having a simple cloud solution. A customer can download a piece of software in 15 minutes and be able to back up their stuff. We report to them every night that everything ran fine — you basically set it and forget it."

The cloud solution works particularly well with companies that have their data distributed across multiple offices. Previously, firms would have had to deploy appliances in all of the different offices, but with Zetta cloud solution, only one piece of software needs to be installed and the firm has a single viewpoint of what is happening in its entire operation. The solution also makes a second copy of the data on the Zetta cloud, meaning if the company loses something, it only takes a short time to recover it.

The company enjoys high margins due to the business model it employs. "We really built a high velocity business model – what that means is the product gets installed in 15 minutes on the phone, we have a great marketing team, and they drive the traffic to us rather than us calling to generate leads," Jenab says. "All our sales are done on the phone. All our territory managers are sitting on the phones here in Sunnyvale covering the whole of the U.S. We do six-figure transactions just talking to people on the phone, so that makes our business model very efficient."

The increase in the amount of data a typical company uses has led to real problems in backing that data up. One of Zetta's clients previously had a system which was unable to back up the huge amount of data it needed within 24 hours, meaning the company could only back up half of its data. Zetta was able to back up the same amount of data in 90 minutes. "That really shows the power of sync and replication rather than a traditional backup software approach. So that's one thing that is driving customers to us," Jenab says.

The company now hopes to grow significantly over the next 18 months or so. "We've just closed a Series B so we have plenty of cash in hand to go through 2015 and possibly go cash-flow positive at that time frame," says Mr. Jenab. "All our focus right now is to grow our revenues from well into mid-seven figures ... to eight figures by end of 2014." RH

Zettics

www.zettics.com

Sterling Wilson

Mobile

Washington

Yes

» Every day, millions of phone users receive a customized bill from their carrier. It is safe to say that a good percent of subscribers end up on the line with their not-so favorite supplier for a frank explanation. Traditional customer service representatives may not have all available data, which leads to unamicable exchanges.

Then comes Zettics, a Seattle-based company started by industry veterans. Zettics analyzes these terabytes of data for carriers, after the merger of two entities Ground Truth and Umber Systems, in 2011. Both founders wisely realized that a single company could best serve this market by joining forces to a single platform. Since then, driven by the insatiable market demand, it has generated amazing growth.

While Internet-focused businesses already leverage user data, sometimes to a fault, phone companies had yet to harness its potential. Although Amdocs or IBM have thrived with traditional telcos, mobility and a new set of players in the ecosystem, such as Google, Samsung, Facebook or Apple called for a technology breakthrough. Zettics' eight patents, focused on Dynamic Learning™, analyzes data from networks to provide granular intelligence to the carriers about subscriber's usage and behavior. This singular approach "delivers actionable data to phone companies" according to CEO and co-founder Sterling Wilson.

At the same time, it confronts the routine "bill shock" challenge, when subscribers do not understand how they consumed data. Says Joe Levy, vice president of strategic consulting at Zettics: "The carriers, our clients, can tell the consumer: the three hours of Netflix and the Hulu or Youtube that you watched the other night, here is how much data you are actually consuming. Before it was almost impossible to provide this feedback to clients."

Obviously, transparency improves carriers' interaction as well as customer experience, reduces time spent per complaint and eventually the churn. But the icing on the cake comes from the Dynamic Learning process embedded in the technology. "Mobile usage transforms behavior every day. And if there is a behavioral pattern growing in popularity, that we do not recognize, we apply those updates every week for our carriers worldwide," according to Levy.

Professional investors often can smell huge market potential. Local VCs have banded with Silicon Valley VCs to put money to work. On the Series A and B, $25.8 million has been disbursed by Steamboat Ventures, Voyager, Emergence Capital and North Bridge. The latest financing in July 2013 added $8.2 million, with Voyager and Excelstar as lead backers. Erik Benson, a partner at Voyager who put in its first dollars at Ground Truth, then led by Sterling Wilson, justifies his investment: "CMOs are the new CIOs for they are driving the purchase of large scale IT systems to understand their customers better in a more real time fashion. Zettics is a category leader with high growth margin and high growth rate."

The company still faces several challenges. On one hand, large competitors IBM, Accenture or recent contenders such as Guavus will not remain idle and have built an excellent footprint with mobile carriers, which are difficult to penetrate. Of course, Wilson, a former executive at Amdocs and his co-founder know the players well. On the other hand, the controversial issue of personal privacy is on everyone's mind. Benson explains however that "until the founding of Zettics, there has not been a company that has approached PII (personal identifiable information) and privacy in a way that minimizes the risk for the carriers to having that privacy information released unnecessarily."

With 503 mobile operators tallied by the GSMA, the international organization for the mobile industry, Zettics has just scratched the surface. Almost 6.8 billion subscribers have not adopted their cellular phone as their main interactive vehicles. New devices abound tablets, dual purpose computers, phone-blets galore. With the explosion of mobile commerce, which has leaped from 1% of total Internet commerce to 18 percent in just three years in modern countries, carriers will need more ways to scan, explain and monetize customers' data and behavior. And to defuse irritated subscribers' calls after a bill shock. RH

Zscaler, Inc.

www.zscaler.com

Jay Chaudhry

Security

California

Yes

» Businesses around the U.S. and the world have been quick to jump on the potential of mobile and the cloud. These two huge shifts in the way business is carried out have brought with them immeasurable benefits, but they have also posed questions. Perhaps the most frequently asked question has been regarding security.

Zscaler, a California based internet security firm, has provided many answers to these questions already. The firm's founder and CEO Jay Chaudhry set up the company with mobile, the cloud and efficiency in mind. "I focused on three main principles, one the world is getting mobile and we need to be able to protect people no matter where they are and what device they are using," explains Mr. Chaudhry. "The second thing – if you really want to protect mobile users, you can't take the traffic through a couple of gateways sitting at an office at regional headquarters, you need to build defences all around the internet in the cloud because most of the threats come from the internet."

"And the third thing was – today a company buys a product from many vendors, many security vendors and they put it at their internet gateway. The traffic has to go from one box to the second to the third and the fourth. If we did the same thing with a cloud based approach, now the traffic has to jump from cloud to cloud, making it worse. So let's integrate a lot of these products so we wouldn't do one aspect of security, we would do it holistically," he adds.

As a result, ZScaler is much bigger than a typical start up, and covers many more angles than most of the security firms operating in the same space. When ZScaler came to present the product to potential customers, it was initially met with scepticism. "We built a very sophisticated architecture because we had no legacy to worry about. So I went and presented to these big companies the first reaction would be it's too good to be true. There was often a feeling of disbelief. But once we got hundreds of customers and now we've got 4000 then that issue went away," says Mr. Chaudhry.

Mr. Chaudhry uses the analogy of an airport to explain the benefits of the ZScaler system. A company using several different products to secure its network is like a passenger having to go through several different check points at an airport, and getting held up and stopped at each one. With the ZScaler system, all of the check are done in one queue, and passengers are able to feel secure in a fraction of the time.

Since the company was founded in 2008, it has grown quickly. It currently boats 10 million paying users from 4,000 enterprises, coming from 180 countries. ZScaler covers over 10 billion transactions a day – a transaction means every time a user visits a web page. Annual growth has been 100% year after year and it is looking to keep that constant. The company employees around 250 people and around 125 of them are in the product delivery side of the organization, which covers everything from engineering to security research to delivery of the service.

ZScaler resited outside investment until last year, when it secured $38 million in funding through strategic investors including Lightspeed Ventures. "Many web security vendors are putting appliances in the cloud and calling it cloud security," said Ravi Mhatre, managing director at Lightspeed Ventures. "Zscaler is the only company that has the right architecture to securely enable the mobile, cloud and social media applications that often bypass traditional security altogether."

Despite the number of customers the company has, it is still required to do some evangelism in the marketplace. What we have built is something we call direct to cloud network, or DCN," explains Mr. Chaudhry. "This means a global network around the internet and no matter where you are, on your PC, your iPhone or iPad, your traffic goes through a data centre that Zscaler has put in place, and your policy gets enforced. And that makes the user experience very good. We think the DCN will change the way people access the internet from a response time point of view." RH

NORTH AMERICA STATS

For more statistics of the 2013 winners, visit us at www.redherring.com

REVENUE

THE CEOS

PATENTS

998 Patents

5 Companies have 53% of patents (531 patents)

10 Average # patents

42% Have no patents

1 Median # patents

FUNDING

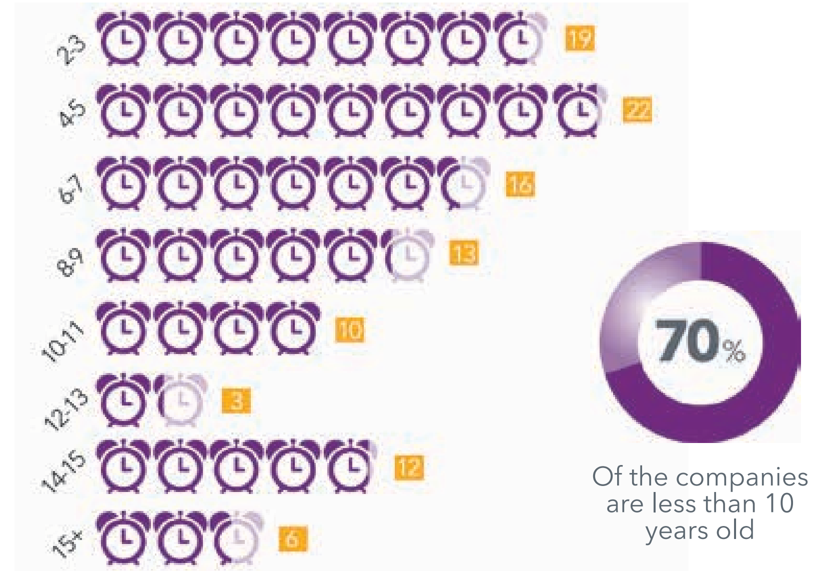
Average Funding **$43M** For winners

Average Funding **$28M** For attending finalists

Median Funding **$29M** For winners

# of Rounds	# of Companies	Avg. Total Funding
0	9	$11,763,222
1	13	$7,600,000
2	22	$41,686,957
3	24	$39,077,083
4	15	$53,696,667
5	11	$79,324,508
6	3	$83,966,667
7	1	$142,000,000
8	1	$87,000,000
10	1	$104,000,000
Total	100	$43,210,283

COMPANY AGE

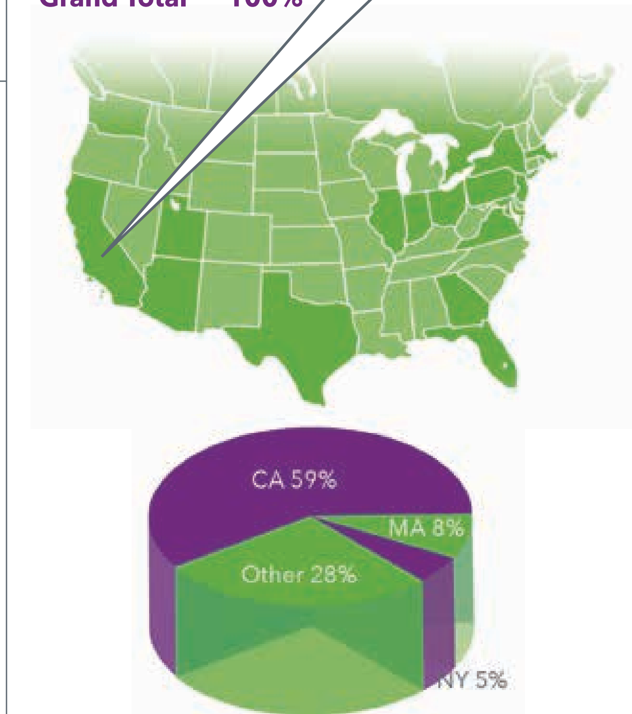


Of the companies are less than 10 years old

STATE DISTRIBUTION

AZ	1
CA	60
Canada	3
DC	1
FL	1
GA	3
IL	3
IN	1
MA	7
NJ	1
NY	5
OH	1
PA	2
TX	3
UT	2
VA	3
WA	3
Grand Total	**100%**

Nearly **60%** Companies are based in California



SECTOR

1/5 Of all winners are Software

	# Companies
Big Data/Storage	5
Cloud Computing	15
Entertainment & Media	1
Gaming	1
Hardware	1
Internet/Online (ISP, B2B, B2C, etc.)	9
Life Sciences/Biotech	6
Marketing/Advertising/SOE	5
Medical Devices	6
Mobile	10
Other	6
Security	7
Social Media	3
Software	20
Telecommunications	4
Virtualization	2

EMPLOYEES

Of companies have less than 140 employees

x 5 = 1000

4 companies have more than 1,000 employees

166 Average number of employees

79 Median

Khan Academy

AN OPEN INSTITUTION

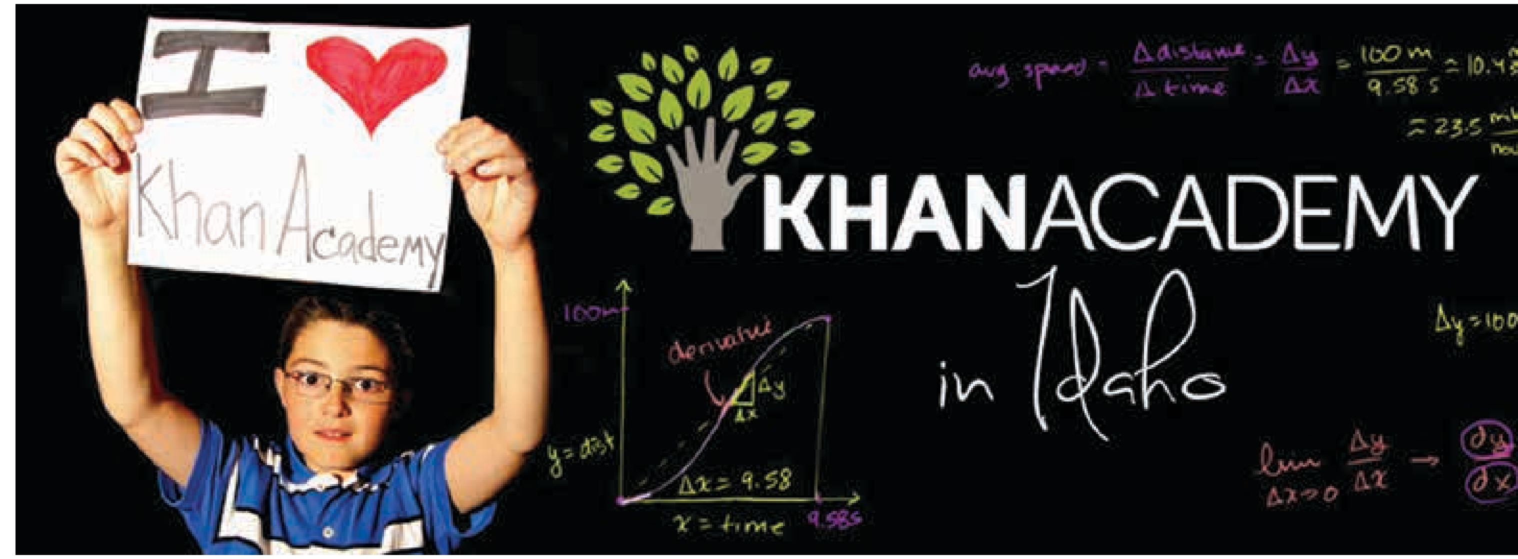
Education and learning guide the world. They foster economic prosperity and productivity, provide the basis for democracy, and at the core, they remain the quintessential ingredients to upgrade the human condition. Economic scholars who have studied GDP in wealthy and emerging countries rich have found that growth and success can be largely attributed to high levels of intellectual capital. Yet by 2013, billions still do not get access to primary education, let alone do they gain proficiency in basic maths and sciences. Without this knowledge, social integration and escape from the throes of poverty remain just pipe dreams. The US Department of Education listed the worldwide illiteracy total at about 775 million for people over the age of 15 in Q2 of 2013. With the United Nations Educational, Scientific, and Cultural Organization (UNESCO) reporting that developing countries only spend 4.4% of income on education due to inadequate spending budgets, the issue of education provision remains unresolved despite the agency's movement to provide "Education for All."

It comes as no surprise then that to most, the notion of a world that grants a "free world-class education for anyone, anywhere" seems nothing more than a perceived utopia. But just a stone's throw away from Google's colorful campus in a secluded corner of Mountain View, an office building plays home to a team of people dedicated to turning this idealized vision into a reality. Up one flight of stairs and across the hallway is the open entrance to the discrete headquarters of Khan Academy.

Serendipity often inspires the best endeavors, and now Sal Khan's story has been told all over the world. In 2009, Khan's personal YouTube tutorial videos, launched to mentor his cousin Nadia remotely, triggered the inception of Khan Academy, a multi-faceted online educational software platform that boasts an expansive range of 33,000 high quality videos covering a vast range of content. For parents, coaches, and of course students from all walks of life, the platform provides relevant and accessible material anywhere in the world for free. Khan began to realize the significance of his work when he started to receive anonymous comments o n his videos — and in particular, when Bill Gates used the math videos to teach his own children.

The son of a Bangladeshi and Indian immigrant, Khan did not plan his career in digital teaching—in fact, far from it. Previously a hedge fund manager, Khan's life took a 360 degree about face towards philanthropy and Khan even recently joked at a Sierra Ventures reunion that it was strange for him to be building an organization focused on social value. Now, he stands at the forefront of an educational revolution, adding 49 employees to the team since founding the company. And with a recent BBC report claiming that in June 2013, fifty-seven million children globally still did not have access to schools or education, Khan Academy could prove to be the vehicle that finally fulfills one of the internet's many promises at a crucial juncture.

Photo Credit: Michael Collopy, selection of portraits taken during Skoll World Forum 2013



"Definitely Khan Academy just makes this wonderful mission a reality," says Andrew Grauer, the CEO and founder of CourseHero, another pioneer of the movement to disseminate top-class, accessible, and affordable education. With genuine passion, he adds that "Salman Khan and his team are able to live and breathe their mission of helping kids as well as students around the world get access to education for free. The idealism embodied in that mission … you fall in love with that as a human."

The recipient of three degrees from MIT and an MBA from Harvard, Khan is no stranger to a world-class education. For him, the future of education involves a transformation in the way a student learns and progresses from a young age. Khan envisions a curriculum where students must first master a concept, and prove that mastery via repeated tests and problems, before moving to more advanced material. The vitality of having a strong base understanding of each concept from which to build upon holds more importance to Khan than simply completing a topic or lesson in the time allotted. While this structure might mean that students' work at their own pace, with some advancing faster than others, it is crucial that they all eventually reach the same destination in their own time.

Imagine a 6th grade classroom that is told to prepare for a math lesson. Yet the ensuing commotion does not feature the traditional rustle of papers and the unzippering of pencil cases. Instead, each student is equipped with a smart device or laptop from which they will interact with an online video. And the teacher, rather than lecturing with chalk and board, roams the aisle, diverting individual attention to each student as and when they require it.

> ... platform provides relevant and accessible material anywhere in the world for free.

This unconventional setting encapsulates Khan's vision of the "flipped classroom," where the teacher's time is freed up for 1-on-1 learning catered to each student's specific needs. Khan Academy's sophisticated data analytics dashboard provides an in-depth look at a student's progress, from how many problems they answered correctly, to how long they took, to when they paused a video. Based on this granular analysis, the website's functionality embeds recommendations on what topics to study or what videos to view, maximizing the impact of the learning experience. When the 51 person Khan Academy team leaves the office each day, they walk past the television screen with the perpetually blinking number, the number that discloses that over 5 million practice problems are answered on the website per day.

"I want to see my kids go to a school where they use tools like Khan Academy so kids can grow at their own pace and operate in an inspiring room like this," Khan says, gesticulating to his own vibrant office. "There's not a bell that rings every 55 minutes, some of the kids will be working on math, while some on drama, while some are painting. The teachers are there to use the data and intervene when the student needs help and hopefully this frees them up to do more interesting stuff."

But the organization's unabated growth since it was founded five years ago has not been unencumbered, as teachers are sometimes reluctant to adopt the 'flipped classroom' model. They face inherent problems that come with students working at their own pace: how can they complete the curriculum for the academic year, or will some students inevitably fall behind their peers? A teacher needs to feel that they did their job, and in many cases, it is easier to reject than accept a change in the status quo. "It takes a leap of faith," Khan admits " and the centerpiece remains the knowledge plus these intangible experiences. If a kid is working on a 4th grade topic and hasn't reached the 6th grade topic yet, that's okay. Eventually he will get to a better place."

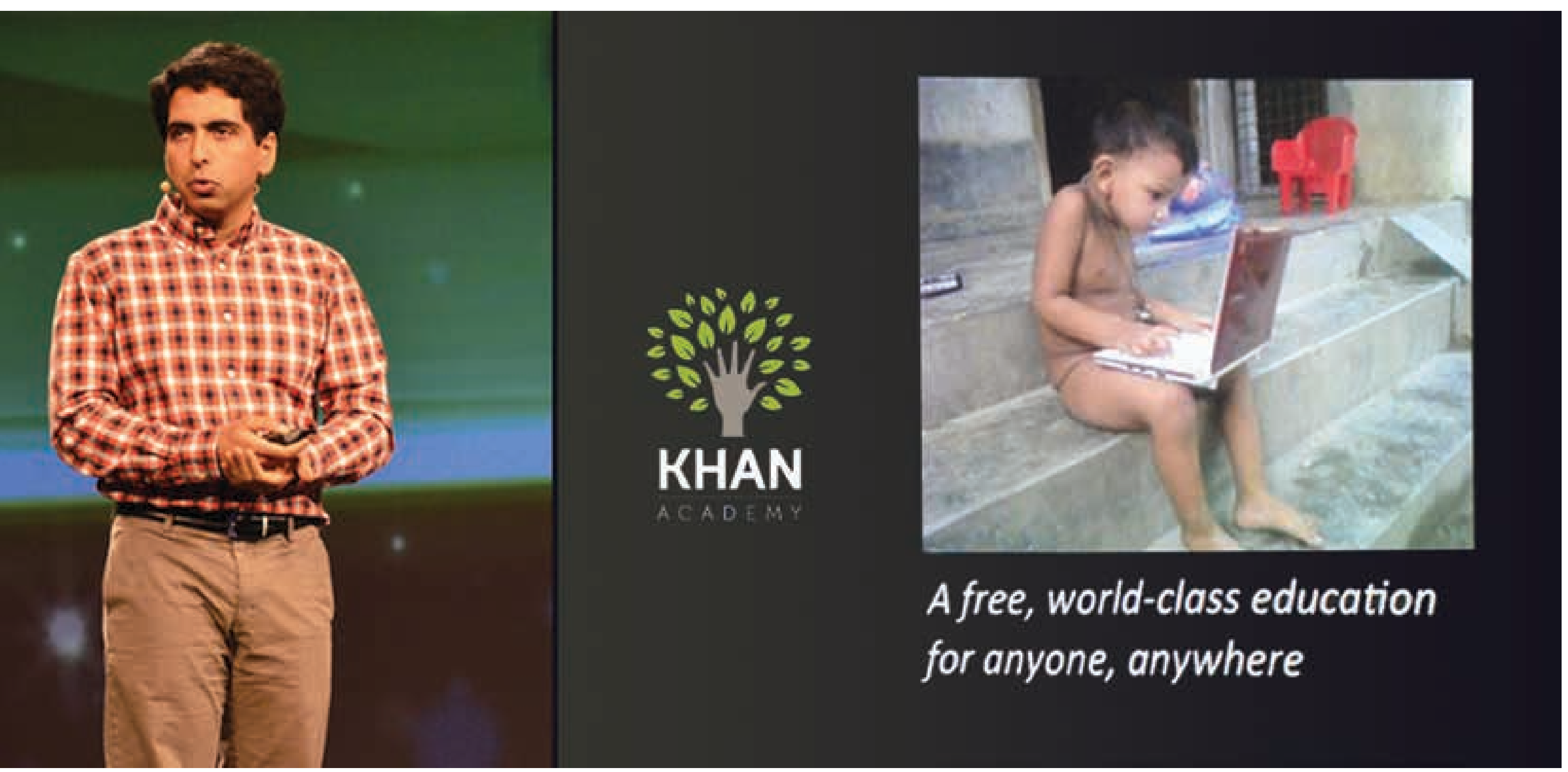
Still, with 10M unique users spanning 216 countries and 300M plus lessons delivered everyday, it would appear that Khan's vision is resonating in the global community. Indeed, the company is funded philanthropically and stands resolutely by its not-for-profit structure, relying on the backing of Google, Bank Of America, the Bill and Melinda Gates Foundation, and a range of other generous high profile individuals to sustain its growth. With potential competitors like CourseHero and Coursera, an online course portal with 17M enrollments, using business models that allow monetization (the former charges for premium content, the latter charges students to earn "verified certificates"), questions about the non-profit's sustainability and ability to scale are potent ones. With growth, Khan does see the opportunity for monetization in the form of corporate licenses or charging for extraneous tools. But he refuses to compromise the integrity of Khan Academy's mission: "we will never have anything commercial on the site, nor will we charge for content," he asserts with no hesitation.

In fact, Khan personally leads the charge. Just before the interview with Red Herring, Khan could be seen recording another math tutorial to go online in his modest corner office. According to a recent CBS 60 Minutes report, Sal Khan has taught lessons in so many subjects that if you watched one lecture per day, it would take over 8 years to cover all of his material. "It's not traditional for an executive director to be in the weeds and creating content," Khan says. "I think that's what is special about us — if you just sit at the top and go to a bunch of meetings, you lose touch with the product and the processes. If I found myself in 5 years sitting in meetings all day, I would go nuts."

But at the rate that Khan Academy is being picked up and used by a global audience, issues of scale might dictate a new role for the 37 year old visionary. Already, over 12,000 lessons on the site have been dubbed over in 28 different languages to vehicle the Khan Academy resource globally. With just seven people internally dedicated to producing content for the site, Khan Academy is increasingly dependent on its partnerships — the elite Phillips Andover boarding school is currently generating the site's calculus content while a recent deal with the Gettysburg Museum yielded a comprehensive set of art and art history materials. Khan hopes to keep the team as lean as possible while the company extends its content beyond maths and sciences into fields such as history and geography.

Grauer, who is both a fan and a peer of Khan in transforming the digital learning space, anticipates the company will adopt a more scalable approach to the way it produces content. "I don't think they can be afraid of getting perfect content, perfect teachers. There is no such thing," he says. "I think they should get comfortable making mistakes as they move fast [and scale], rather than tread softly and pump out fewer pieces of content from fewer people."

However Khan decides to balance his roles in the future, it is undisputed that he is the face of not just the company, but of the romanticized ideal of a "free world-class education for anyone, anywhere." And millions of kids, like his cousin Nadia, are now dialing up on Khan Academy to access his tutorials and as a result, are consistently improving their grades and lifestyles. Slowly, with Khan at the helm, what were once far-reaching dreams for the state of global education are becoming distinct possibilities. RH



BUDAPEST

blossoms with tech talent despite government red tape

Művelődesi Szint — aka Müszi — is a community space and co-working initiative right in the heart of Budapest, Hungary's capital. In it, young tech innovators sit back in reclaimed furniture, drink mug upon mug of coffee and lead a revolution in the city's economy. It might sound like your everyday afternoon in, say, Berlin or London. But in Hungary, where the economy has still struggled to recover from the 2008 crash, spaces like Müszi are still rather new.

Hungary has a population of 9.94m people and sits in the centre of Europe flanked by seven states — one of which is Austria, with which it jointly held an empire for 51 years until the end of World War I. Invaded by the Nazis in 1944, the country was soon taken by Soviet forces, under whose control Hungary remained until the fall of communism in 1989. Today it is an industrially-advanced nation, with mining and metallurgy its main exports.

Prime Minister Viktor Orbán's populist government has come under criticism for perceived autocratic activity. Meanwhile far-right party Jobbik has displayed vitriolic racism and there are fears it may command Parliament seats come April's general election. Despite that, Budapest, a city of around 2 million, is one of Europe's most beautiful capitals and a leading tourist destination.

And its tech community is booming. There's a thrilling batch of tech businesses — presentation firm Prezi and Palo Alto-headquartered LogMeIn are two big success stories — helped along with state funding.

Initiatives led by the country's National Innovation Office (NIO) include a task force, Budapest Hub, which aims to define what the Hungarian startup ecosystem needs from the government. There's a tax-breaks committee, and three groups for education in entrepreneurship. "Compared to five or six years ago, when there were practically no startup companies here, we have information for over 400 startup companies," says the office's László Korányi. "Probably the number is at least 50 per cent higher than that."

The NIO has also been closely involved with the EU's Horizon 2020 initiative, which is pumping $110bn into scientific research ($34 billion), industrial innovation ($25 billion, which includes investment in key technology and capital for SMEs), and 'major concerns' ($44 billion, including climate change and transport.)

But to qualify for NIO funding, entrepreneurs must have money and experience abroad. And with a stuttering economy and low average salary, those are things many young Hungarians simply cannot afford. In addition many new companies complain of being mired in red tape and taxes, while cronyism and corruption remain big problems.

"There are a lot of inspiring stories and many many great ideas around," says Olga Irimas, 33, an art programmer who helps run Müszi. "But the environment makes it difficult or impossible. Especially if you are trying to stay ethical: not exploit your employees, not cheat on taxes.

"You can get a normal job easily if you accept to be incredibly underpaid," adds Irimas. "Meaning 500 Euros ($688; the national average) per month as a young professional: hardly enough to make a living. For everything else, you need connections." Unemployment in Hungary remains high at around 11 percent. GDP, which had been shrinking until 2012, is now turning a corner. According to the country's economy minister Mihaly Varga, it grew 1 percent last year, and is expected to rise by another two in 2014.

Thankfully the need to know folks in high places is scant in a city where initial overheads for startups are so small. Entire buildings in the historic center still lay unoccupied, and rents hover below the $300-a-month mark. For this reason other 'on-the-fly' ventures such as cafés, room escape games and, famously, the city's many 'ruins pubs', are popping up, making

...Budapest an attractive place to set up shop.

Budapest an attractive place to set up shop. "Budapest is a very beautiful city, and recently there has been a burgeoning bar scene with a very special atmosphere," says Korányi. "Maybe the only comparable city in this aspect is Berlin."

"The high creativity of young entrepreneurs is a good basis for a rapidly-growing industry," says Péter Drajkó, a tourism official. Visitor numbers are growing year-on-year, pumping more cash into the city's coffers. Gentrification also looms large over the costs of smaller ventures. But Budapest has a history of innovation — from the ballpoint pen to the Rubik's Cube. And few generations have promised the facelift that this one, armed with little more than rent checks and a big slice of creativity, is already beginning to deliver. RH

TAXI APPS

compete globally for sought after markets

Taxi applications are some of the most effective mobile solutions in the app marketplace. The technology that allows users to hail and track a taxi driver has spawned successful companies such as Uber, Hailo and Taxibeat. But the challenges that arise in individual markets, from cities up to regions, make international expansion a tricky road to travel.

Taxibeat, although not well known in the U.S., has gained traction in emerging markets such as South America and European cities like Paris and Athens. The company was founded in Greece in 2011 and has raised $4.5 million in funding to date. Its latest round, led by Hummingbird Ventures, followed on from angel investment mainly from Greek individuals. After launching with an initial fleet of 200 taxi drivers in Athens, the capital city of Greece, the company enjoyed an early growth rate of 40-50 percent per month.

This type of success is common among taxi apps, as the major players in the global industry all dominate their local markets. “It’s been proven that it’s a highly local game,” explains Nick Drandakis, CEO of Taxibeat. “Every company is a winner in their own market. But when they try to expand there are big problems. So it’s too early to tell who is going to be the winner.”

But for Taxibeat, one country and one local market was never going to be enough. After a year of success in Athens, the company set its sights on South America, a region Drandakis focused on because of the problems taxi services encounter there. Taxibeat targets markets where taxis are hard to hail and the service is poor when one does turn up. This strategy allows Taxibeat the chance to drastically improve on existing cab services.

In the summer of 2012, Taxibeat launched in Rio de Janeiro in Brazil, hit Sao Paulo directly after, and then headed back to Europe to tackle Paris. The company most recently deployed its services in Mexico City and will now move on to Peru and Turkey.

Taxibeat’s unique user-review model helps drive the company’s success in diverse markets. While the likes of Uber and Hailo assign taxi drivers at random when a customer makes a request for a cab, Taxibeat allows the customer to select drivers based on reviews from previous users. “Customers enforce the quality of service they want by rating the drivers and then by choosing one based on this rating,” says Drandakis.

The company currently makes a profit in Greece and has almost reached a positive cash flow position in Brazil. Drandakis estimates that it takes around 14-15 months for the company to make money in a new region.

But Taxibeat faces strong competition from the likes of Uber and Hailo. Taxibeat doesn’t see Uber, backed by Google, as a direct competitor, though the American startup operates in the same general space. Uber reportedly brings in nearly $20 million in revenue every week, according to a leaked document obtained by Valleywag. The company operates in a number of cities worldwide, including London, Rome, Tokyo and 32 cities across North America. Hailo is available in 16 cities globally across Europe, North America and Asia, but doesn’t cross paths with Taxibeat in any of them. Expect that to change by early 2015, when Taxibeat goes after the North American market itself.

The taxi app market will always be a difficult sector to dominate worldwide, because cities can be so different and taxi services even more so. But Taxibeat’s strategy of tackling one emerging market at a time, and complementing them with major European cities, has propelled its success thus far. The established players in the North American market can expect to see Taxibeat in their rear-view mirrors very soon. RH

Alibaba IPO Leaves Hong Kong Stock Exchange Sweating

Alibaba, the Chinese e-commerce conglomerate, is ready to go public any day now. But a squabble with the Hong Kong Stock Exchange has cast doubt on the company listing at home. Could the Nasdaq or the New York Stock Exchange be about to pull off an audacious coup?

Wherever, the company lists, the Alibaba IPO is certain to eclipse that of Twitter and possibly even Facebook. Analysts estimate the value of the Hangzhou-based company to be as high as $200 billion. Alibaba Group, which bares similarities to Amazon, eBay and Google, is made up by several highly-successful listing and shopping websites.

Two of those sites are Taobao and Tmall, which recently reported sales of RMB35 billion ($5.75 billion) with a gross merchandise volume of more than 1 trillion on Singles Day, China’s Black Friday equivalent. In 2012, Alibaba Group raked in revenues of $1.7 billion, 61 percent more than in 2011. Net income increased from $293 million in 2011 to $717 million in 2012. But it’s not these impressive figures that are driving the company to IPO.

Alibaba’s second largest shareholder is Yahoo. At one point the California-based internet company owned 40 percent of Alibaba’s shares, but since 2012 it has owned 24 percent. Yahoo has an agreement in place with Alibaba that the Chinese firm can buy back half of Yahoo’s stake when the company goes public. Both sides see this as mutually beneficial – Alibaba CEO and founder Jack Ma would sleep better at night knowing he has more control of his company, and Yahoo would get a huge bundle of cash.

This agreement, together with pressure from cash-hungry investors, is marching Alibaba towards an IPO, and it seems likely it will happen in 2014. The only question is where? Alibaba appears to want a Hong Kong listing, but the exchange has major problems with the way the company is structured.

Jack Ma’s insecurities over the might of its shareholders led to a complex leadership framework that complicates matters with the HKEx. Alibaba has received funding from SoftBank, Goldman Sachs Fidelity and others, and it has caused Ma to fear for his control of the company. The founder has made efforts to fortify Alibaba against a hostile takeover, possible if SoftBank and Yahoo sold shares to a third party looking to seize control.

Ma tried to set up a super-voting structure, which the Hong Kong stock exchange vetoed, as the system conferred inordinate power on certain shares. The HKEx insisted on a one share, one vote policy, but Alibaba built up their characteristic and elaborate partnership structure to appease the bourse. Today, the structure assures that even after an offering, those on the partnership committee will be able to nominate more than half Alibaba’s board — and by extension, guide the company’s trajectory. Despite jockeying leadership around in an attempt to create the illusion of total share equality, Hong Kong remains set against the company’s committee framework.

Such a structure presents no issue for American exchanges; both NASDAQ and the NYSE okayed it without blinking an eye. U.S. companies like Google and Facebook have some form of super-voting shares, and the practice is more common and acceptable in the U.S. than overseas.

Reports that negotiations between Alibaba and the HKEx had disintegrated led chief executive Charles Li to pen a lengthy, allegorical blog post in September. In the post, he guardedly debated the pros and cons of condoning Alibaba’s leadership makeup, all without naming the company. Through different characters — Mr. Tradition, Mr. Innovation, and Mr. Big Investor to name a few — he acknowledged the need for the HKEx to modernize, but stopped short of okaying what could be seen as special treatment towards companies. He emphasized the HKEx prioritized public interest over that of the shareholders.

If the HKEx says yes to Alibaba, it will negate any argument against similar structures that follow, or even precede, the e-commerce group’s public offering. One exception leads to another, then another, and something the exchange once banned could become commonplace. Now, the HKEx stands at a crossroads. It must choose between becoming Alibaba’s flagbearer and giving up an incredibly lucrative opportunity.

Chinese investors hope Alibaba lists at home, and want the HKEx to challenge U.S. stock exchanges. The NYSE and Nasdaq rank first and second with regards to proceeds raised in 2012, around $23.1 billion and $22.5 billion respectively, according to Deloitte. Mainland pressure on the Hong Kong bourse to grit its teeth and bend the rules is significant. Many would see an overseas IPO as a blow to Chinese exchanges, which lost Baidu in a similar fashion and want to avoid losing ground on global stock markets. Hong Kong ranked 4th in terms of proceeds raised (HK$ 89.8 billion or roughly $11.6 billion USD) with 62 listings in 2012 according to Deloitte.

Wherever Alibaba debuts, it is almost guaranteed a successful listing. But if the Hong Kong Stock Exchange loses out to its U.S. competitors, it sends a strong message to Chinese companies and investors that the exchanges in China cannot compete with the likes of Nasdaq and the NYSE. RH

HKEx
香港交易所

PHOTO SOURCE: 2009 WWW.IDTVC.COM

Acer turns to founder Shih to BUCK A WORRYING TREND

Stan Shih, the legendary founder of Acer, has taken charge of the company following corporate president Jim Wong's resignation, two weeks after the company announced Wong would succeed previous CEO J.T. Wang. But can the company's second internal overhaul in a month rescue it? Poor performance in a struggling PC market suggests not.

Both Wong and the man he was supposed to succeed, former chairman and CEO J.T. Wang, are leaving due to the company's recent performance according to Acer. The legacy PC vendor's revenues have decreased by almost 12 percent since Q3 last year. From a slim positive profit third quarter 2012, the company slid deep into the red this year with Q3 losses at more than $440 million. In an effort to reverse this worrying trend, Acer has pinned its hopes on the returning Taiwanese tech legend Shih.

Today, the company ranks fourth in terms of PC shipments with an 8.2 percent worldwide share behind Lenovo, HP and Dell. Though Acer has been downgraded since ousting Dell as second-biggest PC provider in 2009, the years have also proved unkind to the company's competitors. In the three months beginning May 4, 2013, Dell reported net income of $130 million, a $505 million decline from the same period the year before. Meanwhile, HP's non-GAAP net earnings were down $300 million in the third quarter of 2013, compared to the same period in 2012. Yet Lenovo has seen an increase in profits, posting a 31 percent gain between the second quarter of 2012 and the same time this year.

Acer performs okay in a failing category — hardly a point of pride. The company's worldwide market share fell from 9.5 percent in Q3 2012 to 6.7 percent a year later, and shipments dropped by almost 3 million units during that time. Acer announced on November 5th it will lay off 7 percent of its 8,000-person workforce. However, given the consolidating PC industry (IDC reports total shipments down 7.6 percent), Shih must do more than bail water to keep Acer afloat.

Facing competition from companies that have adapted to shrinking demand for PCs, Acer plays the schooner to Apple and Samsung's 300-foot yachts. As merely 2.5 percent of tablets shipped last quarter were Acer's, it's clear the company has brand awareness and agility issues. The lion's share of its products are netbooks, Chromebooks, ultrabooks and notebooks, all souped-up laptops. Though the company has broken into mobile, its smartphone sales had not topped 1 million units as of the end of February 2013. Acer was among the 34.2 percent of providers selling 153.7 million mobile phones combined in Q3 2013, with each company holding less than 1.9 percent global market share, according to Gartner.

Following the announcement of Shih's appointment, Acer's share prices rebounded from a historic low at TW 14.90 (roughly 50 cents, USD) to TW 16.40 (55.4 cents) days later. However, a few days' incremental gains can't erase years' worth of price slides. Analysts generally recommend cashing out of Acer. Prices reflect deteriorating analyst and consumer confidence in the company as it heads into new industries.

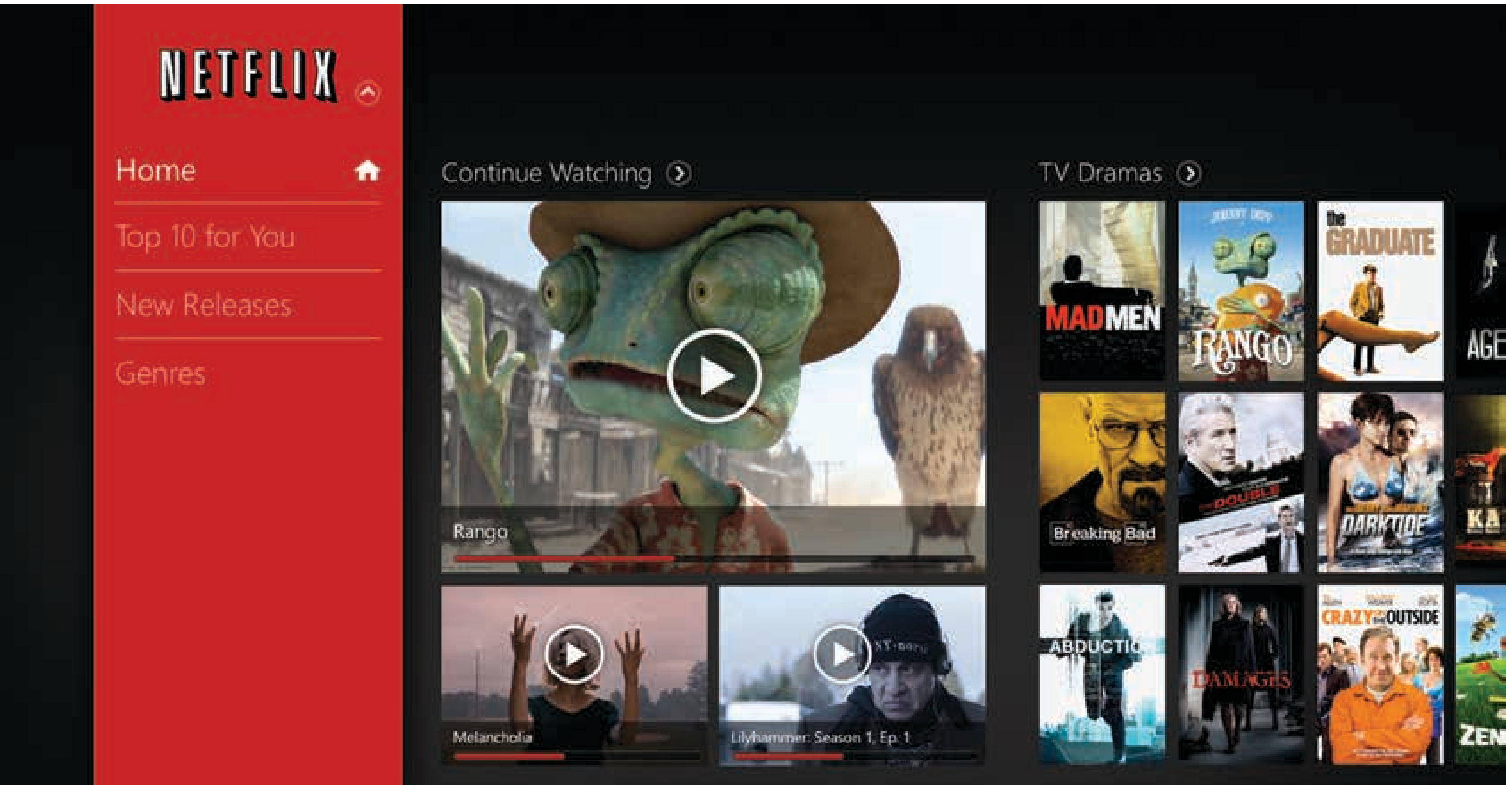
But there may yet be hope for Acer. Shih has piloted his company through upheaval before, and his time at Acer brought sustained success. Perhaps most notably, Shih debuted his Smiling Curve at Acer, a business model exhibiting increased value-adds from technology, brands and services over those from manufacturing. His strategic vision converted the company from simply a producer, into a tech presence with its own personality, and he could do it again. Precedence bodes well for Shih, as returning the founder to a seat of power worked for Apple.

Shih founded Acer in 1976 and left the company fat and happy when J.T. Wang took control in 2005, having steered the Taiwan-based firm through dire straits twice before. The story of the first restructure in the 1990s is detailed in Jason Dedrick and Kenneth L. Kraemer's 1998 book, "Asia's Computer Challenge: Threat or Opportunity for the United States and the World?" Acquisitions caused problems and clashes over management style between Shih and Leonard Liu, president of Acer America, prompted Shih to volunteer to resign. However, it was Liu who left and Shih built Acer back up.

The company restructured again in 2001, when it spun off its contract manufacturing and peripherals units, according Bart Slob, writing in a 2005 profile on Acer for SOMO, the Centre for Research on Multinational Corporations. Acer evolved from a producer to a provider and distributor, with positive results. Operating revenue at Acer increased by almost 60 percent between 2003 and 2004, then again between 2004 and 2005. Shih's company reaped more than NT 7 billion ($236,518,100) net income the year he left — a three year-low, as net income reached more than NT 8.6 billion ($290,540,680) in 2002.

But Shih now seems to feel obligated to resume his old job. "Due to the situation that now faces Acer and my personal social responsibilities, I must stand up and take the reign without salary," he stated in the company's release. His interest might also be piqued by his personal, 0.62 percent stake in the tech producer. In Acer's statement announcing Jim Wong as the new CEO, Shih spoke in a veiled way about changes ahead for the company now returned to him. "After making structural adjustments, we will introduce more competitive products within the existing PC, tablet, and smartphone business and stabilize our market share," he said. "This will be the basis of our transformation and for developing new business opportunities."

PCs remains the core of Acer's business, according to Acer's annual report from last year. In 2012, notebook PCs accounted for 66 percent of Acer's total revenues from ICT product lines, while desktops contributed 16 percent, and displays 8 percent, the report states. Shih has revamped and recharged the company before, but nothing quite so disruptive as the rise of cloud computing or the spread of smart mobile devices occurred during his previous tenure. Though Acer currently relies on PCs to make money, many wouldn't bank on that industry for profitability, or success in the modern technology market. RH



Netflix Streams Ahead

IN EVER CHANGING MARKET

Netflix's history has the makings of a great movie: humble beginnings, more than one near-death experience, and redemption by way of a $17 billion-plus market cap redux — everything except an antagonist.

Netflix began as a humble DVD-by-mail rental service, and now reigns as the uncontested king of the streaming industry, accounting for 31.6 percent of downstream traffic on fixed networks, according to Sandvine. Once a cut-and-dry distributor, the company has recently delved into original programming. Since 1997, web platforms and traditional TV incumbents have taken their time responding to the company's disruptive content delivery solutions. Their inertia has cost them as Netflix has taken control of the market.

According to Nielsen, almost 40 percent of people who use online streaming services choose Netflix, which earned revenues of $1.1 billion during the third quarter of this year. The company now serves more than 40 million people across 41 countries.

Recently Netflix has added to its streaming success with original content. Shows such as 'House of Cards' and 'Orange is the New Black' have won the company credibility and Emmys. Netflix entered the upper echelon of programming providers. After trying its hand at film production with Red Envelope Entertainment early in the company's lifecycle, Netflix recently jumped into Oscar competition with two films they acquired, The Short Game and The Square. Movies studios should watch their backs, as Netflix's future may rest in bringing silver screen pictures to the smaller ones on users' computers and smart device.

Up to this point Netflix's superior user interface and content has trumped that of Amazon and Hulu, its two main rivals. Bill Niemeyer, senior analyst at The Diffusion Group says the lack of competition at the start of Netflix's acendency was startling. "It's like Batman versus the Joker, except the Joker naps through most of the film." But Amazon and Hulu are now looking to catch up, and technology such as TV Everywhere also poses a threat.

> Netflix retains an enormous market advantage, but competitors have begun to establish footholds.

Lately, Amazon has poured cash and resources into content licensing and video services. Netflix CEO Reed Hastings estimated in 2012 Amazon spent anywhere between half a billion to one billion dollars a year on content. Projections from Q3 last year had Netflix spending $2.1 billion on content in 2013.

Amazon revealed "millions" subscribed to Prime in its third quarter earnings report, and sources gauge membership at upwards of 10 million people. But Prime doesn't just offer an instant video service, but also free shipping, meaning not all Prime members are streaming content. Hastings sees Amazon as a major hazard to his business, though his comments about the company seem to indicate Prime Instant Video won't scare him until Amazon spends more on content acquisition.

Meanwhile, well-funded Hulu, owned by ABC, NBC and Fox, has had less luck fighting Netflix, even with a $750 million injection from its backers this summer. The company recently announced its base had grown to 5 million Hulu Plus subscribers and proudly revealed that the company's revenues will hit $1 billion in 2013. Netflix brings in that amount in a single quarter. Hulu has aired its own shows since 2011, but no marquee hit has made its creative efforts as notable as Netflix's. Hulu's platform still incorporates commercial-break style advertising, something users don't have to deal with on either Netflix or Amazon.

Currently, Hulu teams with five of six U.S. broadcasting bigwigs to bring network shows online. But sojourns into original programming may bring users to the platform over the draw of episodes from last week's shows. Last year, Hulu debuted 20 original shows and wants to deploy 40 more in coming years. New episodes of Hulu Originals ranked in the top ten most-watched programming on the site, according to the company.

Other challengers are catching on to new technology trends like TV Everywhere, which would let TV subscribers like those of TimeWarner watch content on mobile. Though Netflix deploys its own content, it may have trouble competing with people's favorite primetime shows given first run on networks, especially when users can watch wherever they want. Embattled startup Aereo may disrupt business as well, as the service will enable people to carry cable TV programming in their pockets. Netflix built its business on convenience — giving subscribers what they want to watch exactly when they want it — and may have trouble beating a company that offers the same, but with more up-to-date options for screening.

Before the company thanks the Academy, it's in for a fight. Netflix retains an enormous market advantage, but competitors have begun to establish footholds. Meanwhile, the potential introduction of TV Everywhere and other, mobile cable-streaming services may dramatically overhaul the industry. From its top spot, Netflix must both defend and continue to gain ground in an ever-changing market. RH

'House of Cards' and 'Orange is the New Black' have won Netflix credibility and Emmys with original content

Meritech Blazes a Trail

in late stage investment

Paul Madera, founder of Meritech in 1999, currently focuses on the SaaS, storage, e-commerce, financial technology, digital consumer, and medical device sectors.

The vast world of venture capital hosts a small and select club — a group of late stage backers and financiers invested in mature technology companies which are all en-route to an IPO. These discrete VCs do not aspire to the big buck returns found in early stage investment, and are happy to take more modest rewards from solid bets on mature companies. Among this select band of investment brothers is Meritech, fast becoming an exception that has gained command of the landscape it operates in.

During the dot-com bubble, the late stage investment world was severely hit. Its participants catered to pre-IPO companies which faltered and collapsed at the Nasdaq gates. Some resounding failures ensued, such as Bowman Capital, which at its peak could do no wrong and folded almost overnight. With an uncanny sense of timing, in the months leading to the peak of the bubble, three former technology investment bankers decide to join force and start their own shop.

Meritech's founders come with solid credentials. Rob Ward brought security and software industry expertise (he later invested in and exited Fortinet, Imperva and Netezza) while Mike Gordon focused on communications, networking and mobile (which eventually led to Back Broadsoft and Good Technology). Paul Madera had a taste for consumer internet and enterprise software, no surprise then when he supported Salesforce and Facebook. All of them had a decade of tech banking under their belts at Morgan Stanley, Montgomery Securities or Deutche Bank, evaluating and setting up start ups financings. They also had a secret weapon, the unyielding support from Accel Partners leaders, Jim Swartz, Art Patterson and Jim Breyer, who gave them an early boost by putting their own money in the fund. Unaware of the industry's upcoming debacle, the trio started with a bang and raised a whooping first time fund of $1.1 billion, a record for a team without prior track record, and a reflection of the mood of the time.

To add to the pressure, traditional early stage players such as Battery, Matrix, and Kleiner Perkins entered the fray and created their own Series D and growth practices. This was supposedly to cater to their portfolios, although critics contend they were lured by the attractive 2 percent management fees. In spite of this competitive landscape, and after its trials and errors, Meritech has thrived and earned its stripes on the field.

Almost paradoxically, the company benefitted from the inauspicious environment it was born into. The four investment partners coat-tailed Accel's pristine early stage practice, Riverbed, whose successful IPO took place in 2006 and preceded security companies like Imperva or Fortinet. Although celebrity-level firms shone under brighter spotlights, less conspicuous companies have returned more money due to three major factors: a rigorous investment philosophy, an old school internal structure and a strong culture.

Meritech's investment philosophy has remained the same since its inception. It finances promising ventures which have achieved a certain level of commercialization or a minimum trailing revenue threshold of $10 million. Secondly, candidates must be on their way to an IPO, and committed long term — meaning they aren't looking for a quick exit. Additionally, the businesses must demonstrate a clear revenue model with a driven team. Speaking to Meritech's past or present portfolio companies quickly shows a pattern.

Meritech partners can afford to sit out and take their time deciding whether to back ideas, often rejecting proposals until the timing is right. Tom Burns, CEO of one of Meritech's portfolio companies, Glaukos, explains that when dealing with Paul Madera and Rob Ward, they told him "No, not now" initially. Burns pursued Meritech further and was denied again in Series D, until Madera took the plunge in Series E and then delivered $30 million to lead the Series F. Meritech eventually invested more money in the glaucoma technology than in any other portfolio company but Facebook Today Glaukos is an internationally acclaimed life science company on its way of radically changing its field.

Meritech's disciplined investment mirrors its internal operation, and the company's partners borrowed the best pages from the old school venture capital manual. They still put time and legwork themselves into screening and monitoring portfolio companies, enabling better coordination and decision processes and rub elbows daily with entrepreneurs at the partners' level. There are no junior analysts or young MBAs, bristling with confidence, reading business plans in the hallways. The 2,500 square feet office nestled in the heart of Palo Alto is far from flashy. Located two blocks away from Accel, the firm which now has just over $2 billion under management, the building boasts no impressive art deco or modern paintings on the walls.

The third factor of Meritech's success "cannot be quantified," according to Jonathan Ord, Dealer Socket"s CEO and one of the firm's oldest investments. "It's about the intangible. Just sit down and lunch with Paul Madera and you can tell the difference," Ord adds. In fact, all of the five partners at the Palo Alto firm stand out from a crowd. One of them piloted bus planes for the Air Force, and Madera flew fighter pilot jets. The partnership dictates that they all receive the same slice of the carried interest (the portion of profits after their investors get paid), which produces a collaborative mindset. "We all share the same lack of confidence in things we do not know" says Craig Sherman, the only new recruit since 1999. He contends that "most partnerships have two great producers and weaker ones, but not in this case here and that is why I joined after a lot of research in 2011".

> Meritech partners can afford to sit out and take their time deciding whether to back ideas, often rejecting proposals until the timing is right.

Entrepreneurs respect Meritech for its attitude on good and bad days. During the tougher times, a combination of honesty and an unruffled approach to problem solving garners appreciation from the companies it invests in. Mike Gustavson, ex-CEO of Blue Arc and now at Virident, remembers the composure as Blue Arc faced competitors' lawsuits and recapitalization efforts on its way to its public offering. Burns praises Meritech's partners for their even keel demeanor, which he believes is anchored in their past. It's a viewpoint echoed by Madera himself, referring to his past as a pilot. "Having had massive amounts of adrenaline pumping through my body on very complex missions as well as crossing the ocean multiple times and having only myself to rely on for 12 hours, you become mentally tough and disciplined," he says.

The company certainly needed that composure during its first few years. Its first fund, Meritech I, fumbled like most of those launched in 1999, and barely returned the money, crippled by late stage investments collapsing at the Nasdaq's doorsteps. The second fund, Meritech II raised $1 billion and once the partners realized they were punching above their weight, they downsized it to $720m. Besides, as usual things do not go as predicted even in the late stage world. Some of Meritech's portfolio companies did not fare as well as expected, such as Homsetead according to Craig Sherman. The partners also missed a few good leads. One that Madera remembers and regrets vividly was Netflix because as he confesses candidly he just "did not get it".

When all is said and done, the returns are the only metric in the VC world – and they have been stellar. In football parlance, the firm has made the playoffs every year since 2005 and won kudos for its consistent choices. Meritech has scored a first tier IPO, the largest software, gaming or SaaS acquisition, or the best performing IPO in the tech and health science world every year. It has routinely exceeded and participated in exits surpassing $1 billion.

A large number of under the radar companies such as Yammer, Pop Cap, Hybris have fared as well in terms of returns as the bigger celebrity companies, and earned Meritech limited partners and investors big pay days. These LPs, as they are called in the VC jargon, include well-known pension funds such as 3M and the State of Delaware, foundations Alfert Dupont and Kauffmann and internationals, including Alcatel and Eurazeo. They have no complaint, having forked out another $425 million in Meritech V in 2011, half of it already earmarked.

Meritech's partners know that they current cycle will bring its own challenge. As the money flies around, valuations are sky-rocketing and each potential deal attracts higher bidders. Despite this, there is great promise in their portfolio, such as Tegile, Glaukos and a myriad of others. But the road remains uncertain, asserts Madera. "We are just riding along, the hard work is made by the entrepreneurs", he concludes. Unflappable, as always. RH

Is **Amazon's drone** plan all for show?

Late last year Amazon announced plans to take to the skies with a fleet of delivery drones, which would send customers' orders directly to them within 30 minutes of an order being placed. The idea seems impractical, potentially dangerous and extremely unlikely, but the retail giant could benefit from a perceived emphasis on innovation.

Amazon CEO Jeff Bezos announced the drone delivery project on CBS' 60 Minutes and attracted wide media attention. He revealed it was still very much in the development phase, and didn't expect it to go into operation for a number of years.

Drones will be able to deliver packages weighing up to 5 pounds, which covers 86 percent of all items the company handles, according to Bezos. The devices, currently being tested, have eight helicopter rotors, stand on four legs, and can cover a 10 mile radius from the delivery center they start out from.

But the idea has almost too many flaws to list. The notion of hundreds of drones flying around a city would cause major security concerns for the Federal Aviation Administration (FAA), which already has stringent rules on small flying vehicles. The devices could even pose a terror threat, should someone deliver explosives via the same medium.

Despite this, the announcement of project will work in the favor of Amazon, according to analysts. "To be in the news and be seen as innovative, especially when you are technology-centric like they are, is probably good for the brand, so I don't see any downside to this," says Rob Enderle, principal analyst at the Enderle Group. "The only downside to this would be if they actually rolled this thing out and we have drones either running into airplanes, colliding with cars and windows, which would be likely, and falling out of the sky. That would do tremendous brand damage."

During Bezos' appearance on 60 Minutes, he appeared keen to show just how important innovation remains to the company. "We like to pioneer, we like to explore, we like to go down dark alleys and see what's on the other side," he said. The drone announcement almost seemed like a publicity stunt, by a man not known for courting media attention previously. The motive for Bezos' out-of-character actions is unclear.

Amazon's third quarter earnings from report from 2013 revealed a company making progress towards profit, but not yet achieving it. The e-commerce giant recorded a loss of $41 million, or 9 cents per share, over the three months up to the end of September — a big increase from last year, when the company lost $274 million over the same period. Revenue increased 24% in the third quarter to $17.09 billion, compared with $13.81 billion a year ago.

Delivery is one of the largest expenses Amazon incurs, and the company has invested heavily in new high-tech warehouses this year. Fulfillment costs, which covers distribution, increased to $2.034 billion in the third quarter of 2013, up from $1.51 billion in the same period in 2012. In the past, the company has sought new ways to make these distribution centers more efficient, as boosting performance could trim costs and increase thin margins. The Amazon drone delivery fleet clearly represents the more ambitious side of this effort. RH

Amazon's fullfillment center

Was Snapchat right to reject Facebook's $3 billion?

ALMOST CERTAINLY NOT

When you send a Snapchat message the user on the other end has a limited period of time to read it, before it disappears forever. Investors in the company may be able to relate — as the startup's decision to reject a $3 billion takeover bid from Facebook may have wiped out the temporary chance of a hugely profitable exit.

As technology investment flourishes, the threat of an impending downturn means the company may never see another offer such as this one again. Meanwhile, Snapchat is still not making money, something it will need to remedy if it is to attract a higher valuation in the future. Ultimately, the sheer size of the offer makes Snapchat's rejection difficult to understand.

Technology startups are enjoying an increasing amount of funding pouring into the sector. Deals worth tens of millions of dollars are being announced every day and multi-billion dollar exits are becoming more common. But this uptick brings a large helping of skepticism with it, as well as suspicion for the future. At the recent Red Herring Global event in Santa Monica, investors advised startups to take the money now, rather than later, as a decline could be lurking just around the corner.

There is genuine, and justified, concern that the market is heading for a crash. In October, Dow Jones revealed that valuations of U.S. based venture capital companies reached pre-bubble levels, and were up by more than three times in less than four years. The value of the technology IPO market has surged, and the likes of Snapchat are valued at more than $3 billion, despite making zero revenue. These are all signs of a possible bubble, but there also needs to be needle-like events that can pop that bubble. One possibility is the cut back of quantitative easing by the U.S. Federal Reserve in the near future. Interest rates are currently close to zero as the Fed pumps money into the economy, but if this stopped, money would prove less easy to get hold of. Paul Denninger, senior managing director at Evercore Partners, told the Red Herring Global conference last year that those seeking investment should hope the Fed doesn't pull back it's stimulation of the U.S. economy, or they may find it more difficult to find companies willing to inject cash into their companies.

Noted investors also expressed concern that market conditions are starting to look bubble-like. "I just worry a little bit that we are edging back to the 'eyeball-and-click' thing we had just before the year 2000," Art Cashin, Managing Director of UBS Financial Services told CNBC. "It's not quite frothy yet, but it won't take that much stirring to get there.

For Snapchat a crash is potentially lethal in timing. The exact reasons behind the messaging service's decision to reject Facebook's $3 billion are yet to emerge, but it seems the company is holding out for a valuation nearer $6 billion further down the line.

But a bubble is not a forgone conclusion. There are some key differences between the market now and in 1999. One is the number of IPOs – there were 308 in 1999, compared to 28 so far this year, although the values of IPOs this year were significantly larger.

For many, the key question is — how will Snapchat make money? The company is not making a profit at this point and the road to revenue generation is unclear. There are two major options open – one is to introduce advertising, and the second is to sell virtual goods. But neither of these are groundbreaking, nor do they carry anything approaching a guarantee of success. Advertising has the potential to drive users away, and while selling virtual goods has seen success in the past, its success in the games industry has been patchy at best.

Snapchat's CEO Evan Spiegel told a recent Goldman Sachs event in Las Vegas that users are sending 400 million 'snaps' every day, and almost half of them had tried the new 'stories' feature, which allows users to combine messages to form a narrative. The company does not disclose its number of users.

The messaging application market is crowded, and dominated by the likes of WhatsApp, which was subsequently bought by Facebook, WeChat and Viber. But the 'secret' messaging app market is also becoming more popular. Facebook did make a play in this space, but it's offering, Poke, failed to take off in any meaningful way. There are more serious competitors out there, such as Wire, set up by two ex Amazon employees, and Wickr, which offers an encrypted messaging services.

Given current trends, any startup may think twice about making a profit before exiting. It seems those with no revenues are making all the money, and in a way it makes sense. If a company attempts to make money and fails, its value will decrease dramatically compared to an idea with a great deal of potential and nothing else. But for this strategy to work, the company must exit at the right time, and for Snapchat, surely this was that time. For the market, it's a worrying sign that companies are turning down $3 billion pre-revenue as it suggest bubble-like conditions, but for Snapchat it's not just worrying – it's almost certainly foolish. RH

European firms look to Israeli model FOR U.S. SUCCESS

For many years Israeli companies have moved to Silicon Valley in their infancy. They benefit from the vast opportunities the U.S. market has to offer and leave their research and development departments back in Israel, where wages are lower and talent is in abundance. But in a twist on an old trend, European companies are now starting to follow a similar pattern.

One such company is Scality, a French firm that provides software-only solutions to handle exponential data growth. The firm was founded in 2009 and made a decision early on to move to the U.S. Scality's vision was to structure the company with a global headquarters in Silicon Valley and a European headquarters in Paris.

France boasts a healthy education system and its universities produce talented IT engineers. Scality takes advantage of this by hiring company engineers and developers in France, while recruiting a sales force in the U.S. to take advantage of the market there.

By operating out of Silicon Valley, Scality can reach 40 percent of its market in just one country. Although a French company, Scality earns 50 percent of its revenue from the U.S. But it is not just sales numbers that attract companies to head to the U.S.

"If you want to be a worldwide success, that's where the action is. That's where you can spot the trends of innovation, that's where the market is and it is also where the partnerships are. And candidly, that's also where the exits may be," says Scality CEO and founder Jerome Lecat.

Moving to the U.S. is not easy, especially for a young company. One of the biggest difficulties: hiring the best talent. Silicon Valley's finest are unlikely to choose to work for a European company unknown to them over a big name or a small business with proven backing. Other challenges include logistical ones, as the U.S. side of the business starts work just as the Europeans go home. This has the potential to create a rift, effectively creating two different companies.

Scality's solution to the recruitment problem was to move Lecat out to the U.S. Immediately. This allowed the firm time to find the best recruits and avoided a scenario in which average employees were hired in the early days. Another answer is to secure funding from a U.S. investor as soon as possible.

Lecat moved to the U.S. at the Series A investment stage of the company. The firm recently received $22 million Series C in a round led by Menlo Ventures. It was the first time the California-based investor put money into a French company.

U.S. investors see these European companies in one of two ways – either as great companies held back by the investment ecosystem in Europe, or as marks ready to squeeze money out of. Alex Fries, president of Ecosystem Ventures, a Silicon Valley-based venture capital company, says 90 percent of the time the main reason European startups move to the U.S. is to search for capital. Companies in Europe grow more organically, and slowly, due to difficulties finding an investor.

But when the European companies get here, they are in a vulnerable position. "There are a lot of so-called sharks, a lot of consultants and service providers that take advantage as soon as they smell some money they can get out of these European startups," says Fries. "It can be very costly for them to find the right investor or partner."

The economy in Europe is still struggling to recover from the crisis which caused chaos across the continent for a number of years. Meanwhile, startups in the U.S. raise an astonishing amount of money. It's no wonder that really ambitious European companies move to the U.S. in order to find funding, get closer to their customers and prosper in a better economic environment. It may not be long before the business plan used so effectively by the likes of Scality is as common as the Israeli model which has worked so well in Silicon Valley. RH

SAMSUNG SUFFERS DROP as budget smartphones disrupt market

On the first day of trading in 2014 Samsung shares dropped 4.59%, wiping nearly $9 billion off the company's market value. One of the chief causes for concern for investors was the ever-growing market of budget smartphone devices, and the impact it could have on prices.

Samsung reported its slowest profit growth since 2011 for the fourth quarter of 2013. The company's performance in mobile remained flat from the previous year. If cheaper phones continue to prove popular, the firm may have to decide between keeping its gigantic market share, and slicing its profits margins.

Newer, cheaper offerings are starting to push down the price of devices. Google's Motorola division recently unveiled the Moto-G, as it looked to target less affluent consumers with a very capable, cheaper smartphone. And this week Google cut the price of its flagship device, the Moto-X, from $550 to $350. The Moto-X, is in direct competition with Samsung's Galaxy S4 device, which is sold for $600 without a contract.

Budget smartphones are extremely popular in China, and there has been much disruption in that region. Apple recently signed a deal with China Mobile to sell iPhones in China, an agreement which will reportedly add up to $3 billion in added revenue this year. But it is the budget market that is really heating up.

Chinese low-cost smartphone manufacturer Xiaomi announced plans to double sales of its devices in 2014. Xiaomi reportedly sold 18.7m devices in 2013, an increase of 160% from the previous year. The company projected it would sell 40 million devices this year.

Xiaomi brings a new business model to the smartphone market. Hugo Barra, who joined Xiamoi from Google's Android team, said last year that the firm is happy to sell its phones at cost, and then make its money from the services it provides. The firm's main offering, the Mi3 smartphone, is available for around $330 and the company reported the first 100,000 were sold out in 90 seconds when it was released in October. The company only operates in China, Taiwan and Singapore currently, but the appointment of Barra strongly suggests the firm will go global soon.

Another Chinese smartphone maker, Huawei, unveiled its 'Honor' series of phones in December, which also target the budget market in China. The most powerful of the two phones announced, the 3X, will be sold for around $280 without a contract.

The budget market in China will become even more competitive as more devices are launched and costs drop lower. And this boom in cheap smartphones is likely to be replicated all over the world. The most pertinent question now is – will the likes of Samsung and Apple adjust accordingly? RH

VeriSilicon

What makes a smartphone so smart?

A phone can boast a great camera, high resolution screen and a revolutionary operating system, but if the hardware can't support the software, then the phone, despite its sleek aesthetics, is just a physical object that lacks functionality. Underneath the hood of the latest high end devices, like the Samsung Galaxy S5 smartphone, lies a design chip that bridges the hardware and software to optimize the device's performance. VeriSilicon, a semiconductor company dually headquartered in Shanghai, China and Silicon Valley, stands on the front lines of this booming market.

The worldwide smart connected device market, comprising of PCs, tablets and smartphones grew 27.8% year over year in 2013, according to a recent report from market intelligence company IDC. IDC also predicts that shipments of smart devices will exceed two billion units by 2015. With notable industry leaders placing stakes in the dynamic hardware market — Google phones, Amazon's Kindle, and Microsoft's XBox One being quintessential examples — the demand for semiconductor designs and updates is set to rapidly expand.

Traditionally, semiconductor companies fit into one of three categories: the direct manufacturers of chips (those who could endure the $5 billion capital expenditure to open a production plant), the fabless companies that design chips, and the foundries that handle outsourcing projects from the latter two. The foundries, often Taiwanese or Chinese, eventually turned into the mammoth public companies such as TSMC and SMIC. According to an IBS report, R&D expenditures as a percentage of revenue from a semiconductor are higher than that of pharmaceutical and biotechnology companies; in fact, they are the highest among all industries, exceeding 17% in 2013. VeriSilicon, launched in Shanghai by the visionary Wayne Dai, has positioned itself in a unique category, attempting to utilize its 'design lite' model.

Dai, serial entrepreneur and CEO of VeriSilicon, acknowledges that his $100 million per year company has adopted an unorthodox position in the market. "We stand between large semiconductor companies, and fabless," he says. VeriSilicon discards the "one size fits all" mantra in favor of tailored custom silicon chip solutions. The company produces systems-on-chip (SoC) solutions that combine all components of an electronic system onto a functioning chip. Such solutions fill a void for systems companies that engineer an initial design but outsource later stage upgrades and developments. As the result of SoC, the core competence of chip companies 'move up' so they can outsource design implementation and reduce high R&D costs. On the other hand, the system companies 'move down' to own a chip for differentiation and customization. Both system companies and chip companies work with VeriSilicon to deliver their custom silicon solutions effectively.

"Right now, fabless does not suffice, since IP costs rise so much, hence the next wave is design lite," says the bespectacled Dai. Twenty years ago, wafer foundries such as TSMC created the fabless chip industry through manufacture outsourcing, a wave led by companies like Qualcomm, Broadcom, and Marvell. Now, design foundries like VeriSilicon enable the design-lite chip industry through design outsourcing with a turnkey service. In other words, VeriSilicon's design foundry model strives to both tailor each chip from scratch and build a sophisticated IP platform from which production can be flexible and cost efficient, while the quality of the end product remains high. Since 2008, the Shanghai and Silicon Valley team have delivered 50 chip designs per year and are able to produce 20 chips concurrently in Shanghai for first-tier customers.

By leasing its IP and collecting royalties, VeriSilicon adds an additional dimension to its business and supplements its revenue model with higher margins. This dual model differentiates VeriSilicon from its competitors. Dai disclosed that intellectual property accounts for 20% of the company's revenues, a growing percentage since 2010.

But in an industry where Dai claims there is "not enough innovation," it is difficult for one company to distance itself from the pack. Global players like San Jose-based eSilicon and Open-Silicon, headquartered in Milpitas, California, secure their share of the market. ESilicon is an ever-present in the South Asia region, while Open-Silicon's footprint in India is second to none. Dai understands that he will likely not monopolize the industry, accepting that competition fuels the innovative process. "We cannot be the only guy," he says. "I wish the other [companies] well."

Lip-Bu Tan, Chairman of Walden International and a veteran of semiconductor investments, says it is not easy for design service companies, such as VeriSilicon, to scale and develop high margins. "Design service is different from the design companies. Design companies like Broadcom have their own product, they can sell, scale, predict. Design service companies like VeriSilicon [design] for somebody else. It's very hard to predict because they don't own their own product, and therefore they depend on customers and when they give you a contract. [They provide] a derivative product." With VeriSilicon's derivative designs reliant on contracts and the cyclicality of its customer's products, client turnover remains high, says Tan.

The market for specific chips can be unpredictable, which makes it difficult for those in the industry to scale. Multiple companies have seen their efforts come to fruition, but it is hard to scale past the $100 million valuation point to $500 million or $1 billion, because semiconductors cater to a derivative market, according to Tan. Without their own tools and IP, there is a fortified ceiling on the growth potential of these companies.

But Soo Boon Koh, founder of iGlobe Partners and long-time investor in VeriSilicon, believes in the company and its leadership despite ups and downs. As part of the Series A funding terms about 10 years ago, Koh required Dai to give up his professorship at the University of Santa Cruz to put all of his focus into VeriSilicon, a challenge that Dai took in his stride. "I learned that he's dedicated, he's very passionate, he's always thinking about new things," Koh says. And as long as Dai's entrepreneurial spirit remains strong, Koh believes in the company and will walk the journey alongside him.

By leasing its IP and collecting royalties, VeriSilicon adds an additional dimension to its business and supplements its revenue model with higher margins.

Dai, a UC Berkeley alum, is not oblivious to this market volatility and is making strides towards scalability. VeriSilicon enables "repeatability, scalability, and a high barrier to entry" through its IP platform. Using the VeriSilicon platform, multiple, specialized, high quality chips can be produced or re-produced without starting from scratch, allowing for the diversification that is essential to the company's business model. While most of VeriSilicon's client list is undisclosed, its known customers include IBM, Marvell, and Samsung on the traditional semiconductor side, and companies like Microsoft and Sharp on the electronic hardware side. Using his repeatable platform, Dai hopes that he has created a customer "stickiness" that ensures his A-list of clients will continue to return, while the company simultaneously forays into the health sector and other domains to expand its market footprint.

Dai is confident that even in economic slumps, VeriSilicon's diversification will lead to exponential growth. "In downturns, companies tend to download their chip design strategy to companies like ours and we can even acquire IP during those times," says Dai. Competitor eSilicon produces 20 chip designs per year, according to the company's website, far lower than the 50 chips designed by VeriSilicon.

VeriSilicon has a substantial geographical reach; while all of its manufacturing operations and over half of its engineers are based in mainland China, 70% of its revenues is earned from customers spanning the USA, Europe, Taiwan, and Japan. Its commitment to global growth and innovation is unquestioned with uncharacteristic research and development centers in Sofia Antipolis (France), Japan, and San Jose. Verisilicon' sales growth has been 40% since 2010, and Dai asserts that the company will grow another 35% in the next three years thanks to market tail winds blowing in its favor.

The consumer marketing and electronics craze is spreading like wildfire. Global and local brands including Google, Amazon, Alibaba, and Baidu competing on every level with the dominant incumbents like Apple, Samsung, and Sony. With electronic devices set to be churned out in the next year faster than bread and butter, VeriSilicon is sitting on a veritable goldmine: "those are the people that know the software business but not the hardware business," Dai claims. "They need hardware silicon strategies." His sentiment is echoed by his long-time friend, Lip-Bu Tan: "[VeriSilicon] is quite strong on the system side," he says. "[The] system side is better, [and] their margin will be better. [Growth] would also be more predictable, rather than depending on the [traditional] semiconductor customers."

While the company has not yet disclosed its future plans, Dai hints that an IPO might be coming as early as this year. Consumers worldwide are creating the demand for the electronic hardware devices and fueling a market opportunity that VeriSilicon can exploit. It is likely that many of the new smartphone, PC, and tablet purchases made in 2014 will bear VeriSilicon's mark. RH