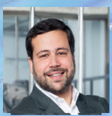
Issue 36

insight

sh gillamor stephens

CONSULTING, TECHNOLOGY & SERVICES

Insights from industry leaders across the consulting, technology and services sectors.



Charles Nasser
Founder & CEO,
Claranet

Heather Preu
CEO - North America,
Kerridge Commercial
Systems

Ian Spence
CEO & Founder,
Megabuyte

Rob Coupland
CEO
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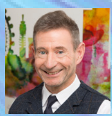

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In this Issue

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Introduction from Steve Morrison

Welcome to the 36th edition of insight Magazine from SH Gillamor Stephens

This magazine has been prepared during the global health and economic crisis caused by the Covid-19 pandemic. It is a challenging time for all companies and their leaders with staff safety and health a priority, as well as dealing with the challenges relating to a recessionary business climate. All companies across the consulting, technology and services sector that we serve have had to rapidly implement remote working as well as, in many cases, supporting their clients through that transformation, accelerating the adoption of cloud-based communication and collaboration tools. As companies embrace new ways of working, digital transformation, if it was not already, is now a board level agenda item and while in the short term there is caution around large scale capital investments many of our clients expect to be busy with these types of programs as businesses emerge from "lockdown". This may also prove to be a time of great innovation as entrepreneurs develop novel technologies in response to new working trends, societal changes, consumer behavioural changes and business market opportunities.

The recent months have been a period of positive change for Gillamor Stephens. Following our acquisition by Sheffield Haworth in 2018, we have recently merged with the Business and Professional Services Practice to form CTS, the global Consulting, Technology & Services Practice of Sheffield Haworth, and evolved our brand to be SH Gillamor Stephens. Our team is now global, with consultants and researchers based in London, Singapore, New York and Los Angeles and we are able to supplement our core executive search capabilities with executive assessment, leadership development and coaching, plus interim consulting. We have all adapted well to the current remote working practices and, while not surprising in these uncertain times, our business has been impacted, a significant proportion of executive assignments have continued. With our support, clients have adapted to running "virtual interviews" and assessment processes and we have recently completed a number of Board level roles where there has been no face to face meetings between the client and preferred candidate.

People have started new leadership roles during "lockdown" and one of our recent hires, Heather Preu, who joined Kerridge Commercial Systems as CEO North America, provides insight into her experiences of this in the magazine. The technology sector is resilient and technology companies will play a key role in reviving economies post the pandemic. At the time of writing in June we are already starting to see certain key hiring requirements that were put "on hold" in March being reactivated and other companies considering leadership requirements for the post lockdown era.

We are grateful to the business leaders that have given us their time to be interviewed for this magazine. The contributors are entrepreneurs and experienced corporate executives from different areas of the technology industry including Cloud Managed Services, Enterprise Software, Machine Learning, Deep and Space Technology. As they share their thoughts on their sector, business and dealing with the Covid-19 crisis, one theme that is clear, now more than ever, is the importance of a strong company culture and an inclusive leadership style.

I hope you enjoy this issue of insight Magazine and I welcome your feedback.

Stay safe and well.

Steve Morrison
smorrison@gillamorstephens.com

Claranet; ever changing but staying true to core principles

Charles Nasser is the Founder and CEO of managed cloud, connectivity and IT services provider, Claranet. The company employs over 2,000 staff, has offices in 9 countries, serves over 6,500 business customers and has annualised revenues of £375m. Steve Morrison of SH Gillamor Stephens had a discussion with Charles to understand what underpins the company's success, what keeps him at the helm after nearly 25 years as CEO and his views on the impact of the Covid-19 pandemic on businesses and IT Services.

Three Guiding Principles

I was fascinated by computing from my early teens and although I could programme, I really wanted to learn how to build a computer, so I went to Imperial College London and studied a Master's in Electrical and Electronic Engineering. I was absolutely mesmerised by the potential of technology and in that academic environment my mind was opened up to all the possibilities of computing. While the vast majority of my classmates ended up in finance related jobs because of the good pay, I knew my future was going to be in technology.

Before setting up Claranet in 1996, I spent about five years working as a Consultant during which time I learnt that I did not enjoy working alone or in a transient environment. I had come to realise that I liked being in a stable team of people that are all working together in a business where there is a recurring relationship with the customer, an enduring relationship. These principles were the absolute key drivers that led me to starting an ISP as well as the fact that the Internet was the really up and coming thing back then; we are talking very early in January 1996!

So, if I look today, fast forward 24 years, despite the fact that our business has dramatically moved on since then, those three things are exactly the same three things which motivate me and that underpin Claranet's business today; firstly our love of technology and what it can do. So, when our strapline says, "Helping our customers do amazing things," what we mean is really amazing things with technology. And that is just as true today as it was 24 years ago and it is truly what I still find fascinating about what we do and motivates me to continue doing it. The other two principles; working in a team and having a relationship with the customer which is recurring in nature are also now completely part of our DNA. Maybe it is a fluke, but it was started deliberately. Also, I don't believe it is a question of scale; you could have a 10-person business or a 10,000 person business and those 3 things would be exactly as important.

"When our strapline says, 'Helping our customers do amazing things,' what we mean is really amazing things with technology."

Charles Nasser, Founder & CEO, Claranet

Ever changing role

I have seen many technology entrepreneurs come and go. Some have gone with lots of money by selling their businesses and some have gone because their businesses have failed albeit you never really hear much of the latter. So, the life of an entrepreneur is one in which you are going to have to walk through minefields most of your life and you see people around you not making it. It is quite stressful. I am thankful that Claranet got out of that kind of existential threat phase, after its first five years. Then there is a different kind of stress, where you can worry whether your business is going to be relevant three years out. Fortunately, Claranet is so broad now, with a wide services portfolio across many countries, that we don't have this issue. Of course, we will always evolve our business and the larger you are, the more opportunities you have to do that.

For me personally, I don't feel that what I am doing now is similar to what I did 5, 10, or 20 years ago; so, it doesn't feel like I have done the same job for 24 years. Therefore, although my title hasn't changed, what I do and what I worry about and the things I do on a day-to-day basis have evolved dramatically over that period of time. Certainly, there is no boredom there as we continue to evolve as a business. Claranet has grown sevenfold in the last six years, so that is a dramatic change, but I certainly didn't do this by myself. I have a fantastic team around me which is a huge factor in our success. I think cultural fit is a really big part of it. When we are hiring, it is an elimination criterion that gets exercised a lot. Clearly there are a lot of competent people in the IT industry with good CVs and track records, but we would never want to work with them if they are not team players. We are very, very clear that for somebody to be effective, they have to work in a team at Claranet. It is an environment where success only comes through teamwork.

We have a lot of continuity in our business. Many people have been with us 10, 15, 20 years and have built their careers with Claranet and developed as individuals and as professionals, and that is a very nice environment to be in. Our change has also dramatically accelerated through acquisitions – we have made over 30! So, none of us feel like we have had a boring or the same job for long. The only reason we are buying businesses is because we think they are a good long-term fit. So, with that lens, what matters the most typically is the people, the culture and the fundamentals of what they do.

Impact of Covid-19 pandemic on Businesses and IT services

What we saw in the global economic downturn of 2009 and what we are probably going to see again after the current economic crisis is a lot of businesses, in order to respond to a significant commercial pressure, use technology to become more efficient. So, they might re-purpose projects that they might have had as business expansion projects into efficiency focused projects in order to handle increased debt on the balance sheet, or a difficult financial situation, declining profits, etc. What is unknown is if there is a protracted recession or even a depression as a result of Covid-19, it is bound to have a negative effect on every business, including us, as a receding tide will impact everybody. However, I think, as far as industries go, we are among the lucky ones, and the nature of our services are business critical to customers and recurring in nature.

The only reason customers stop using IT services long-term is because they go bankrupt, not because they don't use the services. They might switch from somebody else to us, or from us to somebody else, but they don't fundamentally stop using IT. So, from that point of view, we think the real downturn is more linked to the overall level of bankruptcies in the economy, but clearly the current Government support programmes are aimed at limiting that impact. There will be economic pain, but they don't want to see largescale bankruptcies. Comparatively, the pain will be the less in our sector, compared to many other business sectors.

In terms of our services, we see the current crisis as an accelerator of several trends that were underlying beforehand, for example, remote working. Remote working was something which was well accepted, it was just not broadly adopted.

The need for many businesses to have 100% of their staff homeworking in the space of a few weeks meant that when restrictions start to be lifted, working practices won't go back to how they were before. It will dial down, of course, but only so much. So, say, the average workforce in our industry was 10% homeworking and 90% office based. Will that become 30%, 40%, 50%, 60%? It is not going to be 10% to 12%. The dial is going to move significantly which will have a number of knock-on effects, for example, on how offices are used; offices will not look the way they look today, they will be largely focused on meeting rooms, collaboration spaces, events and not on sedentary work.

The second trend we see because of the crisis is the much quicker adoption of technology enabling communication and collaboration; for instance, getting thousands of people on an "all-hands" call. We can do things that we could have done six months ago but didn't choose to do because of the physical nature of office environments. Because of the wider adoption of these tools which have in fact existed for a little while, it is going to change the way we work and it is going to be for the better. It is going to allow us to be more productive and to do things better and quicker. So, that is the second very big learning.

The third one I would highlight is that businesses that were in sectors that either had overcapacity or underlying weaknesses are going to be pushed out or pushed over the edge. It is going to exacerbate the weaknesses, not just the strengths. So, in our industry, there aren't many businesses that are in that place. There will be a few, but not many, at all. But many other sectors will have businesses like that, that will have too many weaknesses and just won't make it.

We will see the inevitable capital restructuring because of debt in many industries which will concentrate industry and it will reduce competition for a short while. That is not such a good thing, but it is an inevitable outcome of recession to a crisis and then they will re-expand at a later stage. Claranet is big enough that we are probably on the right end of that one, but our industry is not contracting, so I don't think we will see a huge benefit from our side, but other businesses in different industries will.

Our roadmap of services supports those trends of businesses adapting, restructuring and accelerating their use of technology. We expect to see customers, once they have realised that their business will survive and there is a future for them, accelerate all projects relating to IT because that is the future; and that is a good thing for us and for our industry.

Landing in "Lockdown" – an Optimistic Realist

SH Gillamor Stephens recently recruited Heather Preu to be CEO North America for Kerridge Commercial Systems, the leading ERP software provider to distributive trade customers. Heather joined KCS in April 2020 from Infor where she was Senior VP & GM Global Solutions. Heather shares her experiences of starting a new leadership role against the backdrop of the Covid-19 pandemic and business "lockdown".

What appealed to you about the KCS opportunity?

After SH Gillamor Stephens' initial approach and briefing, I did extensive additional research and I realized that KCS were investing significantly to grow the business in North America. The company has great market presence in the UK, South Africa and other geographies and I could see that there is a huge opportunity for their solutions offerings here. I liked the fact that the company had been in acquisition mode over the last couple of years. It definitely showed a forward-thinking business with a clear strategy and well thought through acquisition process, broadening their solutions offerings and moving into complimentary industries. The recent acquisition of MAM, the US-listed software solutions provider to the automotive parts, tire and vertical distribution industries being a case in point. I really liked their approach to both growing the organisation as well as moving more proactively into the North America market.

Were you apprehensive changing job in the current climate?

Absolutely. First of all let's say whenever you're making a company change it is nerve-wracking. There is a fear of the unknown but there is also the excitement of the new opportunity. The SH Gillamor Stephens team and the Kerridge CEO and Chief People Officer did such an amazing job making sure there was frequent contact throughout the recruitment process. Everyone was sensitive to what was starting to unravel with Covid-19 and were extra communicative and rather than the, "How's it going? Are you getting ready?" there was that extra, "We understand it's trying times".

For me, based on the size of the Kerridge organisation and its ambitions for North America, I realised that despite these uncertain times, it still needed someone in this role. I knew that in making the move, people would say, "Wow," and trust me, my LinkedIn "blew up". Most of the comments were like, "Wow, you're brave doing something like this right now," but it does not change the fact that this needed to be done. These are unprecedented times and if I can come in, take the helm and basically help steer through a crisis like this, then it can't be any more challenging moving forward. In times likes this you really get to see the best of people

Heather Preu CEO - North America, Kerridge Commercial Systems

and I am immensely impressed by the calibre of the team that I am working with and how we are dealing with the current business climate. I am sure, within the organisation, people must have been saying, "What are you doing bringing in a new CEO right now?" However, I think my background and experiences gained with organisations that were going through transformation and scaling-up, really aligned well to this role. I felt like I could come in and make an impact and help Kerridge get through this challenging period. Yes, there were definitely nights where I said, "What am I doing?" but the positives outweighed that. I think that when you go to take on a new challenge and a new opportunity, you want to feel that you are coming in and making a difference and I felt like I could.

Given "lockdown", with the whole organisation working from home, what was the onboarding process?

Well firstly, I'll say I'm an optimistic realist. I try and make the best of a situation. Luckily for me, my history has been running global teams many of whom worked remotely. At IBM, my boss was in Munich, my team were in 45 different cities and countries, so starting this new role under the "lockdown" restrictions was not as intimidating because I am very used to remote working. That said, the Kerridge team did a really good job with my onboarding. They had the technology I needed delivered in advance of my start date and they were very thoughtful in making sure all the key individuals were scheduled for virtual web meetings with video for the first two or three days. This allowed me a good opportunity to get to spend one on one time and get to know them. I feel that is the critical aspect; it's one thing to do a conference call, it's another to have a video call as, especially right now, it is important that people can see each other. In fact, it may have been even more successful than other onboardings I've done in the past when getting face to face time with everybody was difficult because of having to work around travel schedules and multiple office locations!

I am actually a huge believer in being out in the field and at the offices. In a perfect world I would have gone to each of the locations and held "town hall" style meetings. We just changed those things to being virtual. I believe transparency and communication are incredibly important. One of the first things I did was an "all-hands" call following one by Ian Bendelow, the CEO, who introduced me to the whole organisation. I spoke to all of the North America business, provided a little bit of background on me, my goals, how excited I am to be here etc. In addition, I held smaller virtual round tables with the specific teams – the HR team, the Sales team etc. When you are leading a 150-200 people conference video call, it is hard to take questions; somebody forgets to mute, the dog is barking in the background, those kinds of things. With the smaller groups, it is much more manageable. Then I followed that up with a North America newsletter, covering the normal areas – sales wins etc. but also my philosophy on business. I am very cognisant that I need to have frequent communication, even if it's just an email or a quick video message to the team, whether it's an acknowledgement of deals won or there are books that I'd recommend. For example, right now, "The Challenger Sale" which is a popular book that many salespeople have read in the past, is interesting to read again as one of the first chapters deals with selling in a down economy.

On another note, like most companies, we are doing virtual get togethers. A new idea that I particularly like came from our HR team; they picked a major point of interest or tourist well-known location in countries where we have offices, so for example Ayers Rock or the Grand Canyon rim, and are doing a corporate step challenge. That is something that is healthy with a bit of competition to help people through lockdown; whether it is walking around their garden or walking on the treadmill. Microsoft Teams is a fabulous tool. One of the Teams that we have is your pets at work, they are all sharing pesky pets, a picture of the dog in the background or a cat relaxing on a desk. It just gives a smile each day.

Just about every day I have one or two introductory video calls with customers to touch base, to see how they are doing, to see how we can help and just introduce myself. I have also spent time with the customer advisory board, who are really supportive in donating their time to help us refine the products. We are also drafting a customer newsletter. It is something that I wanted to get out a little bit sooner but obviously there is a lot going on in the first few weeks of taking the role.

Integration and company scale

It's a unique time for Kerridge right now because they acquired MAM in October last year, so they were only six months into this acquisition and bringing the teams together when the Covid pandemic hit. I am using this time as an opportunity bring in people from all different locations over video, to start to create one Kerridge organisation in North America. In my career, I have been through both sides of acquisitions. I have been in companies that have had private equity investments, that have ended up being acquired and then at IBM and Infor, working in organisations that were doing the acquiring. In my new role, I am sensitive to everybody's needs right now but especially on the MAM side of the business. I would really love to get feet on the ground and physically meet them; so, I am making an extra effort to engage with those teams even more closely as we're pulling the groups together virtually.

I joke that I am the business version of Goldilocks; too big, too small, just right. I think that what I am bringing to the role is scale. Throughout my career I have worked in smaller organisations, companies in the middle tier and then large entities such as IBM. What I have found is that in almost every company, 75% to 80% of the issues that they face are the same; it is all about people, process, product. What the larger organisations allowed me to do is really understand managing and driving change at scale supported by strong processes and infrastructure.

Those companies are constantly re-organising and going through structural changes. For example, at IBM, I started with just two parts of the portfolio but that had become seven different offerings by the time I left. This is similar to what Kerridge is going through with their acquisitions, bringing multiple companies together, unifying systems, standardising processes etc. Absolutely core to all of this is maintaining and motivating good people or finding good people if there are any gaps.

I am thrilled to have joined Kerridge even in this Covid-19 pandemic: you have found a fabulous match for me. I love the team I am working with and I am excited about the future.

Three reasons why digital disruption will grow into a digital revolution

Ian Spence, CEO & Founder of Megabuyte talks to insight about how and why digital disruption will grow to a digital revolution.

I have always hated wearing a suit. It is no exaggeration to say that one of the most exciting aspects of starting my own business was knowing that I never had to wear one again. They just seem so illogical, too warm in the summer and too cold in the winter. So, it has been particularly interesting for me to see previously be-suited business contacts on the other end of a video calls in the last few weeks in t-shirts and jumpers. Surely, one lasting legacy of the current working from home situation is that more people will come around to my way of thinking on suits – and never go back.

While a step change in business attire is of course important, the broader point I want to make here is fundamental to the long-term growth prospects for not only tech companies but all organisations that deliver a business service. I firmly believe that the impact of the current lock-down, and the subsequent recession, on how we interact with each other and businesses, both professionally and personally, will change fundamentally. In turn, this will accelerate digital disruption across the service economy. In some cases, this will accelerate disruption already underway, but it also has the potential to create new avenues of disruption.

Most of these changes will benefit the technology industry, but only for those tech companies that are well-placed to take advantage, and not all will be. But, perhaps more importantly, they will impact all service providers whereby digital strategy will become one of the most important drivers of competitive differentiation, if not the most important. So, whether you are a law firm, a media agency, a logistics company or any other business service provider, you will need to have a credible digital strategy if you want to still be around in 10 years' time.

Digital Disruption Perfect Storm

It is of course well known that recessions lead to entrepreneurialism; necessity is the mother of invention, as the saying goes. I remember very clearly in the years immediately following the global financial crisis the rash of new SaaS businesses that were set up or had been recently set up and started to thrive. Two great examples of this are enterprise software players Xero and Workday. Almost unheard of in 2009, they have both grown to be leaders in in their fields globally in the last decade. If anything, the wave of start-ups from 2021 onwards will be even more significant. Many early stage businesses will fail this year and, while the flaky founders who have enjoyed the title but have little ability or commitment will be found out and head back to consulting or investment banking, the strongest will either pivot their existing business or will come back with a better and stronger idea.

"Many early stage businesses will fail this year...the strongest will either pivot their existing business or will come back with a better and stronger

Which takes me onto the second truism about the last two downturns. Coming out of both, end customers are at their most likely to try something new, partly because of financial pressures and partly just because it just seems more acceptable to challenge the status quo. This beautiful

Ian Spence, CEO & Co-Founder, Megabuyte

marriage of the enhanced customer experimentation and exciting new tech companies creates a few years that change the technology landscape forever, although it can take a few years for the full impact of changes to be fully understood and reflected in valuations.

But, as I mentioned above, there is a third disruptive phenomenon this time around – a paradigm shift (yes, I hate that term as well but it is apposite here) in society and business causing all of us to fundamentally question how we do things. The result of these three factors will be a disruption perfect storm; a wave of new disruptive start-ups combined with increased customer acceptance of change, all turbo-charged with a societal step change in attitudes to digital. These three factors will turn the digital disruption of recent years into a digital revolution that will reach all corners of the service economy.

"It seems clear that the High Street will not come back from lock-down in anything like the same form as it went in."

Digital Revolution

As noted above, sectors that have already been impacted by digital disruption will see this disruption accelerate while those where disruption has so far been modest will see it arrive with gusto.

The two obvious examples of the former are the retail and media sectors. Of course, the retail sector has already been one of the most disrupted by the move to digital. But, in the immortal words of Bachman Turner Overdrive, you ain't seen nothing yet. It seems clear that the High Street will not come back from lock-down in anything like the same form as it went in. Whether we are talking about apparel or food, another dramatic shift to e-commerce is underway, which will have far-reaching consequences for the entire retail value chain, many of which will only become clear in the fullness of time.

But some of these consequences are already abundantly clear, such as another step-change in market share for Amazon and mainstream acceptance of on-line grocery shopping. But what about the impact on the hospitality industry? Much has been written about the demise of many leading restaurant brands such as Carluccio's but what about independents in casual dining? I fully expect the rise of so called 'dark kitchens' (off-high street kitchens selling delivery-only meals) to rise dramatically over the next few years at the expense of the local curry house, fish & chip shop and Chinese takeaway.

Media is another example of where we will see a step change in an already disrupted sector. Newspapers and other print media, which have seen a clear but gradual shift to on-line are now seeing a step-change to digital. Publishers with a compelling digital offering will actually benefit from this but those that have been slow to move on-line will never be the same again. Meanwhile, the shift in advertising from broadcast, such as TV advertising, to digital will accelerate, to the benefit of Facebook and Google, and possibly also the streaming services such as Netflix if they choose to pursue this revenue opportunity.

The other obvious example is financial services, where digital disruption has been dramatic in recent years but can only accelerate going forward. Whether this benefits new fintechs or the incumbents is not quite so clear, however, as the banks seem to have re-asserted their place in society in recent weeks and many of the myriad fintech start-up may not make it through the downturn.

"A wave of new disruptive start-ups combined with increased customer acceptance of change, all turbo-charged with a societal step change in attitudes to digital."

Accelerating digital disruption in areas already in the eye of the storm will be joined by digital disruption in areas of the service economy that have so far been less touched by it. Potentially the most significant example will be healthcare, in two interrelated ways.

Perhaps understandably, concerns over the security of patient data has hampered mass adoption of machine learning and AI technologies in healthcare. Meanwhile, cultural reticence to interact with medical practitioners digitally has held back take-up in digital healthcare. However, a greater understanding of the need to use anonymised personal healthcare data for the benefit of society and much less reticence to interact digitally with the healthcare profession could clear the way for an AI-led revolution in healthcare as well as a dramatic increase in the productivity of the healthcare profession.

And there could be a more mundane reason why technology adoption in healthcare increased in a post Covid-19 world. The emergency Nightingale hospitals set up in recent weeks are, in effect, how you would do it if you had a blank sheet of paper and may well expose the inefficiencies in older hospitals in areas such as bed management. The NHS will not be able to 'unsee' these things and the pressure to implement them in all hospitals will grow.

And there are many other sectors of the economy where digital disruption may have been a bit sluggish but will now accelerate, such as in training & education and professional services. In many ways, we don't know what we don't know yet, other than that disruption will accelerate across the board.

All companies are tech companies

When we assess the risks and opportunities from accelerated digital disruption, it is important that we don't look at this next phase simply as a continuation of what has gone before.

While the move to Cloud, SaaS and all of its related technologies will continue, the impact of accelerated digital disruption on what we currently see as non-tech businesses will be even more profound than on tech companies themselves. I have joked, along with others in the tech sector, that all businesses will ultimately become tech businesses. While that may not come to pass in a literal sense, what I believe will happen over the next decade is that technology will become as intrinsic to delivering products and services, as electricity.

And I'm not just talking about increased use of technology to enhance efficiency and the quality of service delivery, I'm talking about the use of technology to deliver core services. In short, the trend to tech-enabled services that has been developing in recent years will take a step change. For the most part, this will result in service organisations becoming tech-enabled but, in some cases, it will result in tech companies becoming tech-enabled services companies.

"The impact of accelerated digital disruption on what we currently see as non-tech businesses will be even more profound than on tech companies themselves."

By extension, these developments will lead to a fundamental change in business models in some sectors, driven to a large extent by shifting value chains, with disintermediation rife. Think of the impact that the aggregators have had on the insurance sector, for example, and you get a glimpse of what is coming. We have already started to see this in other areas such as carwow's impact on the car market.

"Investors will make their best returns by investing in businesses with the potential to digitally transform and then transforming them."

And this digital revolution will also polarise investment returns between the digital winners and the digital losers, with a concomitant impact on valuations. We had already seen a convergence in the valuations of tech-enabled services companies with pure tech companies, and this can only accelerate. Moreover, a bit like buying a 'doer-upper' house, investors will make their best returns by investing in businesses with the potential to digitally transform and then transforming them. Also, M&A will increasingly start to reflect this new reality – services acquiring tech, tech acquiring services etc.

So, in conclusion, while it may well be obscured by a nasty recession over the next 12-18 months, there is no doubt in my mind that the digital revolution is coming. Once service economy companies have sorted out their Covid-19 mitigation plans, they should immediately turn their attention to how they can address the coming digital revolution.

Action through Understanding

Rob Coupland joined colocation and cloud infrastructure services provider Pulsant as CEO in October 2019. Rob talked with Steve Morrison of SH Gillamor Stephens about Pulsant's specific market positioning, the impact of the Covid-19 pandemic and shares his experiences of stepping into his first private equity CEO role.

What is the market positioning of Pulsant?

We are a data centre and cloud infrastructure services business at our core and we operate a regional fabric of 10 data centres across the UK. We service the IT needs of the UK regional mid-market and enterprise space and we have 3,000 customers throughout the UK. This national fabric, which goes all the way from London in the South to Edinburgh in the North and many points in between gives us a unique capability to serve customers regionally; it differentiates Pulsant from many service providers.

Our customers are all on a path to digital transformation which normally involves them saying, "We'd like to go to the cloud." When you really engage them in that conversation what they are actually really interested in is how they transform the way their business operates, for example enabling a more mobile workforce to access their core business applications on the move. If they are a business in the South East, there are lots of companies that can help them with that. But where we are different is in areas such as the North East and Scotland where we are able to bring that regional expertise to bear and we can say, "Your data is going to be stored in a data centre that sits in Newcastle or in Edinburgh, so you can have confidence that it is close to hand and you will be able to get to your systems. Our staff are people that are based in your region and actually understand the regional dynamics and understand how business works in the North East and how business works in Scotland."

Rob Coupland, CEO, Pulsant

While public cloud has a key role to play, actually a lot of businesses are still grappling with, "What do I do with the IT estate that is sat in my server room in my office? Where do I move it that is sensible? How do I get the benefits that I perceive that public cloud brings in terms of flexibility, responsiveness, ability to scale up and scale down quickly, but actually be able to do that in a way where I've got a real sense of where my data sits, that I've got control over it and importantly I've got cost control as well." Pulsant as a regional data centre business with a very well-established private cloud capability is absolutely right for these types of customer; it is an area where we have a really strong heritage going back to the mid '90s, of success and fantastic customer relationships. It is still a segment of the market that is somewhat fragmented and there isn't an all-out leader and it is our goal at Pulsant to become that de facto leader.

What has been the impact of the Covid-19 crisis on Pulsant and your customers?

In late February when we, like everyone, were being made aware of the impending crisis, we realised quickly that moving early to a more remote operation of the business was a sensible thing to do. We have large concentration of our service capability in Newcastle which is normally a strength having the various support teams working closely together. However, we realised that was where our risk lay in terms of our ability to operate, so we rapidly shifted to a home working scenario. By the time the Government was telling business that they needed to move to homeworking, we effectively had already been in that mode.

The second early decision we took was to be very open with employees about how as a business we were going to deal with this crisis and using technology to support us in doing this. It was as simple as having a strong focus on regular communication plus an "all hands" call every Thursday. For the first few weeks there were lots of new things to talk about - "How are things changing, how are we going to be working?" Now it has settled down and there is not so much need to update on those type of points, but the call has become a focal point for the business and I believe it has really fostered people being prepared to ask more open questions. There have been no dramas at all in terms of that move to home working, and the way our people have dealt with it has been outstanding.

We have been fortunate that because of the IT services sector we are operating in we have relatively little exposure to some of the worst impacted areas of the economy. We are clearly not without impact, but we are certainly not as badly affected as some sectors. What we saw quite early on in the crisis was businesses starting to become more internally focused and so there has been a pause on some of the bigger transformational projects. Clearly many customers had to address the issue of, "How do I mobilise my homeworking solution?" Some businesses were pretty well prepared but others really weren't. For example, one customer had absolutely no arrangements at all for the 200 people they needed to move to home working. So, it was literally a case of setting up the laptops, setting up the secure home working solution and getting it all deployed for them within a couple of days. There have been really good opportunities to be very supportive for customers and Pulsant is of the size where we have enough scale to have depth of resource, so we are not spread thinly but still small enough to be very agile, so it meant that we were able to be very responsive and help people get up and running.

What are your aims as CEO?

I think to an extent it is not just about my aims; part of what you need to do as the CEO of a business is to really bring the needs of different communities together into a coherent vision. There is a community which is your current and prospective customers - how do you make sure that you are providing and developing services that are relevant for them? You have an organisation around you; the team that you are leading who again want to understand what does the future look like and what does the vision look like? Then you have shareholders that also want to understand growth plans and have their aspirations for the future. So each one of these comes from a slightly different angle. With a shareholder, it is much more about value creation, with a customer it is how you are going to help them create value in their business and employees are ultimately driven by wanting to be part of a successful company. So a lot of my role is about trying to understand the different dynamics of each of those communities and to really help us as a company have a compelling vision of what we are going to do and how we are going to drive forward over the next three years balancing all of those aims. In my first few months as CEO, my initial focus has obviously been to understand the business I have come into, which is about understanding the capabilities, people and the customers. Then, together with the team, building a plan and building a vision for what we are going to be.

Advice for new CEOs and views on Leadership

Typically, when you are going through the interview process for a job there is a lot of you responding to what the hiring company want to know about you. I think it is equally important coming into a role like this, or any role, to make sure you are doing your due diligence on the business as well. I was fortunate that when considering this role at Pulsant, I had previously worked at Telecity with our Chairman Mike Tobin and our CFO Brad Petzer. So, it was relatively easy to ask the direct questions of them and the shareholders to make sure I understood the opportunities and challenges.

When you start a CEO role there is quite a unique opportunity in your first few months to have very open-ended conversations inside and outside the business where people don't have any preconceptions about you. Really getting under the surface of some of those challenges that sit there in any business. You only get a chance to do that once and so I would say use that opportunity very wisely. In a private equity environment, you have to balance that pace versus knowledge piece with this and I think getting to know the business as quickly as you can is important. It is important to get the relationship right with the Board. Of course there's a degree of scrutiny there and a degree of holding to account, but actually shareholders and your Non-Executives want you to be successful and they will have knowledge and experience that you can learn from, so it's important to tap into that.

Then it is about being comfortable about what you do and who you are as leader. Make sure people understand your expectations, but then give them the space to perform as well, give them the space to show you what they can do and not make assumptions about them. I think part of leadership is recognising your strengths but also recognising your weaknesses and then organising around that. One of the joys of having a strong team around you is that you can have people that are good at the things that you are not so good at. I think if you are able to recognise this, then ultimately, you'll be a better leader. What is great about working with a leadership team that themselves are "comfortable in their skin" is that you can have very honest conversations about the things that are working, but also the things that aren't working. What I look for is a team that are focused on, "What do we need to do?" rather than feeling as though they have to be defensive about, "If it's the thing in my patch that's not working then I need to defend that." It is about trying to breed that environment of aspiring for big things, everybody staying focused on the overall goal and making sure you have a leadership team that is really focused on the bigger picture and not just their individual functional responsibilities.

There are times as a relatively new CEO, when I consider some of the challenges and realise how much responsibility rests with me. Ultimately, that is exciting but at times daunting, but I have had a very enjoyable first few months. I am really enjoying the role and I feel very at home in Pulsant, it is a great company and we have got tremendous potential, fantastic people and I think it's going to be a great journey over the next few years.

Asking the right questions as a Non-Executive

Gordon Matthew is a plural Chair and Non-Executive of small-midsize technology companies. He speaks about his experiences of making the transition from an executive career into Non-Executive as well as working with different types of Boards and the need to create a very transparent operating culture.

How and when did you first move into a Chair role?

I first took on a Non-Executive role in 2011 with Intrinsic. At the time, I was still working in an Executive capacity. I wanted to become a Non-Executive Director so that I could work for more than one business at a time and I wanted to try to use the experience I had gained throughout my Executive career to help others. That was the rationale behind it.

I was fortunate enough that I was able to become involved with RJD Partners, the PE firm, which acquired Intrinsic in July 2011, and I was offered the Non-Executive Chair role. The main challenge was to strike the right balance between advising and instructing; you do not want to go in as a Non-Executive Chair and start telling the Executive team what to do. You are there to constructively challenge them, to ask them probing questions, but you are also there to listen and support them.

What is the key difference between Executive and Non-Executive roles?

When you are the CEO, you can drive the plan execution directly. As a Non-Executive, it is much more about advising, coaching and mentoring. It is about getting the Executives to think for themselves and getting them to take responsibility for their decisions and actions. The Non-Executive is there to be the "sounding board" for the CEO and to ensure that the CEO really thinks through the consequences and ramifications for decisions made and actions taken.

For the first three or four months in my first Non-Executive role, I had to keep reminding myself that I was not the one who was making the decisions here – I was advising. My remit was to coach the team into making better decisions, rather than making decisions for them. I think that was a learning curve for both the Executives and for me. In total it took me a six month period to get used to a Non-Executive mindset. It was an evolution rather than a revolution. As I spent time with the other Directors, I was also able to help them think about their management style and what they could be doing differently. So, while I was there primarily to help the CEO and bring that independence to it, I was also able to help the rest of the executive team be more successful.

Gordon Matthew, Plural Chair & Non-Executive Director

Is there a theme to the types of companies you typically chair and what is your modus operandi?

Not really - I have chaired companies in growth mode and those in turnaround. In one case, I was put in as Chair to help sell the business. My mandate was to shape and structure the business for a trade sale. The key thing is to align the objectives of the business with that of the key stakeholders whatever the state of the company.

I like to have monthly Board meetings and a fixed agenda with certain things we always go through, such as the financials, sales and operational KPIs. I also like to arrange a strategic review every couple of months. For example, at one of my portfolio companies, we have been developing a behavioural model, where we analyse how we interact with each other, our customers and our partners and assess what good behavioural traits look like. It is now part of the annual review.

How do you balance the interests of the Investor with those of the Executive team?

I have the same conversation with the CEO and the Investor. I tell them both that I will be completely transparent. I will be open and honest with both parties and there are no surprises. When you explain to them the need for transparency, with no hidden agendas, the dynamic works well. Both the CEO and investor do not have to necessarily agree with each other, what's important is that they are aware of their differences. If there is an issue, it is best to share it openly, as that way we can collectively address it and solve it. Unless your interests are aligned, it is never going to work. You need to have aligned goals, objectives, and deliverables.

Any tips on working on Boards where the Owner/ Founder is still intimately involved in the business?
I had a baptism of fire with this situation in one of my CEO roles where the Founder was still heavily involved with the business. Although I replaced him as CEO, he remained as a Non-Executive Director. That was very difficult for me, as CEO. From my perspective, it helped me realise that you can overcome anything if you have got a common agenda and aligned interests.

Another good example was a company that had no real Board governance, or Board meetings, let alone a Chair. I had to convince the Founder and the Executives of the benefits of Board meetings. Over time, they all agreed these meetings helped them understand all aspects of the business and not just their own area of responsibility. It made a tangible impact on them working as a team and on the company's performance.

Has the current Covid-19 pandemic required a different approach in running the Boards of the companies you are involved with?
My first thought was – do not panic. The second was – we need to produce a business plan for a worst-case scenario and then understand what that means for this business. Does it mean we have to borrow to weather the "storm" or does it mean we do not actually need to borrow anything? How can we maximise revenue generating opportunities in these challenging times? One of the businesses is doing particularly well because they are a cloud services provider and have a recurring revenue model, although others are finding it more challenging because they are more project-based businesses and they have projects that have been put on hold. I also interact with my portfolio companies more frequently. In some situations, it has moved to weekly updates with the Board, certainly with the CEO and the CFO.

How do you balance your time? Is there an optimal number of Non-Executive roles that you would run with at any given time?
A typical Non-Executive role is 2 to 3 days a month, allowing for an additional time commitment to deal with an acquisition, an exit, or any other significant event. Apart from the fact that I quite like to go cycling one day a week, it is important to leave space in the calendar for those peaks and troughs. That works well as a Non-Executive because companies will actually bring issues to you, whereas, if you are not seen to be available, they very quickly stop bringing you issues and move on. I believe an optimal number of roles is between four and six depending on the Non-Executive time requirement in each.

What are your views on what skill and experiences are needed to become an effective Non-Executive Chair?
I think you need to have quite a lot of empathy and strong people skills. You are engaging with the CEO, the CFO and the rest of the leadership team to get the best out of them individually, but also as a cohesive unit, pulling together to ensure the business operates and performs to the highest level.

In addition, you need to have a strong understanding of the business you are chairing; what the value proposition is; what the competitive differentiators in the market are; and what the threats and opportunities for success are. The first few weeks is mostly about listening to the CEO; but after that it is about constructively challenging the CEO and providing some ideas & suggestions. Asking the right questions to the CEO makes them think more laterally and deeply about their business. I believe that is a major element of the true value a Non-Executive Chair can bring to a business.

> ***"Asking the right questions to the CEO makes them think more laterally and deeply about their business. I believe that is a major element of the true value a Non-Executive Chair can bring to a business."***

Any advice for aspiring Non-Executives as to how to get build a plural career?
It is all about securing the first Non-Executive Director role. I was lucky in that I was able to transition into a NED role whilst still in an Executive role. I also had some early success as a Non-Executive in exits. That gave me some track record being a Non-Executive and with the successful early exit, this made me attractive as a Non-Executive to other companies. It is quite challenging stepping from an Executive role into your first Non-Executive role. My advice would be to initially secure a Non-Executive Director role, rather than a Non-Executive Chair post. Obtain some experience and reference-ability first and foremost.

leadership insight

Jenny Davies, CEO – it's not about me

Private Equity backed M247 has a 20-year heritage as an international connectivity and cloud services partner. Jenny Davies joined the company in 2016, became Operations Director in 2017 and was appointed CEO in 2018. Jenny talks about her experience transitioning into the CEO role and gives insight into M247's market position and future ambitions.

The transition into being a CEO

I think the first point to consider while transitioning into a CEO is who you are surrounded by. I was lucky in the sense that I was asked to do the role rather than me necessarily applying for it. The Chairman and the two investor directors from Livingbridge were absolutely willing me on and wanted me to do the role. At the start I had a very clear conversation with the Chairman and the investors about roles, accountabilities and what was expected of me.

You could speak to ten CEOs across midmarket PE backed companies and they would all have slightly different accountabilities. Some of that is dependent on how "hands on" the Chairman is, whether they are an Executive or a Non-Executive Chairman, also, how actively involved in the business the PE house is. You have got to find your own way. I think an open conversation is important, being really comfortable and not putting too much pressure on yourself as you are not expected to know everything straightaway. A lot of small businesses get to a certain scale but then plateau because they do not have the processes, governance or talent in place to get to the next level. I gained a good understanding of these areas from my earlier career in general management and operational roles in larger corporate environments such as BT. I am an operations person not a salesperson; my brain works in process and understanding businesses from the bottom up and really knowing where the value creation drivers are. My ability to step away from the detail was only enabled when I felt comfortable that I had the right leadership team around me.

"You have got to find your own way...being really comfortable and not putting too much pressure on yourself as you are not expected to know everything straightaway."

Jenny Davies, CEO, M247

I have tried to bring the best elements from that corporate experience, whilst not losing the entrepreneurial spirit and the things that have made M247 brilliant in the first place. For example, I have one of the original entrepreneurs as part of my executive team, he is always our conscience if anyone gets a bit too bureaucratic and it stifles our creativity and innovation.

Resilience is one thing that I particularly value in my organisation. By resilience, I mean the ability to put things very quickly into perspective. Being consistent in your leadership approach and being quite measured using both data and intuition. The other quality is curiosity. I have got to understand this business well by asking lots of data and questions. If something does not stack up for me, I will ask a question.

I think it has been remarkable the amount of times I have asked a question and seen people almost sit back and say, "Actually, yes, why do we do it like that?" Something I look for in people of a senior level is that they ask questions.

In fact, I really look at the number of questions someone asks versus the number of times they state their opinion. Stating your opinion does not really extract anything from anyone, it closes them down more often. I believe we have a very open and transparent culture. People need to know that they are valued and how the role they play impacts on the business achieving its overall goals.

I really dislike an egocentric selfish approach to leadership, which is all about how someone looks rather than what they are actually doing. I think my team trust I am absolutely doing the best for the business. It is not about my brand or me as an individual, it is about M247. I always put the business before me, because it is all about the business.

Creation of M247

M247 as it is today is a global connectivity and cloud services provider. We have a range of services across, connectivity, cloud, hosting, voice, security that we provide to customers which are typically mid-market businesses. Our heritage is based on the coming together of three entrepreneurial businesses: Metronet UK, M247 and Venus Business Communications. The combined services portfolio essentially enables us to be a “one-stop-shop” for our customers IT needs.

Two key aspects of each of those businesses was the strength of their customer centricity and the value that was placed on building long lasting relationships with customers. Intimately understanding what customers need is critical. While we have standardised offerings, equally we still have an agility and flexibility in our business model that allows us to really understand customer needs and offer them bespoke solutions as required.

In order to be able to do that you have to have amazing people in the business who really want to go the extra mile for the customer, who are technically very credible and are very committed to M247 and the vision. Again, that was a common thread in the three businesses. They all had very technically credible people; unlike anything I have ever seen before really. A collection of people who were just so committed to delivering outstanding services for a customer. It has created a very strong value proposition and people are very much at the centre of that value proposition.

Market dynamics - to compete or partner with Hyperscalers?

Our belief is that we embrace the technology and hyperscale of cloud as part of an end to end solution for a customer. For some customers they will have everything in AWS or Azure and we will support them in managing those workloads. For other customers, whether they are regulated in some way or they have certain performance standards that they need to meet, they may choose to have a hybrid solution that has some of their workloads in private environments.

We have our own shared public cloud environment, so we have our own platform. Increasingly we are seeing customers move into that hybrid cloud because one size does not fit all. We have always been technology agnostic as an organisation. In the sense that innovation moves so fast, to just be wedded to a single technology or to be wedded to a certain product would be extremely short-sighted. We have always been very commercial in our outlook and it would just be short-sighted to say “no, we do not work with the hyper-scalers”, of course we do. They are a huge part of the cloud services market.

Ambitions for the business

We have been very successful at delivering double digit year on year organic growth which I am sure many companies in our sector would love to achieve. As well as maintaining this level of strong organic growth based on listening to our customers needs and providing a full portfolio of services, our aspirations are to accelerate internationally; this part of our business is growing 50% YoY but is still smaller than our UK business but we strongly believe that it can be as big and bigger over the next few years. And although this business was built through having our people remotely, we have opened a small Spanish office in Malaga last year and we now have presence in North America.

We have not done any M&A over the last two years and that was a really deliberate strategy as wanted to fully integrate the three separate organisations that have come together to create M247. We now have a very strong platform that will enable us to integrate and realise the benefits of any future acquisitions, which we certainly plan to do moving forward. It is all about market penetration, scale, and brand awareness. It is the same themes as the organic plan but recognising to accelerate the growth agenda, M&A will have a part to play.

Impact of COVID Pandemic

What we and our industry peers are seeing is a short-term procrastination around the big decisions on IT. This is totally understandable because all companies are getting “their house in order” and making sure that they can actually trade through this challenging period. However outside of the UK, the international part of our business is pretty much trading as it would normally. What we are taking from that experience is that when the UK comes out of lockdown, that customers will want to talk to us about accelerating their cloud migrations. Without a doubt, we see ourselves as being an important part of that recovery for businesses in the UK and wider international territories.

Deep tech, deep risk?

Mark Hammond started his career with a PhD in Computational Neuropharmacology working on better models for the development of epilepsy and neurodegeneration therapeutics. He then worked in cleantech venture before going on to build out Imperial College's deep-tech start-up accelerator and academic spin-out ecosystem, facilitating several exits to the major tech companies before leaving to found Deep Science Ventures in 2016. DSV is creating a new paradigm for applied working science, across sectors from energy to pharma, and has built over 25 ventures in the last two years.

How to avoid a few of the most common traps in early stage deep-tech investing

After 10 years of building and backing deep-tech companies at one of Europe's leading universities, in the City and our own fund Deep Science Ventures, one thing is clear: the outcomes can be big and exceed tech outcomes in both scale and speed, but any clues on how to navigate this landscape are largely hidden in hearsay with little depth.

Phrases such as 'avoid clean-tech, terrible bust last time', 'hardware is too hard', 'synthetic biology is hot right now' come to define the deep-tech landscape but fail to capture the real dynamics. In reality: the term 'cleantech' represents a hugely diverse set of approaches, there have been some enormous hardware exits and there are more struggling synbio companies than mattress companies. It's critical to pull out the real quantifiable drivers underlying these heuristics to have any chance in deeptech, in addition to what makes founders great founders.

Forget the tech and focus on people and problems

The heuristic of backing 'an experienced management team' is so overused as to be meaningless. No doubt having people that know what they're doing and an existing network helps, but often the world has changed and the same actions this time aren't as valuable as a first principles perspective on the problem in hand. What is important however is not just task specific experience but attitude. Is this team building something because the tech is cool or because they are unbelievably driven to solve the problem, to the point of coming off as a little too intense? Have they found creative solutions to seemingly insurmountable problems? Do they think from a first principles perspective? Could they sell ice to an eskimo? Are they empathetic to customer need even if it doesn't immediately fit with this vision?

Mark Hammond, Founder DSV

Do they always seem to be moving faster than you would have thought possible at both tech and market aspects? If yes to all of these then maybe it's time to consider the market.

Be aware of the extreme funding risk in the early stages

Deep tech is often faster to liquidity and requires less funding than tech, in contrast to hearsay. Whilst biotech only represents 11% of VC financing it represents 54% of VC backed IPOs and outperforms IRR in tech 27% to 22% with a median exit time of 8 vs. 9 years. Once a company is at series A with a product and revenue or royalty bearing partnerships there are thousands of investors, however most of deeptech has serious early stage funding risk at pre-seed and seed.

Some sectors have active investing ecosystems with very well understood dynamics, such as biotech. Whilst this is a blessing it can also be a curse as the sub-set of approaches that interest these investors is often very limited and trend driven completely blocking out truely novel approaches - see the history of immunotherapy below.

Other sectors have very few genuine investors due to endless failures of the past such as med-tech, chemicals, materials. Lots of investors say they back deep-tech, but look at their portfolios for the real story. In these sectors companies are largely reliant on grants to get to the technical and commercial milestones but at the same time the grant programmes are often strongly misaligned with finding product market fit as fast as possible often leading to an eternal grant funded research trap. In this situation check for extremely tight alignment between grant deliverables and (multiple) customer and downstream investor milestones.

Market risks are usually non-obvious

Look at the problem space rather than the technology space. It's so easy to be sucked in by something that looks game changing that is often, not even consciously, hiding the real threats. These won't appear in the company's 2x2 competitor grid. The competitors in that grid usually live or die for the same reasons, just look at the 200+ amyloid beta antibody trials that have failed so far: how many hours were spent agonising over the minute differences between those in pitch decks, when in reality it's not a competing technology which will win but a completely different approach (more on our approach in Alzheimers here). Airware and its competitors learnt this the hard way, none of the fancy tech won in the end, customers bought simple solutions and flew them by hand.

If you're on trend you're probably too early or too late

Themes are popularised when they're at the top of the hype-curve and become public knowledge when they reach the main market. Take a look at the biggest exits, invariably they were very much off trend at formation and often for the first 2-4 years. This means that most of the challenge in deep-tech is not being so early that the downstream funding risk is insurmountable, and not being so late that it's awash with competition and you're priced out.

Of course timing any market is likely a fool's errand. Just a year ago clean-tech was a dirty word, now it's overflowing with investors, from angels to those managing billions in assets. Two years ago trapped ions was the leading option for quantum computing, now it looks almost cute compared to what can be achieved with photonics, driven by completely independent materials research breakthroughs.

In addition whale-like behaviour in the market can cover a lot of mistakes and distort the entire market towards follies that aren't as much of a sure thing as they sound.

For example 23andme raised hundreds of millions of dollars and is still lauded as a genome driven drug development poster child and spawned a plethora of AI for genomics companies, yet after 14 years its deals still represent a tiny proportion of the venture funding it has consumed.

If you want to invest early all you can realistically do here is build as close to application as possible, build for where the market will be when the product is ready. Play the hype if it arrives and gather as much money as you can to live through the troughs in between.

Avoid unquantifiable binary risk

Binary risk milestones are abundant in deeptech ventures, if it's achieved we're off to the races, if we fail it's end game. This is often the case in healthcare ventures: for example, without a rebate code you can't charge for your service or device, building on the hope of getting a code is close to a suicide mission for a small company. This is what ultimately killed Claritas genomics who had a better solution for pediatric genetic testing. Binary regulatory risk is unavoidable in some sectors but more quantifiable in some than others. Will the EU ever allow genetic modification of food? Who knows. Will the FDA allow a drug with a specific risk profile through? Well there's a lot of data on previous outcomes to quantify that decision, which is why you will find a lot more biotech investors than synbio agri investors.

Economics assumptions are a particular risk in materials (including semiconductors), chemicals and therapeutic production where the assumption is always "if we just get to scale the economics will work". This rarely happens, algae sticks to pipes differently, the cells in the middle end up cooking, nearly every battery responds very differently at scale. For example Envia systems quickly lost cycle life once built at scale, whilst Satki3's deal with Dyson ultimately fell apart as the results weren't reproducible. Look for processes which are truly scale independent or incredibly well quantified to avoid surprises.

Start small and be prepared to spend a lot of time learning

Deeptech investing can be hugely rewarding: you can enable life saving therapies, prevent the demise of the planet, launch entirely new computational paradigms and certainly many people have made a lot of money. If you'd like to learn more or get involved with our companies you're very welcome to join our deep-tech angel community over at dsv.io/community.

Shaping the future of photonics

EFFECT Photonics spun out of the University of Eindhoven and is a leader in the design and development of optical components. Paul Gillespie sat down with the CEO, James Regan, to discuss the company's beginnings, challenges and his personal lessons working in Deep Tech.

James Regan, CEO, EFFECT Photonics

EFFECT Photonics is a true Deep Tech company, but what it is you are trying to do?

We are a photonic integration company. We have a unique capability in the world, by putting all the functions of an optical system onto a single chip. Traditionally, all the beams of lights in optical systems were managed through multiple small lenses, but small lenses, but we have put all the complexity onto one chip and that makes it into a much simpler and useful module. The difference is that we are making an integrated circuit of light - a photonic integrated circuit. We take the kind of systems that are used in the core of the network, which are low in volume and high in price, and put them out to the edges of the network in high volume, low cost and low power.

Has it been challenging to get this company off the ground? You are highly disruptive but how receptive have the investors been?

When we closed our series A in 2014, there were almost no early stage hardware technology deals being done in the world. Fortunately for us, much of the investment we have had has come thanks to the support of the Dutch regional Government's ecosystems that exists in Eindhoven. That has provided us with our early stage seed money. Also, we were fortunate in finding at the time of our series A, a visionary German-Austrian investor with a lot of background in photonics and semiconductors, who was able to provide leadership throughout these investment rounds. I have learned a lot about the power of regionality and it has been great.

Is that because there is more to show and tell? Does that make the product more real for them?

Absolutely. In terms of risk-management, it is a much more attractive proposition. The downside is that the valuations arise with that. I think we have been very grateful for the visionary individuals that have come with us on this investment journey. We are also very excited that, as we grow, we are scaling now into larger and larger institutions in our investment community towards the larger scale investors.

Your first-generation product is coming to market soon. What are the challenges for you moving forward?

We are running multiple waves of product development simultaneously, which is quite a challenge. Traditionally, people in this market would advise you against that – but our investors see the scale of the opportunity in front of us and we are in a hurry to get everything out shortly after our first release and we have a rich roadmap of new products being developed. That is the power of a new technology platform – once you have that platform working, you can generate a wide variety of products and really leverage that core investment into a range of products, driving revenue and margins up on the top of it.

Where is the company looking to go in the next 5 years?

We see bringing these waves of products through to market, generating massive growth in revenue and ramping up our operations, sales and marketing and continuing to drive the engine of product development to bring these products through to meet the needs of our customers. That has us on a path of pretty rapid growth over the next few years, and then, ultimately, taking that towards a public listing – this could be where we end up.

What would be your advice to Deep Tech start-ups?

With Deep Tech, you need to understand how you can get something out as fast as possible. It is a very different case being a Deep Tech company that has revenue, and a Deep Tech company that has none. I would advise looking for a minimum viable product. I would also look for getting as much funding as you can in the early days from the help of Governments, and regional investment bodies, until you are ready to get something that's then close to revenue. You need to preserve your equity and that isn't easy if you have quite a long road to get a Deep Technology from its early university stages into something which is ready for deployment. How to hang onto as much of your equity as you can through that journey is the big challenge.

Additionally, you have to be smart about where you make your investments. For example, we have not invested in fab, which is very capital heavy and rather focused on adding value in the design and being vertical in the areas where we can differentiate.

Finally, you need to be brave! Something you want to find early on is the right commercial partner – someone that knows their way around the industry. You have got to be sure that you have got something that you believe in, and something that is really going to make a difference and change the world. That is what I have found with EFFECT Photonics. It is really unique and has an amazing capability that can, and will, change the world!

Orbex on course to launch first space rocket from UK

The notion of space rockets being launched from here in the UK may seem like science fiction to some, but it's becoming a reality for Orbex. Orbex are aiming for their first launch with a satellite payload in 2021 from a new spaceport being built in the Scottish Highlands. Chris Larmour, CEO and Founder, gives an insight into their journey.

Chris Larmour, CEO & Founder, Orbex

How did you come to found Orbex?

Entirely by accident. It was 2015, I'd just exited two telecoms businesses and was looking around for something else to do. I happened upon an article on something interesting going on in space, and it led me to wondering: "how hard would it be to build a moon rocket".

I started to chase that idea a little bit, met some like-minded people and we started to work on some concepts. It began in a very hobby-like way and gradually morphed into a proper business opportunity.

So, what is the market opportunity?

A new generation of miniature satellites called smallsats has come along. They are very small satellites that are being flown in large constellations. The advantage of this approach is that you can create a network that offers global coverage at much lower cost than was possible in the past. The problem is that there isn't really a launch solution designed for that kind of payload mass, so we're working to build a system that services that need.

It's a sustainable proposition too because these small satellites are lofted to fairly low orbits, and naturally decay over a period of five or six years before burning up. That means they need replenishment over time, a need which we'll be able to fulfil longer term.

How have you re-written the rule book in terms of the technology you're using?

Fundamentally, we have a rocket that flies to space – nothing new about that. But the way we built it using carbon fibre technology, large volume 3D printing, and in particular, our fuel strategy is completely novel. We're using a new fuel called bioLPG, which is propane created from biomass. Small rockets are very inefficient as a class, but by using propane we can reduce the mass of the vehicle by about 30%, improve its performance, and cut CO_2 emissions by 90%.

That last point is key. We are deliberately setting out to be as sustainable as we can. The use of bioLPG is a big part of that, but we're also building rockets that are recoverable, reusable, and leave no debris in orbit.

You've also taken on the mantle of building the UK vertical spaceport.

That piece of the puzzle is just as important as the rocket. We knew that right from the off, and began working on solving it the moment we started designing the rocket.

Securing the right location, licensing and insurance is crucial. We've been selected by the UK Space Agency to help design and develop, in partnership with the Highlands and Islands Enterprise, a new spaceport in Scotland. And, we're also working on the design of a new spaceport in the Azores. This has given us a lot of know-how and a helpful commercial advantage.

What have been the biggest challenges for you, and how have you overcome them?

Well, finding the right people and selling the opportunity of Orbex to them is key. As a venture-backed company, we can't afford to make big mistakes with key roles, so it's vital that we find people with first-class experience and knowledge to enable us to deliver results. Locating that intellectual horsepower in the European space sector is a challenge we take seriously. We are very selective, focusing very much on quality over quantity.

Then, there's the question of finance. More funding means being able to hire better people, develop programmes faster and push harder in certain edge conditions, where you're not quite sure if something will work. Again, we've been fortunate to get support from people like the UK Space Agency, the European Space Agency, and the European Union's Horizon 2020 programme.

When are you planning your first launch, and what will the company look like in five years' time?

We're aiming to launch late 2021 / early 2022. Then the plan is to continue growing the cadence of those launches, flying more launches every year. We certainly see demand to fulfil that kind of capacity – we've already announced several customers. Really, our core focus is to get rockets flying reliably into orbit. If we can achieve that, it creates a lot of options. There's an old saying in science fiction that 'once you're in orbit, you're halfway to anywhere'.

Using GIS data to help solve world problems

Rafal Modrzewski is the CEO of ICEYE, one of the first, and fastest growing New Space companies in Europe. ICEYE uses radar systems in space to provide 24x7 imaging data through clouds, darkness and even volcanic ash.

Tell us about ICEYE and the proposition.

We are trying to solve world problems with information derived out of GIS data. So, we're building sensors to collect data, creating algorithms to extract that data, and then embedding it into products that help businesses and Governments around the world make better decisions about what's happening around them. The first instrument we have built is collecting data from observation images coming from a growing constellation of synthetic-aperture radar (SAR) satellites.

You and your co-founder Pekka Laurila, CSO, come straight from academia and have already raised funding of $65m and have a three satellite commercial constellation in orbit. How have you achieved this in such a short space of time?

I ask myself the same question every now and then! The breakthrough moment for me was taking part in a programme at university focusing on New Space technology, which allowed students to build small satellites ready to launch into space. The first satellite we launched on that course is actually still orbiting now! This gave me a really good grounding in understanding New Space technology and miniaturisation.

It was then a question of discovering a need. Back then, as the name ICEYE suggests, we realised that small satellites could be useful in ice monitoring, not least because of climate change. The product needed for this wasn't just the satellites themselves, but something that could translate the data coming from them. We presented an idea to a university accelerator and that's when we started gathering momentum.

We were fortunate to work with a number of generous funders who recognize the value of our technology. Part of ICEYE's attraction is in our quick, agile thinking methodology. We're solving seemingly impossible problems within a matter of months, thanks to an amazing, multinational team who believe anything is achievable.

Many of your competitors can only dream of the kind of funding you've secured, so what do you think has made ICEYE stand out in terms of attracting such a strong mix of investors?

You have to demonstrate from the outset that you have a strong, talented, dynamic founding team in place, who are going to successfully execute. I think our investors saw quite quickly the devotion and faith Pekka and I have in ICEYE, our team and the technology.

Then you need to have the talent and drive within your team to deliver on the promises you make with the initial seed funding, and to own and quickly put right the failures. That's the source of strength which allows us to drive the company forward so fast, and keep the funding coming.

Was the data analytics always part of the plan or is this something that has evolved as ICEYE has matured?

In the beginning, we concentrated on tackling the ice monitoring problem. But once we started capturing the data for that, we realised that the same system could be used to solve many other data-capture problems, so we started broadening our customer base. Then, we saw that many of our users were struggling with the ability to transform the data into actionable insight, so we now help them with this as well.

Where do you see ICEYE in the future?

The only thing I'm certain about is that it will be different. How? It's hard to say, but my belief is that the constellation will be tens of satellites, with a platform-based capability where users will be able, and encouraged, to quickly build solutions for their everyday problems.

What do you see as being the biggest challenge?

The biggest challenge continues to be recruitment. It's the same from the beginning until the end. The moment the company starts, it grows. It fails or succeeds in gathering its early financing based on the team, and then the successful execution is dependent only on the team.

Rafal Modrzewski, CEO of ICEYE

Using machines to read between the CV lines

Dina Bayasanova is the CEO and Co-Founder of PitchMe and a Member of a King's College Accelerator program and a frequent invited speaker at TED talks and forums that explore the Future of Work. Dina also mentors students about their career development and has served as a mentor at the Exeter Entrepreneurship society. Among her awards are nominations for Rising Stars Awards 2017 and Young Professional of the Year by the Energy Institute, 2017.

What exactly is PitchMe?

PitchMe is a skills-based talent marketplace that relies on a multilayered profile of candidates' skills. We have worked since 2018 to help students, young professionals and career shifters to find the best fit for their skills relying on analysing traditional sources and digital traits. PitchMe created an innovative tool for candidates to measure and evaluate skills and help them meet current employment market needs. Our approach is based on a dynamic presentation of candidates' skills, a continuous analysis of a job market and educational opportunities identification that maximise candidate's employability.

Our technology ensures equal opportunities by eliminating bias from candidate's screening.

Why did you decide to set-up PitchMe as your first entrepreneurial venture?

Having been involved in the Energy Institute Young Professional Network Committee, I witnessed how young professionals struggled to find a job, while big companies found it extremely challenging to find good candidates even with the help of recruiters.

Being a young professional with a non-linear career story myself, I knew how challenging it was to pass initial shortlisting stage. I had just recently finished my PhD, and

Dina Bayasanova, CEO & Co-Founder, PitchMe

I had a feeling that these challenges required an in-depth analysis, beyond intuitive feeling of the problem. I decided to identify the causes of such paradox by carrying out some market research and studied all parties involved in the recruitment process. After the data analysis was completed, I spotted a need for a new solution that would fill in identified gaps.

It was evident that many people are affected by the imperfections of traditional approach for screening CVs. CVs tell us the chronological story of employment as told by the candidate. They do not present the diversity of skills that one may possess. CVs also support a biased vision of the candidate in many cases, making it extremely difficult to shift career and explore opportunities beyond specific narrow career tracks. I wanted to change it.

But it is not only about CV. The additional reason for urgent need to develop new technological solutions is the change of the employment landscape, the way we develop professionally and the vision of the future of work. In fact, the future of work is already here. As William Gibson said: "The future is already here – it's just not evenly distributed." Today, organisations are desperately seeking digital-savvy talent as well as a digitally agile workforce. Across industries, organisations need talented employees who know how to use new technologies in-line with business objectives, are acquainted with emerging digital business models to achieve business goals and can adapt to new and evolving approaches and methods that can contribute to business growth.

The future of work also means that candidates need to constantly adjust to the changing demand of job markets. Reskilling is necessary to update or replace outdated skills and to stay ahead of the evolving job market and remain attractive to current and potentially new employers. Allowing the employee's skillset to become redundant is a disservice and limits their ability to contribute to the business.

To invest in upskilling successfully, organisations and individuals would benefit greatly from first capitalising on skills analysis. Skills planning is the keystone of any strong upskilling program, by clearly presenting where the individual's skillset is currently at in comparison to what the market needs. In other words, organisations can identify essential skills that are required as well as the development employees need to meet ideal proficiency.

Who are your competitors and why is the company unique?

So far, most of the technologies that have been used in order to recruit people, specifically at the stages of pre-screening, shortlisting and assessment of candidates, relied on an analysis of the employment history, as manifested in candidate's resume. As an outcome, many candidates who have better skillsets, but not relevant employment history or skills in the CV, are often not selected for further assessment and evaluation. That contributed to inequality around employment opportunities, and limited not only the capacity of some candidates to get jobs that match their skills, but also the capacity of companies to find and hire the best candidates for their needs.

PitchMe has developed a SmartMe profile - a multilayered view of individual skills created relying on a combination of traditional sources and digital traits. We have also consolidated a historical Skills Map - aggregated analysis of 125,000 job descriptions since 1995 detecting the skills needed for different jobs and showing how those have changed over time.

PitchMe has developed a unique proprietary technology applying Machine Learning, NLP and data science and have demonstrated its efficiency for >60k users. Our unique advantage is a methodology of converting big data obtained from more than 32 sources (analyzing unstructured text, images, videos and code) into real-time skills profile.

The technological advantage of the Skillsourcing system is an ability to conduct early assessment of skills relying on combination of traditional sources and digital traits, eliminate bias from pre-screening of candidates. Proprietary algorithms that support matching relying on skill analysis reduce subjectivity in hiring.

We offer a digital dashboard for the management of professional development that relies on skill-based dynamic presentation of the candidate, a continuous analysis of a job market and identification of educational opportunities that maximise a candidate's employability.

Who is PitchMe aimed at and who will it help?

There are several audiences that benefit from our platform:

1. **SMEs with no internal HR team** and with a limited recruitment budget. Companies that are in active growth stage, making between 5-100 hires a month. At the moment, we are working with tech (IT, software, engineering) and creative sectors, but are planning to expand to wider industries (financial, sales, management, etc.)
2. **Candidates with non-obvious career story** – graduates, young professionals and career shifters (including job seekers) with non-obvious career stories.
3. **Recruiting agencies and independent recruiters** – they will benefit from using the technology and utilize full potential of their databases.
4. **Corporations** – we will be integrating our assessment/recruitment/profiling technology into existing HR systems.
5. **Online education platforms** – PitchMe will be an outsourced career service for MOOCS (Massive Open Online Courses). Online courses' main challenge is to attract users. The main motivation behind taking an online course is to improve/change career path; therefore, our partnership will enable online courses to guarantee employability for users.

What are the constraints and challenges for you?

We believe the volatility of the job market is an opportunity to introduce innovative technologies that help people navigate through this ever-changing landscape and for companies to find the best talent beyond the traditional horizons of search.

The risk for the next year is challenging the traditional mindset of employers that base their decisions primarily on full employment history and the educational background of candidates.

An additional internal risk for next year is hiring top talent and fundraising to scale and sustain growth. We also need to establish our positioning and branding, not as an HR tech platform, but as a technology for the future of work. We want to become a critical talent partner for our clients so one of the key challenges will be finding new ways to integrate our technology with larger companies.

What are your growth plans over the next few years?

We continuously work on the development of our methodology to offer new ways of using the data. This will help the users find the most suitable and interesting careers, identify some non-obvious opportunities and support their professional self-reflexivity.

We are also planning to expand our geographical presence and industries we serve. We are keen to further develop strategic partnerships not only with online educational platforms, but with traditional universities. Finally, we know that COVID-19 is not the last global crisis and new challenging situations are yet to come. Therefore, we need to be prepared and make sure, that our technology will help when the next event inevitably comes.

China - Southeast Asia Technology Market Overview

Yen-Pin Ng leads the Consulting, Technology and Services practices for SH Gillamor Stephens in the APAC region. Having spent 11 years client side with Accenture, Yen-Pin has experience of executive hiring both internally and in an executive search capacity. Below, he discusses the Southeast Asian technology market opportunities and the war for talent – especially amidst the Covid-19 pandemic.

The Technology Market Opportunity in Southeast Asia

The Southeast Asia region is a strong potential market, where the digital economy is expected to grow to 300Bn USD over the next five years. China's technology firms are stepping up their efforts to expand into the Southeast Asian markets with home-grown capital from their corporate funds to expand into these less mature technology markets, even as funding from private equity and venture capital giants has caused uncertainties in the market. Such firms are bringing their industry know-how and experience to seize untapped businesses in the region, with a running start due to the significant number of captive Chinese users living in Southeast Asia with the ability to pay and exchange currencies within the closed system via Alipay/WeChat. Covid-19 has put a spotlight onto companies' HR policies and practices. However, for the majority, key strategic hires are pushing ahead as businesses focus on their current growth projects.

Consumer Technology Leading the Drive

Online retail, food delivery, ride-hailing, courier & express have grown rapidly in Southeast Asia and have been adopted by all levels. This adoption is enabled for rapid growth by big integrated platforms such as Alibaba, Tencent, Grab, SEA Group, etc. Disposable income for the majority is not as high in most parts of Asia and access to mature financial products are not as prevalent, hence net purchasing power is still lower. However, that is set to change with the fintech and digital payment opportunities in the region. Together with the increasing expectations from a burgeoning middle class who are looking at improving their quality of life – innovative solutions around the core pillars of education, health and lifestyle continue to be areas of focus, with a view of creating a seamless O2O delivery for services.

For now, the Southeast Asia market is taking the lead from China for B2C technology ideas and adopting what works for their own markets and regulations. This is usually led by large local corporates with significant access to the target consumer segment. For example:
Nasdaq-listed iQiyi, a leading video streaming platform often referred to as the "Netflix of China," announced its first overseas partnership in June 2019. The online entertainment company expanded its footprint to Malaysia by launching a channel with Astro, a Malaysian satellite television provider, to bring video content to the Southeast Asian country.

Talent Challenges

We have seen an increasing trend where local traditional corporates are moving digital, with most having ventures in new business areas and a growing number being more open and taking their business through a full digital transformation.

With such "Conglomerate Startups" and the increasing number of Asian Unicorns, such as Grab, Razer, SEA, amongst others, this has led to challenges in finding talent outside of traditional skill requirements. To acquire top talent, wealthy technology multinationals will make every effort to secure their services – sometimes to an extreme. Unprofitable technology unicorns have had to match them or risk losing out.

As an example, fast-growing technology firms like Grab and Razer aren't just competing for technical talent. As they blitz into new business areas such as financial services, they're also fighting for former investment bankers, private equity specialists, or ex-management consultants – people who could be a big help as they navigate new regulatory or financial territory.

However, the effects of the Covid-19 pandemic has stunted the abilities of many start-ups to rival the bigger enterprises in the war for talent. For cash-strapped start-ups, being able to offer competitive salaries for new roles is now impossible. This is creating a growing divide with the bigger enterprises who are able to continue on their hunt for talent, which is in stark contrast to the trend from 12 months ago.

The Future

The innovation and talent which exists in the Southeast Asian market today produces significant opportunity for rapid technology growth moving forward. While Covid-19 poses the whole world with similar challenges, there is substantial appetite from investors and innovators alike to continue to position this region as a hub for technology unicorns. The increasing number of overseas Chinese enterprises and investments in various parts of the supply chain also help to strengthen the value of these ecosystems. It is, therefore, no surprise that in recent years, venture capital managers are an increasing presence looking to deploy China raised funds at opportunities in Southeast Asia.

If you'd like to find out more about our executive search expertise in the APAC region, please contact Yen-Pin, yp.ng@sheffieldhaworth.com