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CONSULTING, TECHNOLOGY & SERVICES

SH - GS insight

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In this issue

Exploring the secrets of success

SH-GS insight discusses some of the latest trends and opportunities in the international technology industry, the importance of company culture in business success and much more...

Welcome to the 35th edition of GS-insight, the magazine of international technology sector Executive Search specialists Gillamor Stephens, part of Sheffield Haworth, the global talent consulting and leadership advisory firm. As a recruitment team, we are fortunate to work with companies at all stages of organ-isational and business development; from university “spin-outs” requiring CEOs to help commercialise “bleeding edge” technology, through to privately owned and VC/PE funded small-mid size businesses seeking the leaders to drive organic and acquisitive growth/ internationalisation strategies to the larger corporate entities hiring executives to lead large scale business transformation and growth. In the UK, it is very pleasing to see the geographical spread of executive oppor-tunities with multiple assignments at present in Manchester, Bristol, Oxford, Cambridge as well as London and Thames Valley. Outside of the UK, we are very active in the German and the Nordic regions, where there are many well-funded technology “start-ups”. At the time of writing, the UK is still mired with Brexit uncertainty but this has not had any noticeable impact on executive hiring activity in the technology sector; we are busier than at any point in recent years, with the market for executive talent being very competitive and as a by-product of this we are recording compensation levels trending higher. While for certain roles there is often a strong preference to hire individuals with proven experience and track record, those that have “been there and done it”, we are seeing that some clients are more interested in hiring the high potential candidate who may not immediately match every criteria but, importantly, has the core skills combined with the right attitude, ambition and desire to make a positive impact and prove themselves in a challenging role. To support this activity, we are often working with business psycholo-gists to help in the assessment of an individ-ual’s future potential, culture and value fit and thereby de-risk the hiring process. Understandably, investors and Boards are very keen to have a robust assessment of the strengths and risks associated with management teams and of their capability to grow, change and adapt to achieve business objectives.

This issue of GS-insight explores a wide range of themes with leaders across our industry sector. We discuss the importance of company culture and business growth with Graham Charlton of Softcat and Russell Sloan of Kainos, two of the most successful and fastest growing publicly listed technology businesses. While insight into the positive challenges facing UK headquartered technology “unicorns” is provided by Sophie Fromont of Graphcore and Ross Seychell of Transferwise. International perspective is given by Kelly Kinnard, VP of Talent at Battery Ventures, who helps us understand the competitive market for leadership talent in Silicon Valley and other technology hotspots in the USA. The new frontier of investing in space technology companies is explored with Mark Boggett of Seraphim Space Capital, the only space-tech focussed venture fund anywhere on the planet. A down to earth view on the opportunity in the UK mid-market for cloud managed services is discussed with entrepreneur Des Lekerman, while Ian Spence of Megabuyte, the leading technology analysts, challenges the current hype around AI. The role of interim management in the technological revolution is outlined by our colleague Martin Smith. Plural Non-Executive Chairman Chris Stone provides advice for succeeding as a Non-executive and contrasts between PLC and PE boards. Finally, Alex Stephany of Beam, talks about social enter-prise and the emerging “Tech for Good” sector that is helping society’s most vulnerable.

I hope you enjoy this issue and I welcome your feedback.

Steve Morrison

Steve Morrison, Managing Director, Gillamor Stephens smorrison@gillamorstephens.com
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The Cultural Route to Success

Graham Charlton joined IT solutions and services provider Softcat as CFO in 2015, taking the business to IPO within ten months. Here he tells SH-GS insight what first attracted to him to the company and why he believes its unique culture and operational style is one that sets Softcat apart from many other businesses.

The Start of Something Different

When I joined Softcat, I knew very little about the industry, but I was immediately drawn not so much to what the business did, but to its strong, unique sense of identity and its vibrant operating environment. After meeting some of the people I knew it was the right place for me.

Softcat was founded 26 years ago by Peter Kelly. Peter is a larger than life character with immense enthusiasm, drive and energy. He was convinced that there had to be more to corporate life than the grey world of business he'd experienced in his early career. He wanted to bring his own personality and beliefs to the world of work; to create an environment that was fun and exciting to work in – basically somewhere people would enjoy coming to each day.

I think the idea to get into software resale (the business was initially called 'The Software Catalogue') was something a close friend of Peter's in the private equity world first mooted. That initial idea, Peter's enthusiasm and creativity, and a great group of people took the business to £50 million turnover over the next 10 years or so. At which point Peter considered selling the company and although that didn't happen, he realised that new leadership was required to take the business through the next phase of growth. By this time the business had been renamed 'Softcat', and in came Martin Hellawell who was to be Chief Executive for the next 13 years. Martin had already had a very successful career as part of the leadership team at Computacenter, and he knew exactly what was needed to unlock the true potential of Softcat. He also had the charisma and strength of character to blend in perfectly with and enhance what Peter had begun. So over the next 13 years both Martin and Peter (Peter gradually stepping further away over the period) propelled the business to a very profitable £600m turnover. It's important to realise that all of this growth was entirely organic – up to the present day Softcat has never acquired another business nor taken on any debt. The reason for going public rather than executing a trade sale or selling to private equity was because Peter loved and still loves the company and its culture. He didn't want to lose the strong identity he'd created; an identity that has been fundamental to Softcat's success. The job of the team running Softcat post IPO has been to stay true to that very special

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Graham Charlton, CFO, Softcat

heritage and just keep going.

Fast Forward

At the time I joined, the mentality of the business had been to grow in as lean a fashion as possible, so the development of the back-office functions had lagged behind the development of the sales engine. When the time came to commit to the flotation, it was essential to enhance the infrastructure of the business to face the rigours of public life and all of the compliance obligations that brings, and most importantly to establish a solid footing for further growth. Part of that development involved finding a CFO and quite understandably the business set out to find someone with experience of both running an IPO and operating in the lead role in a listed business.

Luckily for me, nobody they saw could tick those boxes as well as fit the culture. So they widened the net and placed a priority on cultural fit coupled with potential rather than experience. At the time I was working at BGL Group as Finance Director of Compare the Market. I had plenty of experience in senior finance roles but, despite 6 years in senior roles at Experian, I had not held the number one job and had not executed an IPO. However, I met Martin and we got on, discovering we had a similar outlook on many things. Our then Chairman, Brian Wallace, decided that I was up to scratch on the finance side and off we went. I joined in January 2015 and we floated in November that same year.

That first year was an incredible learning curve. As soon as I knew I was coming to Softcat, I began to consume every bit of information I possibly could on the IPO process. I think I must have read the London Stock Exchange's own guide cover to cover at least five times! Of course, any properly resourced process brings with it a raft of profes-sional advisors to call on. The most important thing at that time was to use all that knowledge properly and fully. I always tell people that there are two bits to getting an IPO done – the legal bit and the sales pitch. The legal bit comes down to hard work and diligence, and letting the experts guide you. If you organise a team

> **"People often ask me about the secret of Softcat's success, and while the answer is easy it's also hard for people who haven't worked here to really get it. It's culture and attitude."**

and put the work in, you will get it done. The other side, telling the company's equity story, is something that the management team have to take ownership of. This is what ultimately decides how successful the process is, whether investors feel compelled by your proposition. That part was a great challenge, being so new to the business and the industry, but I really enjoyed it and investors found it compelling.

I didn't set out to be a public company CFO, I've always taken opportu-nities on their own merit without any fixed end point in mind. But I am immensely glad I've ended up being just that at Softcat. I think, quite frankly, it's just about the best CFO job in the UK. Being a CFO puts you at the focal point of information and insight in a business, and if you use that privileged position well, you can really help drive the business forward. Doing that under the spotlight of the public markets with the opportunities Softcat brings is brilliant fun and I'm very lucky indeed to have this job.

Importance of Culture

People often ask me about the secret of Softcat's success, and while the answer is easy it's also hard for people who haven't worked here to really get it. It's culture and attitude. People here are given freedom and responsibility within a robust framework of rules and guidelines that are designed to serve the best interests of the company as a whole. We hope our people genuinely care about the business they work for, care about each other, and as a result feel like they are working somewhere special, unique even. If you have that, many other things simply take care of themselves.

While it sounds easy and obvious, creating that kind of culture in my experience is very rare indeed. I've seen pockets of it before joining Softcat, but never across an entire organisation (and we're spread across 8 offices these days). Bringing in large numbers of graduates helps. They're malleable and looking for leadership and role models, and once they've grasped Softcat's culture and adopted the right attitude, they set the standard for those coming in behind them.

We teach our graduates to play the long game. They have a revenue target from the minute they join the sales team. They're given no accounts to trade with, they're cold calling, trying to win new customers – it's incredibly hard work. We've created a remuneration structure that rewards results and teamwork. It's vital that new joiners understand from the outset that they will only thrive here if they're a team player, with the drive, hunger and energy to do the very best possible job for our customers.

That's not for everybody, and conse-quently the first year or two seems many decide a different career would suit them better. But we work hard on supporting them and giving them every chance to succeed. Those who enjoy it and have the ability, resilience and attitude to make a success of it can then look forward to a great career at what we think is one of the best places to work in the world. After those first two years attrition rates drop enormously. The nature of the job changes significantly as well, becoming more about developing a consultative relationship with a set of customers you've got to know really well. Accessing that pool of talent is one of the reasons we have set up our new offices near university towns, but the other is so that our head office doesn't become an anonymous monolith of 1,500 people where no one knows each other. Each new office is seeded by five or six people who've been with Softcat for between three and seven years. Those people who intrinsically understand and enjoy the company culture and who have the desire to build their own new corner of the business.

If you walk into our Manchester office,

it will feel different from our London office, which will in turn feel different to the Marlow office, but you can still tell it's Softcat. People will smile, say hello, ask you if you need any help. There are open communal areas in each office with lots of people talking. It's a relaxed environment, but always with a purposeful hum and buzz.

Moving Ahead, Staying Relevant

When I joined, Softcat had an accounting function that was pretty good at keeping the score and getting us through audits, but we weren't doing enough in terms of plotting the route ahead and planning for growth. There were lots of myths about how the business worked, so a big part of my job, apart from getting the IPO done, was to shed a bit of new light to hopefully enhance the way we were running the business. Using key data and insight to tweak and nudge an already fantastically well-oiled machine into an even more optimal groove. So since that time we've created a new Commercial Finance Team. This team consists of just five people, but it helps inform almost all of the significant decision-making process in the business. That group and the wider team has shown how a well-rounded finance function can really focus efforts and resources and help accelerate growth.

That work gave and continues to give us the confidence to scale-up the organisation at a faster rate. Rather than reaching a plateau on IPO we're now growing faster than ever in absolute terms and have consistently exceeded expectations in each of the four years since the float.

I've been asked about my views on automation in the finance area and, to be honest, I'm sceptical in parts. So often the real value is to be found in the human interpretation of the data. There are definitely processes that we could automate, but if every decision is made only by reference to data you will eventually break something. So for me a large part of the work of a finance function will always be about leadership and judgment.

In terms of our customer propo-sition, technology is advancing rapidly, particularly with the large-scale adoption of cloud computing. We have to ensure we stay relevant and understand the technology challenges faced by our customers, helping them evaluate the right model for their business. While we don't really sell the clever appli-cations that sit on their IT infra-structure, we are instrumental in providing the compute power, the storage, the security, the networking and the devices that comprise their technology platform.

Occasionally we might offer to manage some of it for them or to find a partner to help with that, such as maintenance of a security process for example. We're not trying to move away from selling our products, but there are services that we can and will provide that are relevant in assisting them to have the right technology infrastructure in place.

> **“Rather than reaching a plateau on IPO we're now growing faster than ever in absolute terms and have consistently exceeded expectations in each of the four years since the float.”**

Figuratively Speaking

When I joined Softcat I spent a lot of time trying to get to understand how this industry works. When you look into the detail of many managed service providers, they might have a great proposition, but delve deeper into the numbers and it's increas-ingly rare to find a growing profitable managed service company.

I'm not being dismissive of services and the potential they have to generate high margins. If you can find the right niche and get the right scale, you can have a fantastic managed service business. But often there seems to me an almost ideological belief that to survive in this space you need predominantly to be a service provider. This is something our former CEO, Martin Hellawell, always questioned and having looked at it hard myself I've found his intuition to be very well-founded indeed. It's one of the very many things I learned from him.

At Softcat our P&L doesn't really start with revenue, it only gets going at gross profit. A £10 million commodity licencing deal for a large organisation might only earn us a 3% margin, but that's still £300,000 gross profit towards the bills. That's a deal worth doing; the 3% is far less relevant than the £300k.

We've made a huge effort to not allow being a public company to change this ability to think for ourselves and plough our own furrow. Those that get the principles like the fact we've got clarity of thought on the strategy, and they know the logic is sound because our results bear it out. In fact, when measured relative to gross profit our net earnings are higher now than they've ever been because we train our people to compete on value, not price. What IT managers care most about is that the product works and is fit for purpose. They'll pay for that quality and reassurance, and they'll keep coming back again because they trust you.

So, in terms of what Softcat's plans for the future are, well, it's first and foremost more of the same. Our model works, and the investment strategy is one we're determined to maintain. We think that will underpin further market share gains for us. We only have 5% market share so there is still a massive opportunity still.
And because of this we're still entirely focussed on UK customers. We are investing in overseas branches and overseas relationships with suppliers to make sure that we can deliver worldwide for UK customers, but the plan to put sales teams in foreign jurisdictions to sell to non-UK companies is not yet part of the plan.

We haven't yet made an acquisition but we keep an open mind. We're continually building capability organ-ically but accept that sometimes inorganic expansion can be a great option too. If the right thing ever came up, we'd look at it.

But, as has always been the case, the single most important thing to all of us at Softcat is the health of our culture.

The role of interim management in the technological revolution

Martin Smith, an Executive Director at Sheffield Haworth Consulting Solutions, looks at the rise of the independent consultant and the role they can play in addressing the heightened demand for skilled leaders across what is a rapidly evolving technology landscape.

In the UK no other sector is growing quicker than that of the technology sector. It continues to outstrip the rest of the economy by some distance (2.5x), with statistics showing that in 2018, it contributed over £180bn to GDP, up 12% on the previous two years.

With digital transformation continu-ing to drive business change across all industries and marketplaces, it is a given that change will take place at all levels, none more so than when it comes to talent and capabilities. Leadership teams that begin this journey of discovery very rarely end it with the same people in the role. New talent, familiar with new technol-ogies, will inevitably be required. As such, the ability to be innovative and flexible in 2019 is essential, with hiring managers and business leaders needing to up their game when it comes to developing talent pools and working with partners to identify and engage talent in a timely and cost-effective manner.

It is extremely important to note that this is not only a HR issue, but a business one. Executives must embrace strategic workforce planning and treat it as a key priority issue, with the pace of expansion leading to a surge in job creation and a 'war for talent'. They need to ensure that their companies are agile and can respond instantly to whatever gets thrown at them, dissolving the traditional hierarchical structures that we tend to see and reinventing their workforces.

So, the question now on every execu-tives' lips is how do we continue to innovate at speed and compete at the top of our chosen marketplace? The answer is clear and lies in their ability to think creatively when it comes to addressing key people and leadership challenges. It is where the role of interim management comes into play.

Martin Smith, Executive Director
Sheffield Haworth Consulting Solutions

Such talent can be engaged and on site quickly, free of baggage and adding tremendous value from day one. Having 'been there and done it', their ability to deliver has already been proven, as has their ability to move between different environments and cultures, adapting seamlessly to whatever they encounter. They harbour a genuine purpose and can inject a certain momentum into a change scenario or growth agenda, combining a strategic and tactical skillset to define the problem statement, deliver a solution and then hand off to the business.

In 2019, there are many windows of opportunity opening for such operators across the tech sector. Whether it's an expert who can lead on technology initiatives and focus on the 'big-picture', an advisor who can carry out pre-IPO / M&A due diligence or a specialist in organi-sational design who can devise and embed a new Target Operating Model (ToM), it is those businesses who treat interim management as a vital part of their stratgeic workforce planning who will come out on top. Combine this with the ever-increasing trend of companies tying employees to longer-term (6 months+) notice periods, a real issue when looking to add to permanent headcount, and the result is a buoyant and compet-itive marketplace.

The investor community must also sit up and take note of interim management and its value add. With the markets as competitive as ever, and as uncertainty about Brexit and worries over a trade war between the US and China persist, it's a tricky time for dealmakers across the globe. However, with all that in mind, investors press on, with a burgeoning need to build value in their investments.

As such, private equity and venture capital firms must capitalise on the high-quality resource available in the independent market, adopting flexible and agile resource that can relieve and deal with some of the pressures, priorities and sensitivities arising during an investment cycle. In addition, an honest appraisal of leadership capability within their portfolio companies must be carried out, ensuring they have the right people in place to accelerate growth and achieve the kind of exit/returns required.

There are all too many stories of high-potential tech companies biting the dust due to hesitation and burn out. With the 'ideal world' scenario of having all the right mindsets and skills in place at any one time rarely achieved, the ability to expand and contract your executive capacity, via the use of interim managers, should always be considered.

For more information, contact Martin Smith on:
m.smith@sheffieldhaworth.com

Views from Silicon Valley

Kelly Kinnard is the Vice-President of Talent at Battery Ventures*, a global, technology-focused investment manager involved in both venture capital and private equity, with nearly $7B raised since inception and 125+ portfolio companies worldwide. Kelly provides insight into the key themes and challenges in executive hiring in the world's leading technology hot-spot and across the USA.

Kelly Kinnard, Vice-President of Talent, Batteru Ventures

What are the key aspects of being a global talent lead for Battery Ventures?

Battery is quite unique with our stage agnostic approach, doing both venture, growth and private equity investing. Simply put, my role is to be a "go-to" resource for our portfolio companies, and to help them with any recruiting issues or challenges they might be facing. I often get asked and pulled into many HR questions as well.

Therefore, I spend my days meeting with portfolio companies and help as much as I can. Sometimes it is more about building teams of sales reps or engineers, or about the necessity of upgrading the level of executive talent. In the early days of a startup, companies often bring in people from their own network, but as companies grow they then need to bring in outside executive senior talent. For example, people who can take a company from $10 million to $50 million annual revenues and beyond.

I also make introductions to our portfolio companies. When I interact with external executives, I am thinking about where they might fit in the portfolio and I keep a list of all of the searches that I am aware of in our portfolio. Therefore, for example, if a CFO approaches me directly, I have a list to pull out to see if they fit into any of the searches we have.

How does your current role compare to what you did at Oracle as an in-house Executive Leadership Recruiter?

It is very different. Oracle doesn't use outside recruiters for the senior executive level, so all of the C-level executives at Oracle have a dedicated executive recruiter, who comes out of retained search and directly conducts all of the company's VP-level and above searches. It was a very execu-tion-oriented role, and any time there was someone hired at the executive level in that part of the organisation, I was involved in that search.

At Battery, I am utilising all of my career experiences to provide advice and support on people-related matters to our portfolio CEOs. Sometimes I help our CEOs chase down resources. For example, when they come to me and ask for a compensation consultant that I can recommend, I have a list of consultants and experts to pull out when necessary and manage those relationships.

I also manage our relationships with recruiters worldwide, both contin-gency and retained. So, on a daily basis, I have portfolio companies needing help with different searches that I can't do myself. Overall, I have a good overview of who is doing a good job with our portfolio in various fields and geographies and who we should be working with on execu-tive-level retained searches.

What are the key challenges in terms of executive hiring in Silicon Valley?

I think it's getting more and more competitive and companies need to approach hiring in a very humble way. Many early stage companies think their technology, team and passion are top-

are top-notch, but to an outside candidate who knows nothing about the company, these companies will all look and sound the same. Many of these companies do not understand how hard they will have to work in order to recruit top talent.
I always tell them that you need to think of recruiting like dating – bring flowers on the first date and think about the fact that you need to woo these candidates. You might even have to go to the candidates, instead of expecting them to show up at your offices. You are also going to have to work very hard to articulate why your company is better than the twelve others in your zip code that look and sound almost identical.

Smart companies understand that, and the ones that are humble usually do the best job and have the most success.

What about the compensation factors? There is a perception that there is a salary inflation in the Valley due to the war for talent that has led to less loyalty, with people moving on once their first tranche of options has vested.

Yes, that happens. People do change jobs statistically on average around every two years. When these people get hounded and approached with so many opportunities on a weekly basis, you can't blame them if someone comes along and offers to pay more for their skills. It is a candidate's market here and they are in the power seat--it is incredibly competitive.

So what are the factors that will get people over the line and signed up?

I think it is mostly personal relation-ships. Whenever they know someone at the company, or on the board, that is when they really start thinking about it - especially the senior execu-tives. It might even be a company where the founders are people who worked with the candidate 10 years ago and for whom they have a lot of trust and respect.

When recruiting executives in the Valley, a lot of people will not even take or return a phone call unless there is a name included or attached. "You were recommended to me by person X who used to work with you and thinks really highly of you" is much more powerful than a cold outreach that everyone gets.

What are the current senior roles that are particularly in demand?

Within our portfolio, we have seen a demand for VP of Sales and VP of Marketing roles. For some reason in the last two years, they are the most popular searches and companies are looking for people to help them go to market.

I see this mostly in companies that are smaller and venture backed. They are perhaps currently doing $5 million or $15 million in revenues, but they want someone who has previously taken a company to $50 million and beyond in revenues. There aren't many people who have done that multiple times and want to do it again. You can't blame them – that's really hard to do! When sales leaders get to a certain point in their careers, they do not want to do the same thing over and over again. The headaches that come with going back to another $8 million company to scale it aren't appealing to a lot of people.

In more recent times we have seen far fewer requirements for VPs of engineering or product, and even CFO searches. We do, however, have regular requests for data analytics leaders.

What about geographic hotspots in the USA?

I would say that more and more companies are moving to San Francisco and realising that they need a presence there instead of just being based in the South Bay. Many venture capital funds now have offices in San Francisco as well, SoMa specifi-cally. Many of these firms (including Battery) used to be on Sand Hill Road in Menlo Park exclusively. Younger people want to live in the city; they don't want to be on a bus commuting down to San Jose and working in the suburbs at the age of 25.

New York has really taken off over the last couple of years as well. We have a significant number of portfolio companies there and are probably seeing more activity there, in the sectors we focus on, than in Boston. Our Boston team is investing more in Europe, New York and other geogra-phies and wherever they see the best opportunity.

How are you addressing the gender balance within technology companies?

A lot of companies make the mistake of not thinking about it early enough, when they still have 10 people and are just getting going. What I see all the time are companies that get to a certain size and every single person on the management team is a man. They have no diversity and all of a sudden, they realise how bad it looks and decide to focus on it. Then they need to a hire a leader and they decide it should be a female, which really is not fair. These discussions should happen much earlier. I don't think things have gotten any better recently and little has changed.

What about cultural challenges in hiring talent into technolgy companies?

I don't like it when people use the words "culture fit", because to me it sounds like they are looking for someone that looks and feels almost exactly like them. Instead of giving feedback on how the candidate interview went, they tell you "Oh, not a cultural fit". But what does that mean? Is it not someone that you would want to hang out with on a Saturday night or grab a beer with after work? Or is it because they come from a different religious or interest standpoint?

It is lazy from companies to dismiss a candidate on the basis of a lack of cultural fit. Obviously you need someone who is going to fit in well in your company and will be liked and come across as credible, but it is part of our job to push companies to be more structured in how they evaluate candidates and sophisticated in their responses.

***Battery Ventures provides investment advisory services solely to privately offered funds. Battery Ventures neither solicits nor makes its services available to the public or other advisory clients.**

The New Face of Space

Mark Boggett is the CEO of Seraphim Space Capital, the world's first venture fund dedicated to financing the growth of companies operating in the Space ecosystem. In this article, he tells us how the business started, and the challenges faced by the companies they invest in.

Mark Boggett, CEO, Seraphim Sapce Capital

Why Seraphim Space Capital?

The trigger was that we were looking for a new area in which to launch (one of many unintentional puns!) a new $100m fund. We identified space as a nexus of several megatrends, such as IOT, AI, autonomous transport and smart cities. Further investigation suggested that the traditional space sector was going through a period of disruption, primarily because the technology advances in different sectors had started to find their way into the space arena.

We saw a new paradigm emerging where there's certainly a trillion-dollar market that's available for the space tech sector, with the potential for long-term growth across a broad range of industries. Once we'd decided on investing in space, we were surprised to find there were no other space-tech focused venture funds anywhere on the planet, not even in Silicon Valley, and to this day we remain the only space-focussed venture fund.

Getting the investment, though, was far from easy. Most investors just saw space as rockets and satellites. And those that have been in the market have seen spectacular failures. The interest in the sector has really been generated by a group of celebrity billionaires: Bezos, Musk and Branson.

How have these personalities helped helped re-focus and drive investment in the sector?

There's absolutely no doubt that they've been instrumental in attracting the attention of the investor community. They're the people who've created headlines that raise public consciousness, which, in turn, has filtered through to the investment community.

Here at Seraphim, we decided to bring in our own celebrities, but from the space world. Michael Jones, for instance, who was the founder of the Keyhole Corporation which later became Google Earth. More recently Matt O'Connell, co-founder of GeoEye, an earth observation business, and Candace Johnson, co-founder of SES/ASTRA, the largest satellite player in Europe.

These experts in space technology were all able to see Seraphim's potential to build and sell businesses in the sector with a new cohort of start-ups. They've joined as partners to help us identify opportunities and to scale them to become billion-dollar busineses in their own right.

It's interesting that you've decided to take this approach of growing companies from the very earliest point, but why go to all that effort when you could have been just a standard VC?

We took inspiration from the pharma and bio market, which is consist-ently the top-performing venture category. The reason they're so successful is that the majority of the investment in many of these VCs is through the pharma companies themselves. They're taking big stakes as LPs, then talking to the venture funds about the particular areas that they're interested in, before going out and finding the companies and taking them through the riskiest stage of their R&D product devel-opment. When they get through to a certain phase, the LPs acquire those businesses.

We've recreated this model in the space sector by bringing in a range of corporates, such as Airbus, Telespazio, SES, and Teledyne, along with the European Space Agency, and using their knowledge and experience to help us do the due diligence on the businesses that we're identifying.

Currently, we have the resource and focus to invest in around four companies a year, even though we're seeing around 100 companies, globally, per month. To address this, we've developed different initiatives associated with Seraphim to enable us to work with a much broader group of earlier-stage start-ups that will ultimately act as a feeder to our fund.

In 2016 we created, alongside our partner, Newable, an organisation called UK Space Tech Angel. This is a group of more than 100 individuals to whom we refer interesting businesses with addressable markets in technology. The angels will then, typically, invest a million or so, and we can then track these businesses and then join them in their A-series.

Two years later we launched the Seraphim Space Camp Accelerator Fund to support companies who have great technology propositions but haven't been able to validate that through customer engagement. This has led to us bringing on board a whole range of additional corporate partners, such as Inmarsat, Eutselsat, Rolls-Royce, KSAT, Cyient and DSTL, who engage with these emerging businesses on a three-month basis to test and validate their technology, pricing and competitive positioning.

While that's going on, our venture team are working with the management teams to help them better articulate their business proposition and put together their pitch decks. We're evaluating the teams from an investor perspective and then at the end of the programme, we invite other venture funds to come along to our investor day and to invest into these companies. So far, we've put 23 spacetech companies through this programme.

You talk about how broad the sector is, but what do you see as the sweet-spot for Seraphim

We are interested in data from above – satellites, high-altitude platforms and drones - and how that data can be applied to a very broad range of verticals. There are billions of dollars' worth of opportunities to use this data now that it's available at high resolution, low cost and, most importantly of all, more or less real time. When this becomes fully realised, it'll enable a whole range of new activities such as change detection, identifying anomalies that can be fed into things such things as dynamic maps.

"We are interested in data from above - satellites, high altitude platforms and drones."

That's our focus, but we're also investing into companies that already have sensors in space, but whose end goal is to provide data analytics from them. An example of this is ICEYE, a pioneering small-sat company using innovative radar imaging, but whose end goal is the analytics platform.

Launch is clearly the area that's attracted most capital from venture to date, but we're not looking to deploy capital in this area because we believe that there's been over-in-vestment here – today over 100 launch companies are simultane-ously coming to market whereas only a handful will survive. Over the next few years, as new rockets come on stream, there's going to be over-supply of access to space, which will be good news for the businesses we're interested in, because it's going to lead to continued price erosion and easier access.

Another area of interest, virtually overlooked by other investors, is something we call "downlink". This is the technologies associated with securely getting the data down from the skyborne platform to a ground station. There are only a limited number of companies currently trying to solve this problem, and the prize is going to be huge for whoever cracks it.

The final component we're focussed on is product, which is the fastest growing area of the space tech market. As satellites and constella-tions continue to get bigger, that data moves closer to real time and there are more and more applications that will need to be applied.

On the subject of the proliferation of satellites, how big an issue is space debris?

Every launch in history has led to the littering of space with cast-off components that are no longer required. It's estimated that there's somewhere between 250,000 and 750,000 pieces of debris circulating in orbit.

The problem with this is that operators are having to more closely monitor this debris to avoid their satellites being hit. To put this into perspective, a piece of debris that is just 2cm in diameter is the equivalent of a hand grenade going off if it hits another object. The requirement for new satellites to be able to de-orbit when they stop working or reach the end of their useful life is increasing and may become mandatory. For instance, you can have an independent propulsion system, that's totally independent from the rest of the spacecraft which, upon a separate signal, can send the spacecraft back down towards Earth, where it'll burn up in the atmosphere.

It's important that until the problem is resolved, operators maintain a stance of good citizenship to reduce the risks of space debris. Our reliance on satellites depends on it because we can't afford to have damage to GPS systems linked to, say, the New York Stock Exchange or atomic clocks.

One of the businesses we've invested in is LeoLabs. They have a series of ground-based radars that look up at the sky and monitor all the space debris. The information they gather is then passed on to operators, regulators, the military and govern-ments who can then use this to work out the most efficient, safest paths to set their craft on. However, we imagine it's going to take at least one other major event before the regulators are going to get themselves together and implement the necessary controls.

What next?

This is just the beginning for Seraphim. Our first fund was $100m and we are now heading towards a first close of our new $200m fund and this will entail us opening new operations in Europe and Asia. Overall, $4bn was invested in the sector last year to 31st March and this is growing exponentially.


Chris Stone, Plural Chairman

Sitting Across the Divide: The Art of Chairing Public and Private Companies

Chris Stone is a plural Non-Executive Chairman with a portfolio spanning across the technology landscape, from SaaS to IoT. He spoke with GS-insight about his current commitments, his advice for succeeding as a Non-Executive, and the challenges of chairing private and public companies.

What Boards are you on currently?

I currently chair Idox which is a software provider to the public sector and NCC which is a cybersecurity business. Those are both publicly listed but I am also Chair at two private companies. First there's Compusoft which is a TA Associates portfolio business. We're a European market leader in the building, distribution and management of software for kitchen and bathroom designers. The business has grown very successfully with an incredibly dispersed team. The headquarters are in Norway but the CEO lives in the French countryside, the CTO is in Germany and the CFO in Norway, whilst the Head of Sales is based in the UK.

Secondly, I work with an early stage business called Everynet which is an Internet Of Things networking business. For Machine to Machine and IoT connectivity, you can use very low-end radio spectrum that sends tiny packets of data. Our software builds software-defined networks in that space. It allows customers to build a single physical network which they can subdivide and sell to multiple network operators who use it to run IoT connectivity, each on their own private subdivision. The technology was developed by teams in Finland and Russia and the sales team is based out of Miami where there are a lot of telecom tower companies. It's a founder-led business run out of London, whilst we're about to go through Series A funding.

What's good about having a mix of public and private companies is that the rhythms are different. Public companies always want a board meeting on the third week of every month, so diary management becomes critical then. Private businesses are less time sensitive, so I find time for meetings and talks with them at the beginning of the month. But I couldn't take on more than four companies, especially with the two public businesses.

How did you find the transition to becoming a Chairman?

It is quite tricky. In my first two Chair roles, I was younger than the Chief Executive which I took as a prompt to learn how not to be a CEO. I had to learn not to try and second guess or override operational decisions. I think I've managed that rather well but it was something I had to actively work on, to acknowledge that it's not my job to run all the business. It is my job to provide insight and to give early warnings. If I think somebody hasn't fully thought through all the outcomes of a decision, then I find ways to share my experience without taking over. It's an important part of the job that I'm getting better at.

At NCC however, I initially went in as Executive Chair because they'd been struggling with governance issues due to a huge amount of change in the business. As a result, I know the management team very well because for a time they all worked for me. I have a much closer working relationship there than I do, for example, at Idox where I've never sat and worked with the team for a few days or accompanied them to customer meetings, all of which I did in my first nine months at NCC.

The challenges can vary and learning how to become a good non-exec is a journey, it's not instantaneous. A person who taught me a lot about how to share my experiences in an encouraging way was Dave Hodgson, a Partner from General Atlantic, who was on the board when I was at Northgate. He would never tell us outright that something couldn't be done. Instead, he would always find a way of telling us what he had learnt from negative experiences. A lot of things are recurring stories across different businesses. He would never say, "We tried that at X, Y, Z, it never worked." He would always find a way of saying, "Do you know, when we tried that at X, Y, Z, here are the things we learned." That's a really important point. One of the values non-execs bring to a company is that they've made lots of mistakes. I always tell the teams I work with that I want to help them avoid making my mistakes so they can go out, be creative and find their own problems. You have to do that in a way that is supportive, not patronising or belittling.

Is there a difference in how you approach PE and public company roles?

There is a difference, largely because

of the extent of involvement from shareholders in public companies. In a PLC you have to often presume what they would want in a given situation. Whereas in private equity backed businesses, you can get more face to face interaction with the investors and simply ask them what they want. Governance is important in any business but when you have that arm's length from the stake-holders, you have to think a bit more about how to explain the decisions you make. For example, you might have to explain remittance and plans for bonus and options schemes, or about decisions as to where you may or may not be investing. You have to think, "what are the shareholders looking for from this investment?"

I commit time to go and talk to share-holders. I carve out a week each year for each business and tell the brokers to fill my diary with as many meetings as there are shareholders that want to meet me. I don't go into these meetings with any specific agenda but simply to say, "what do you think about this? What would you like the business to be focusing on? What would you like me to do?" You can't please everyone but at least I then know what everybody thinks. If I end up displeasing anyone, I can explain to them that the decision taken was that which the majority wanted.

What does the ideal PLC board look like?

When I first took over as the CEO of a public company my board had nobody from the technology industry on it. There was a nuclear engineer who at least was an engineer but that was it. That's completely changed over the last twenty years. There's now enough people around who've built careers focused specifically on technology who can look at a pack of KPIs and understand what activities they will require on an operational level. Today, you have to understand the specific challenges to a business in creating value. Of course, you want a general mix of skills on a board to some degree, but they've also got to know which levers to pull to generate value in a technology business. Besides that, there a few obvious things a board needs to have. One is gender balance and diversity. Then ideally you should have two accountants who can chair and sit on the audit committee. The best Audit Chair I ever worked with was Sir Stephen Lander at Northgate. He had previously been Director General at MI5 and was brilliant, because he knew when people were fibbing or were not totally convinced of their position. He was superb at just reading body language and saying, "You don't really believe that, so I'm going to ask you that question again from another angle."

At NCC for example, we've assembled the board very carefully. Jonathan Brooks has great experience having started his non-exec career at Arm and then on numerous other boards. Chris Batterham also has been on a number of boards before, some of which have had their difficulties, whilst others are enjoying very high growth. His role at Blue Prism is very interesting as it gives him an under-standing of how to manage rocket ship growth. We're a people business so we also have Jenny Duvalier who was Chief People Officer at Arm and lastly, I managed to persuade Mike Ettling to come and join us who has amazing cloud experience from SAP which is vital for us.

Do you think an IPO is the best exit route for tech companies and what is the best market to list on?

It depends. On NASDAQ for instance, big companies tend to do very well but there's also a lot of living dead companies on there which we don't hear so much about. If your business has a sub-billion-dollar market cap, then I don't think NASDAQ is the right place to be.

However, I don't think people can simply blame the market. A public company has got to do two things really well: it's got to explain to shareholders why the company is a good investment and then it's got to deliver on that promise. Usually, when businesses face difficulties with valuation it's because they've made a misstep on one of these two counts. The markets are currently really vicious when it comes to such missteps but they can also recover very quickly. The markets aren't fickle but they are thin, there just aren't a lot of people putting money into equity markets at the moment.

Do you have a framework for working with CEOs?

I really like businesses where I can take on a role coaching the CEO. But I've also got to be dispassionate and challenging. I'm currently working with a really interesting mix of CEOs. Adam Palser at NCC has held CEO roles of private businesses, but this is his first with a public company so I'm helping him with that transition. At Compusoft, David Tombre is a first time CEO. He's been with the business for a long time and knows it inside out, but they've recently been bought by Private Equity so that is a big change for him to work through as well. Lawrence Latham at Everynet meanwhile is very experienced and has worked in IoT for the past twenty years. My job there is just to help him with some of the bigger issues, to liaise with the shareholders and make sure the business is structured in the right way for us to grow. There's a considerable mix of situations which require different approaches.

Besides your packed portfolio, you also own a number of prize-winning Three-Day Eventing horses. Do you see any link between your business and equestrian pursuits?

We run the yard as a business but it's a loss-making business. We won a gold medal at the World Games in September last year and we've got six horses on the long-list for the European team, though there's no guarantee that any one of them will make it. The thing about horses is, it's 15% outright disaster, like one of them falling in the cross country at the weekend. Didn't even finish. 10% euphoria because, either, you win or the horse does better than you thought or it shows that it can do something that you didn't think it could do. Then the rest is just kind of vague disappointment where it's just, "Oh, could have gone a bit better than that." You've really got to enjoy the whole process.

Our mission statement is to win every gold medal between now and when my wife and I die. That's our mission. Now, will we get that? No. I'm realistic, but it is something to aim for!

A Journey in HR - from Engineering to AI, via Reykjavik

From traditional engineering companies to the gaming sector and now machine learning, Sophie Froment has led a diverse and international career. She talked to GS-insight about her journey as an HR professional and how she is bringing her experience to bear in her new role as SVP People at UK-headquartered tech unicorn Graphcore.

You started out working for traditional engineering firms in France before making the move into gaming with Electronic Arts, how did this transition come about?

I actually began my career as a head hunter, working for a boutique firm in the South of France. I'd previously completed a business degree and had spent a year living in London and Madrid so the language skills I developed during this time made recruitment a natural fit for me.

I first made the jump into HR as an internal recruiter in charge of all the hiring at Coface who provide credit insurance and risk management services. This gave me some international exposure but I realised I wanted to develop my career as an HR generalist and so I joined Valeo and then Alstom, both massive French engineering companies. At Valeo I was responsible for everything except the production line, whilst at Alstom I oversaw the population for the entire site. Both companies were international organisations and my time there increased my desire to mix my language skills with my background in HR.

I couldn't miss such an opportunity. The role was a new creation based in Lyon where I lived, and I was to be the HR Business Partner for the Southern European region. As a U.S.-headquartered business, it also meant I got the opportunity to use my English a lot more and they like the fact I could speak Spanish.

Joining EA marked a pivotal moment in my career, I spent seven years there and earned three promotions. I moved to London and then to their international headquarters in Geneva. In my last role as the Senior HR Director for Europe I was respon-sible for about twenty-one countries.

You next joined CCP, another gaming business, but this was based in Iceland.

At EA I was mainly looking after Publishing Marketing, IT, Translation and Finance in the gaming industry. But I wanted to work more with the engineering and creative minds, as I had done in my previous roles.

At first, friends and family were shocked by the decision. They said, "what are you going to do in Iceland?" But as a family we had already experi-enced moving abroad and were open minded. I know it sounds weird, but we thought it sounded kind of exotic!

But I didn't take the job because it was in Iceland. I joined CCP for the opportunity to lead the whole HR function. Like EA and now in my current role, it was a newly created position and the opportunity to build and develop world-class teams is something that really appeals to me.

The company had been around for about ten years already but there was no one in charge of HR. They had gone through massive growth when they bought and merged with another gaming business, White Wolf in 2006 and had opened an office in Shanghai to become truly global. They went from a headcount of around two hundred to six hundred and eighty by the time I joined in 2010. They

Sophie Froment, SVP People, Graphcore

were 700 people and had realised the need to hire a dedicated HR exec in order to handle that growth and to do more from a culture perspective.

I liked the challenge that CCP offered but I also loved the people I met during the interview process. I believe it is very important to make sure you fit within a business if you want to add value. This becomes easier as you progress in your career and you develop your own style.

Lastly, I really loved the gaming industry and its combination of technical and creative people. In gaming you only have the people, so it's a very people focused industry with a more open, less formal style than in traditional engineering companies.

Was it difficult to adapt Icelandic culture?

We didn't know what Iceland would be like when I joined CCP. I even negotiated that if after a year, we decided it was not for us, then they would agree to relocate me to one of their other offices. The language and the culture are very different, so it wasn't the same as moving to the UK or Spain.

In hindsight, the move actually helped me balance my work and family life. My kids were young when we moved and I was starting my first leadership position in HR, but Reykjavik is a very small place so I could also educate and spend time with them. My walk from home to the office was just under three minutes so I felt I could be a good mum as well as a good exec. Sure it could be cold and sometimes very windy but looking back, I'd definitely do it again!

You recently joined Graphcore, one of the world's most exciting AI companies.

CCP was changing ownership when I was approached by Graphcore, so the timing felt right but I wasn't actively seeking a new challenge. As was the case with my previous roles, what I liked about the company was the story. I'm super interested by AI and machine learning, it's an amazing tech field to be in from an HR perspective. Once again, I met some incredible people when I interviewed, and I liked that the role is another new creation. But whereas CCP had been going for some time before I joined, Graphcore is definitely still a start-up. It's a fantastic opportunity to help the development of the company so early on.

Despite being an early stage company, we're also experiencing huge growth and have to hire a lot of people. We currently have close to two hundred employees having doubled in size last year and we're set to do the same again in 2019. But we're not arrogant people, we don't try to do lots of PR all the time. We're certainly very well known within our field, but one of the challenges we currently face is that many people still haven't heard of Graphcore.

Although we've just closed another incredible round of funding which adds to the story and helps us build our employer brand, people can still be quite risk averse. The world of machine learning and artificial intel-ligence while very appealing in many ways, is still a new and unproven industry.

Another challenge we face is that we're based in Bristol. It's a great city to live in but it's not somewhere a lot of people outside the UK are especially aware of. When I first told friends I was moving to Iceland, they heard Ireland and again when I told them I would be living in Bristol, they thought I said Brighton.

Lastly, in terms of hiring people from outside the UK, Brexit is an issue. People are very concerned about what's going to happen, often not so much for their own sakes but for their partners and families. We've had a few candidates who've declined to go further in the interview process until they know more about what's happening to the UK and its relationship with the EU.

We also face some internal hiring challenges. We're always looking for people who will feel comfortable working for a start-up. We need people with experience and knowledge that can add value but who can also handle the turbulence that comes with flying in a prototype. In a start-up, things can change quickly and recently we've had a couple of amazing people who have left because of these challenges.

We also set the bar really high in terms of our recruitment. Due to the complex nature of what we do but also who we are in terms of company culture, we're always looking for people who are better than us, so we are extremely demanding.

Given all these challenges you face in recruitment how do you create diversity and inclusion?

In my first six months at Graphcore I've focused on building the talent acquisition pipeline but now the next step is to become a lot more deliberate in our hiring processes to create diversity and inclusion.

Historically, we've been hiring people known to us from the networks of current employees. It's a great way of recruiting because candidates know and already trust people in the business who in turn know and trust them. It's also helped us to manage the enormous hiring agenda. If we need to hire two hundred and fifty people and we already have that number in the business, then I can ask each team member to find one person.

But now we need to become more deliberate in our hiring processes and that is top of our agenda. This means strengthening our Talent pipeline / funnel, developing our interviewing skills, keep building world class approaches!.

Bristol is growing quickly as a recog-nised tech hub for start-ups and Graphcore underlines the potential of the region with several other fast-growing companies. It's going to be another very exciting chapter in my journey!

Growth and Transformation: How Kainos Shape Business, Employees and Customer Experience

Having joined Kainos as a graduate, Russell Sloan today leads their burgeoning Digital Services business. He spoke with GS-insight about the company's offering, massive growth, culture and hiring strategy.

Digital Transformation

There's no universal definition for Digital Transformation but at Kainos, it's about taking a business-critical process and truly transforming it. Others might describe it as updating websites or online brochures but that isn't genuinely transformative because it doesn't change the way a business operates. It's different to IT and software services as well for the way it links change in technology and more general business.
Dealing with diverse business challenges requires us to engage with customers throughout the prohect life-cycle. With some supplier organisations processes project life-cycle. With some supplier organisations processes are less transparent and it's all about the big reveal at the end. This is how design agencies often work and it's how software development projects have run in the past. But we've always worked hand-in-hand with our clients meaning we've been able to adapt quickly to the growing demand for Digital Transformation services.

A good example of the work we do is our recent partnership with the DVSA. We worked with them to upgrade the system that records MOT results, used by some 65,000 mechanics across the UK. They were previously keying data into dumb terminals which sat in the corner of the garage and served no other purpose. The system was run off a mainframe and cost about £35 million annually. It was old technology and difficult to change.

To succeed, we ensured we under-stood what users really needed. We spent time in garages and spoke to mechanics, gradually developing the beta system before going live. The result was the first UK government transactional service in a public cloud. We switched off the mainframe and scaled the new system so all users could log in. It was absolutely a business-critical process. There are thirty-five million MOT tests every year, underpinning car tax which alone is a £6 billion industry. It was an eighteen-month project with a hard deadline and the threatofbigfinancialpenaltiesforthe DVSA if they were forced to extend extend. There was scrutiny up to ministerial level but the business case was to save £100 million over the next seven to eight years and they're currently over achieving on that.

Public Sector

Though our healthcare and commercial offerings are performing strongly, the UK public sector has fuelled much of our growth. Our recently announced full year results show a 42% growth in our commercial business and a 68% increase in public sector revenues.

> **"The business case was to save £100 million over the next seven to eight years and they're currently overachieving on that."**

The growth in public sector deals was initially driven by the Government Digital Service which worked to show departments how to do things differently and be disruptive. Now departments and agencies understand the benefits of Digital Transformation and are undertaking projects of their own volition. There's certainly a need to transform their services. This is driven partly by the demands of UK citizens and taxpayers. People are used to a digital world in which they interact daily with social media, so they expect government to be providing the same digital channels and experiences. But there's also the need to cut cost; the money saving business case never goes out of fashion.

Cost and customer benefits are demonstrated by our work with the Passport Office. Citizens can now go through the process of requesting passports online. I renewed mine all on my phone, photograph included. As a citizen, it was a really positive experience and for the Passport Office, the business case for full digital transformation is an annual saving of up to £65 million.

At various points, the UK has formed part of the D5, the most digitally advanced nations worldwide. To achieve that, GDS will have looked at other countries. The model is Estonia who had the disguised blessing of having no previous technology infra-structure. They were able to build from scratch, one of the world's most advanced digital systems without the burden of outdated legacy technology.

At Kainos, we've similarly looked to other business sectors for inspiration. Government has been leading the way when it comes to embracing agile ways of working and cloud adoption, but innovative use of data is most prevalent in the financial sector. This is partly because they face less restrictive legislation but there are tangible benefits for any organisation that adapts the way it uses its data.

Growth

I joined Kainos almost twenty years ago when the business had about one-hundred and fifty people. Today, the overall organisation has a headcount around 1,450. In terms of revenue and people, the annual growth rate has been just over 20% for the past five years. When I started the Digital Services business in 2012, we had about thirty-five people in total. Now I have a team of around nine-hundred and fifty working on digital transformation across the UK government, healthcare and commercial.

That growth in all parts of the business hasn't been linear however, and we've had to be careful to prevent certain changes negatively affecting the company. For example, Kainos was originally a software engineering business with little in the way of sales and marketing so we had to focus a lot on scaling the sales team. But as they performed increasingly well, we faced new challenges in terms of larger scale delivery.

At this stage too, we had to focus on reformulating our people processes to operate effectively with a much larger

“When I started the Digital Services business in 2012, we had about 35 people in total. Now I have a team of around 950 working on digital transformation across the UK government,healthcare and commercial.”

headcount. In the last year, we've gone from recruiting one or two people a week to seven or eight which has created new challenges around on-boarding and putting in place the right frameworks that enable people to succeed.

Part of our culture has always been to hire graduates and give them exciting career prospects. There are lots of leaders in the organisation who have been with the company for their entire careers. This year, we'll take in around two-hundred entry-level employees - a mixture of graduates, placement students and from our academies and apprenticeship scheme. In the last year, we've have received nearly 22,000 job applications and have conducted an interview every twenty-two minutes on average. We get some very capable and ambitious people from a range of subject backgrounds and we keep the bar high. We hire good people and give them challenging and exciting work to inject fresh energy into the business.

The Future

AI and machine learning are becoming pervasive in the technology industry and we're starting to see tangible benefits from it in enabling Digital Transformation. People worry about the potential increase in unemployment caused by AI disrupting traditional industries, but we see it being used by clients to free up staff from repetitive tasks. Rather than gradually trying to remove people from the business, companies can use AI in a positive way to deploy staff to higher value, more fulfilling tasks.

Returning to the example of data and the DVSA, we implemented for them a proof of concept followed by a full solution that used machine learning to analyse their data concerning garage inspections. DVSA have a limited team who inspect about 5% of garages a year for signs of fraud. We were able to look at the data in 50% of the time spent manually analysing data and provide insights as to which garages were potentially acting fraudulently. Whereas they used to find two cases of fraud for every nine garages they'd visit in a day, they now on average find seven. Increasing productivity in this respect was a high priority on the board's agenda as it impacts people's lives by ensuring MOTs are carried out properly, improving vehicle safety. With this project we were the winner of the 2018 UK IT Industry Awards Artificial Intelligence and Machine Learning project of the year.

Competition

Kainos is one of the success stories resulting from the change in government policy that encouraged departments to engage SMEs. Our competition ranges from companies of fifty people or less, right up to the large system integrators. It's become more competitive so we must keep differentiating our business case and finding new ways to add value. It's changed the nature of our work also as we increasingly engage in larger scale projects which sees us compete more and more with the biggest players.

We have a diverse offering that includes support services with lengthy contracts, some of which have been renewed repeatedly over twenty years. However, the majority of our business is project based and all projects come to an end. Therefore, we work closely with our clients to understand their needs and whether there might be other problems in the business we could help solve. Repeat or recurring business accounts for about 90% of revenue. We remain competitive by focusing on delivery.

Lastly, increased competition has made recruiting and retaining top talent more difficult. Our culture and focusing on our people is important. Besides remuneration, we offer genuine opportunities for career development and work that is truly rewarding. We engage people with the chance to take responsibility on large, complex projects that make a real difference to people's lives.