techUK
FOR WHAT COMES NEXT

UK Tech SMEs

Driving Economic Growth and Innovation

October 2024

Beauhurst

kytemark solutions
insights are forever

About techUK

Over 650 of our members are SMEs.

We provide our SME community with opportunities to network and collaborate with their peers, industry leaders, and customers in both the private and public sector.

Our relationship with government and regulators allows us to advocate for regulatory solutions and policy that help our SME members to compete and grow.

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Executive Summary

Technology SMEs are central to the modern success story that is the UK's technology industry. Our SMEs have pioneered innovations in emerging technologies, created highly skilled and highly paid jobs, transformed public services, and led the emergence of regional tech clusters.

To better illustrate the critical impact of tech SMEs across the nations and regions, techUK has combined quantitative data provided by Beauhurst and qualitative interviews conducted with Kytemark. This report provides both the current macroeconomic picture of tech SMEs, but also the economic and social impact of individual tech SMEs.
It unearths some of challenges they face in achieving their growth ambitions, and outlines how some of the solutions presented in techUK's recent Growth Plan can address these challenges to ensure the UK economy and society fully benefits from these world-leading companies.

The data echoes what we already know that SMEs are central to economic growth of the UK. The data reveals the

breadth and diversity of tech SMEs currently operating in the ecosystem. There are over 190,000 tech SMEs across the UK employing nearly 700,000 people. This is nearly double the amount ten years ago. Whilst the majority of these continue to be based in London and the South-East, the strong presence of tech SMEs in Greater Manchester, West Yorkshire and West Midlands shows the continued success of these tech clusters.

Software companies continue to dominate the industry, but there are also thousands of tech SMEs within the UK's leading industries, such as HealthTech. The average age of a tech SME at 7.5 years illustrates that, whilst the industry continues to spin out and found innovative start-ups, the tech SME ecosystem possesses strong experience and expertise. Some of the SMEs interviewed for the purpose of this report have decades of experience in the industry, such as Sapphire, Jadu and SEBi. On finance and funding, the data illustrated that only 7% of tech SMEs have received equity investment and 2% have received a large innovation grant.

Beyond the data, the tech SMEs interviewed outlined the invaluable impacts they are making in the UK right now. The conversations with SMEs unearthed the real successes they are having in driving economic growth across the nations and regions and delivering real-time solutions to some of the UK's most challenging issues. Reducing hospital waiting times, saving lives in conflicts, and drastically cutting carbon emissions are just some of the impacts tech SMEs across the UK are making. Combined with this, they are at the cutting edge of leading British innovation, spearheading developments in AI, quantum and net zero technologies.

Despite the successes, tech SMEs continue to face significant challenges and barriers to furthering their growth and innovation. Insufficient funding, significant digital skills gaps, difficultly in generating sales prospects, particularly in a burdensome public procurement, and regional inequalities, are all preventing tech SMEs from unleashing their full potential to the benefit of the UK economy and society. Many are closing or relocating to overseas markets, namely the US. As a result, the UK is losing the economic and social benefits from these companies in the form of jobs, future tax revenues, and the innovations developed.

Even with these challenges, the tech SMEs interviewed remain positive, and had plans to expand their growth and innovation, creating more jobs and delivering the technologies the UK desperately needs. By addressing the challenges outlined, the UK could not only accelerate the growth of tech SMEs and add more highly-skilled jobs to the economy, but also feel the benefits across society – transforming public services, enhancing the UK's defence capabilities, boosting UK productivity, and drastically reducing carbon emissions.

Data highlights

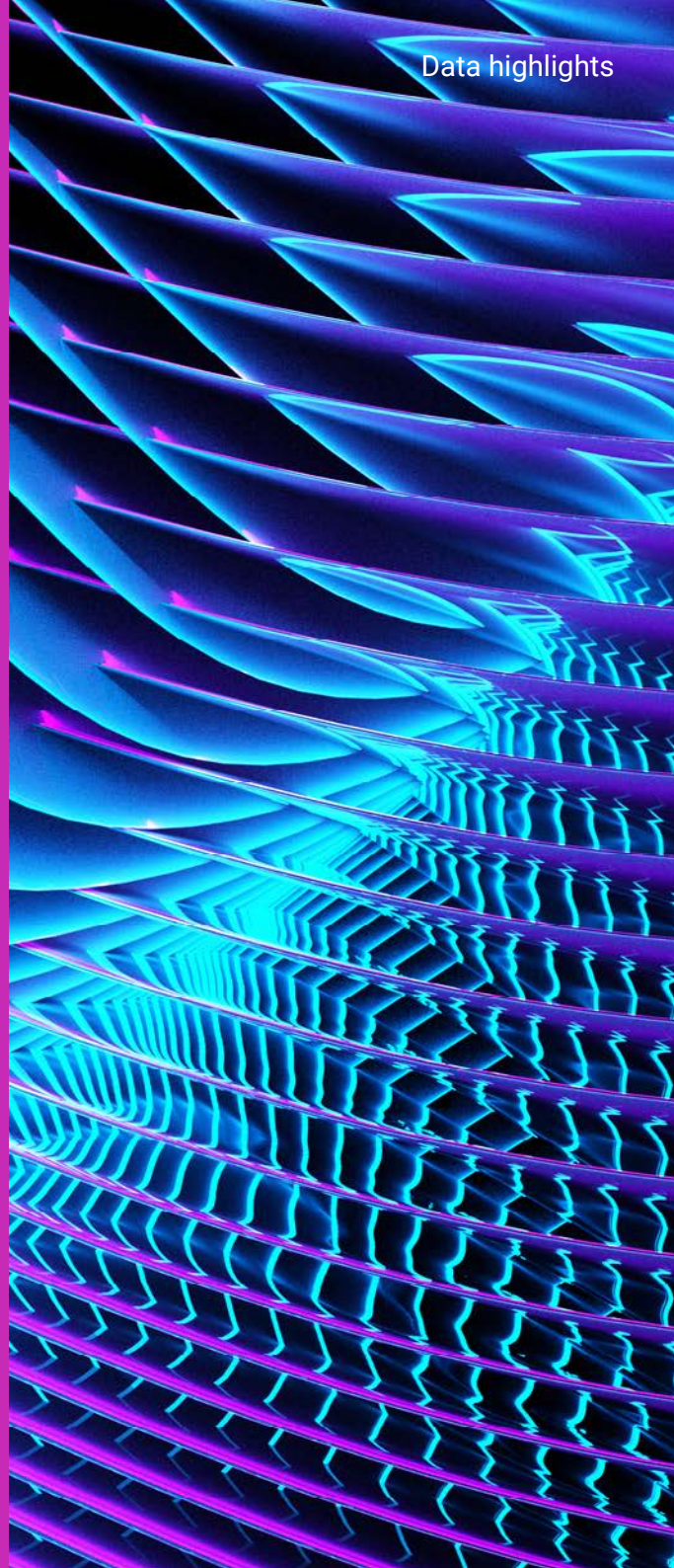
191,000
tech SMEs in the UK

700,000
people employed by tech SMEs

7.5 years
average age of a tech SME

7%
tech SMEs received equity investment

2%
tech SMEs received a large innovation grant



Main Challenges

Access to scale-up finance

Commercialisation of innovative technologies

Generating sales prospects in public and private sectors

Lack of available talent

Regional disparities in infrastructure and resources

Cash flow and late payments

Recommendations

Tracking	• Improve public data leads on UK companies and publish data on a regular basis to improve policy making and interventions for SME support.
Finance and Funding	• Unlock more investment for SMEs looking to grow by continuing the delivery of Mansion House Reforms, including a range of reforms to private pensions to ensure they are as effective as possible in unlocking institutional investment. • Drive greater diversity into the scale-up ecosystem through targeted initiatives, including the Venture Capital Fellowship programme. • Restore confidence in the UK's flagship R&D tax relief scheme, prioritising longer-term policy stability, effective administration from HMRC and better support for SMEs. • Simplify the process for securing public grants, such as Innovate UK, and explore options to provide more grant funding and support for the commercialisation of innovative technologies.

Generating sales opportunities

- Establish a commercialisation Tech Taskforce comprised of regulators, businesses and government to identify markets within the UK where tech innovation could drive significant change.
- Establish the new Technology Procurement Delivery Body (TPDB) that includes Ministers and high-ranking civil servants to improve procurement processes and tackle existing barriers to procurement that levels playing field for SMEs.
- Engage with tech SMEs to identify what information and support they need to expand and export internationally to inform how to improve and update government insight and support on expansion in foreign markets.

Talent

- Deliver the new Growth and Skills Levy and work with the tech sector to create a Digital Skills Toolkit. This will increase digital skills provision across the UK and encourage a more diverse and inclusive tech sector.
- Develop practical ideas to connect scale-ups to pools of talent, for example by facilitating partnerships with universities, allowing greater certainty over when visas will be granted by the Home Office and connecting SMEs to national and devolved government skills initiatives.

Accelerating regional ecosystems

- Deliver on the recommendations of the Harrington Review to create a more joined up investment offer with the support of metro mayors and devolved governments.
- Review different SME support initiatives across the UK's nations and regions to identify how to better facilitate joined up thinking and reflecting on best practice.

The UK Tech SME Ecosystem

Over the past ten years, tech SMEs have grown significantly in the UK, with the total number of tech SMEs in the UK currently 191,000. This has nearly doubled from ten years ago, when there was 104,000 tech SMEs.

Overall, these tech SMEs employ nearly 700,000 people, many of which are high-skilled, high-paying jobs in various parts of the UK. 2020 saw the largest increase in active tech SMEs, with an annual increase of over 15,000. Despite the recent economic challenges, 2023 saw the third largest increase, with 10,500 extra tech SMEs in the UK.

Many of these tech SMEs will vary in size and growth stage, comprising of start-ups, scale-ups and established companies. In the UK, it has often been reported that 60% of business fail within the first three years.[1] However, the average age of UK tech SMEs is 7.5 years, suggesting that within the tech ecosystem, there is a broad range of SMEs at different sizes and stage of growth, with many established SMEs with several years' experience.

In terms of type of technology, the UK tech industry continues to be dominated by software, with over 70% of tech SMEs either producing application software or software-as-a-service (SaaS) products. Outside of this, there is a significant presence of electronics hardware and data companies. Additionally, there are substantial number of SMEs operating in the innovative technologies the UK is world-leading in, with over 4,000 AI SMEs and over 3,000 FinTech SMEs.

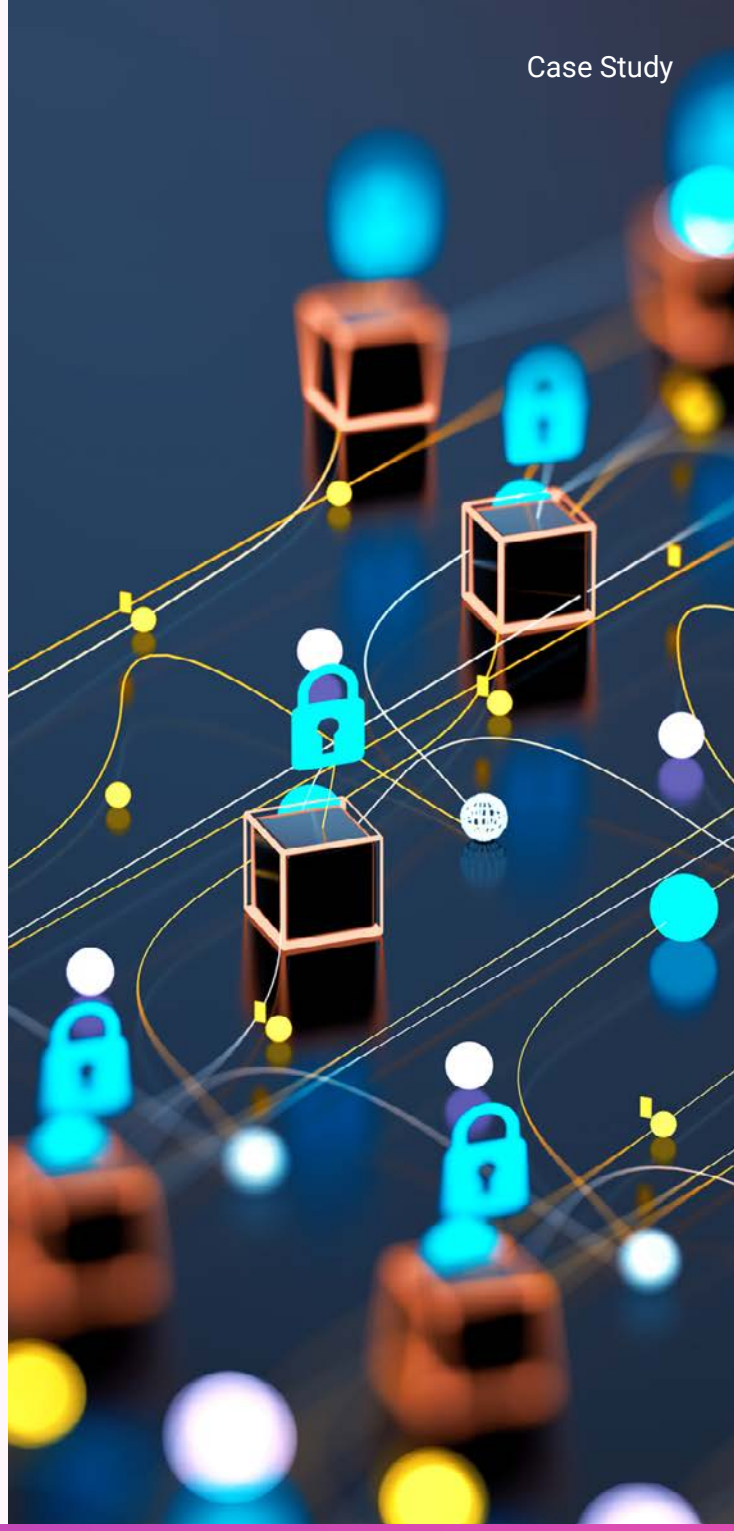
Active UK tech SMEs	
Year	Number of active companies
2023	191,299
2022	180,836
2021	174,407
2020	168,450
2019	153,243
2018	145,462
2017	134,986
2016	122,785
2015	113,849
2014	104,728

Case Study

Ian Thomas,
CEO, Sapphire

Having been established in 1996, Sapphire is an example of a cyber security SME that has operated in the industry for several years. 100% UK owned with staff and operations all in the UK, Sapphire is a leading cyber security business that safeguards organisation's infrastructure and has more recently begun to lead on solutions to the serious and emerging cyber threat to operational technology. Sapphire's ability to respond to changing landscape demonstrates tech SMEs substantial agility.

As the CEO Ian Thomas said, *"We're fortunate that as a company of 120 employees we can come up with an idea in the morning and implement it in the afternoon, well, maybe the following day!"*



Case Study

AutogenAI

Sean Williams, Founder and Chief Executive, AutogenAI

AutogenAI, a company whose software helps organisations write more winning bids, tenders, and proposals, was established in 2022. In less than 12 months of taking its product to market, the company became one of the fastest growing AI businesses in the world, won the prestigious AI Grant and drawn in over $60m in investment.

AutogenAI now has more than 150 employees across three continents and more than 100 customers, including some of the world's largest government contractors and fast-growing SMEs. The company is dramatically boosting bid win-rates, revenues, and productivity for UK companies. Moreover, they are creating a more level playing field for SMEs to submit bids when up against larger companies with more resources.

Whilst there is a strong perception that the majority of tech SMEs will have been backed by equity investment at some stage, very few have actually received any equity investment. Only 7% of the active tech SMEs have received equity investment. This varies by region, as shown on the next page, in the regional breakdown.

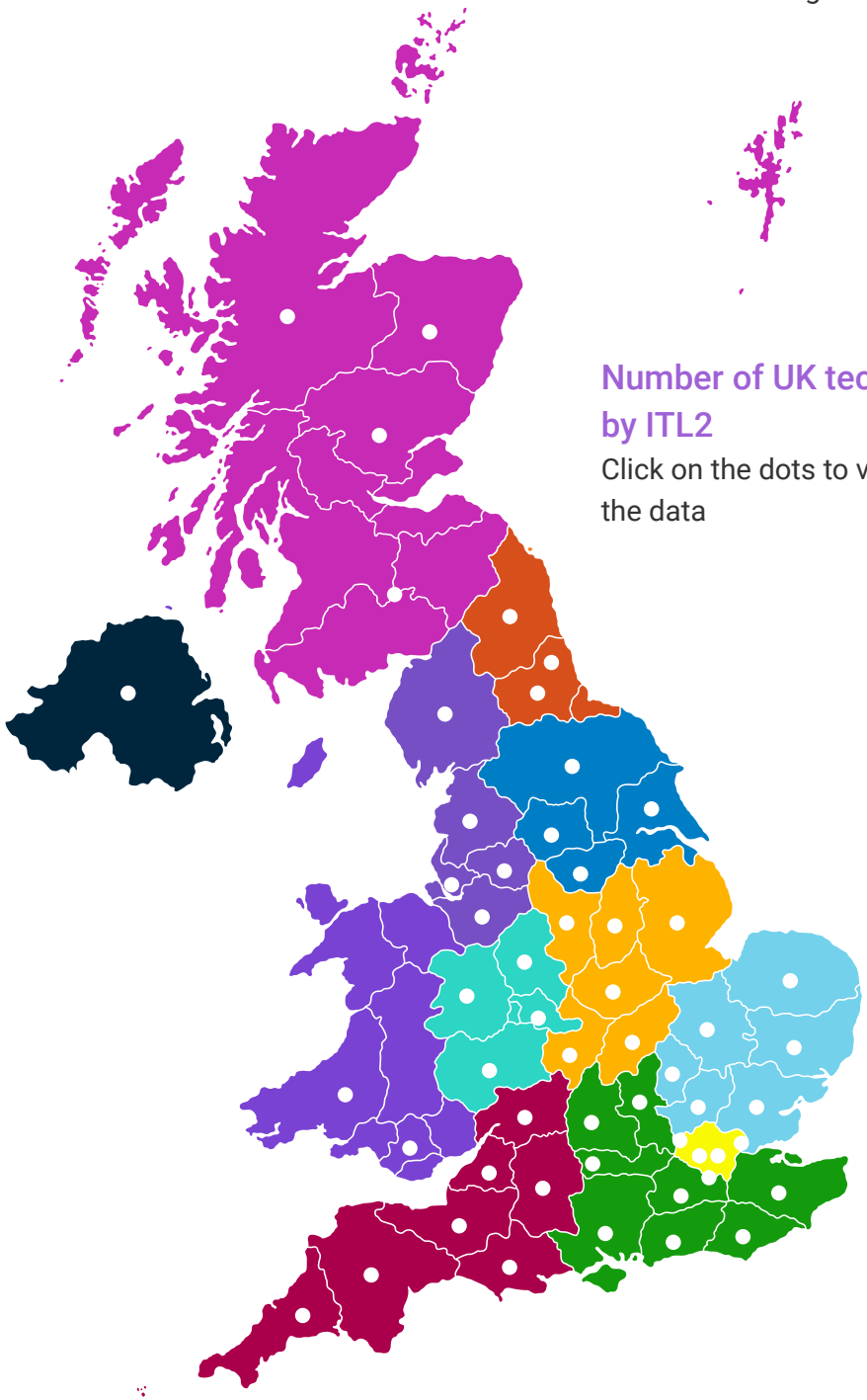
Moreover, despite these tech SMEs leading innovation in cutting edge technologies such as AI or HealthTech, fewer still have received large innovation grants (grant of over £100,000). Only 2% of the tech SMEs have received a large innovation grant.

Regional Breakdown

Over half of UK tech SMEs continue to be based in London, the South East and the East of England. Outside of these areas, Greater Manchester, West Midlands and West Yorkshire are the subsequent largest regions, with these three regions home to over 16,000 tech SMEs.

The location of tech SMEs in different parts of the UK continues to illustrate the urban-rural divide highlighted in techUK's Local Digital Index, as more congregate around urban areas.

To view the full table, please see pages 64-65.



Number of UK tech SMEs by ITL2

Click on the dots to view the data

Tech SMEs also make a significant contribution to employment and job creation across the nations and regions. As a result of the regional split of the number of tech SMEs across the country, the largest number of people employed by tech SMEs continues to be companies based in London, the South East and East of England. Nevertheless, tech SMEs based in areas such as West Yorkshire, Greater Manchester and West Midlands employ a significant number of people. These jobs will often be highly-skilled and highly-paid in innovative industries, such as quantum computing.

Number of people employed by Company HQ ITL2 location	
ITL2	Employee count
Inner London - West	161,280
Inner London - East	76,913
Berkshire, Buckinghamshire and Oxfordshire	43,124
East Anglia	28,366
Hampshire and Isle of Wight	27,846
Gloucestershire, Wiltshire and Bath/Bristol area	27,302
Greater Manchester	25,768
Surrey, East and West Sussex	25,688
Bedfordshire and Hertfordshire	21,750
North Yorkshire	16,723
Outer London - West and North West	16,256
Derbyshire and Nottinghamshire	16,153
West Yorkshire	14,105

Number of people employed by Company HQ ITL2 location	
ITL2	Employee count
West Midlands	12,939
Eastern Scotland	12,327
Cheshire	11,337
Northern Ireland	11,231
Leicestershire, Rutland and Northamptonshire	10,139
Herefordshire, Worcestershire and Warwickshire	9,851
Essex	9,457
Kent	7,719
Northumberland, and Tyne and Wear	7,716
West Central Scotland	7,711
Outer London - South	7,629
Dorset and Somerset	7,455
Shropshire and Staffordshire	6,910

Number of people employed by Company HQ ITL2 location	
ITL2	Employee count
Merseyside	6,831
East Wales	6,752
South Yorkshire	6,645
Outer London - East and North East	6,543
Lancashire	6,153
West Wales and The Valleys	5,802
Devon	5,101
Tees Valley and Durham	4,384
East Yorkshire and Northern Lincolnshire	3,244
Lincolnshire	3,216
Southern Scotland	2,762
North Eastern Scotland	2,228
Cumbria	2,131
Cornwall and Isles of Scilly	2,004
Highlands and Islands	994

The average age of tech SMEs also varies by location, illustrating once again the urban-rural divide mentioned previously. Cumbria had the highest, with the average age of a tech SME 10.2 years, whilst Inner London – West has the lowest at 5.35 years. This perhaps reflects the higher density of tech SMEs in urban areas, but also the attractiveness of some of these urban areas to start-ups, which as mentioned often fail within the first three years and therefore may reduce the average age. Many spin-outs will emerge from universities within city regions, particularly within the Golden Triangle region, adding to the lower average age. Tech SMEs based in these urban areas are also more likely scale quicker, receive more investment and therefore exit quicker, often through acquisitions.

Top 5 Oldest Average Company Age

10.2	9.82	9.81	9.74	9.59
Cumbria	Highlands and Islands	North Yorkshire	Surrey, East and West Sussex	Hampshire and Isle of Wight

Top 5 Youngest Average Company Age

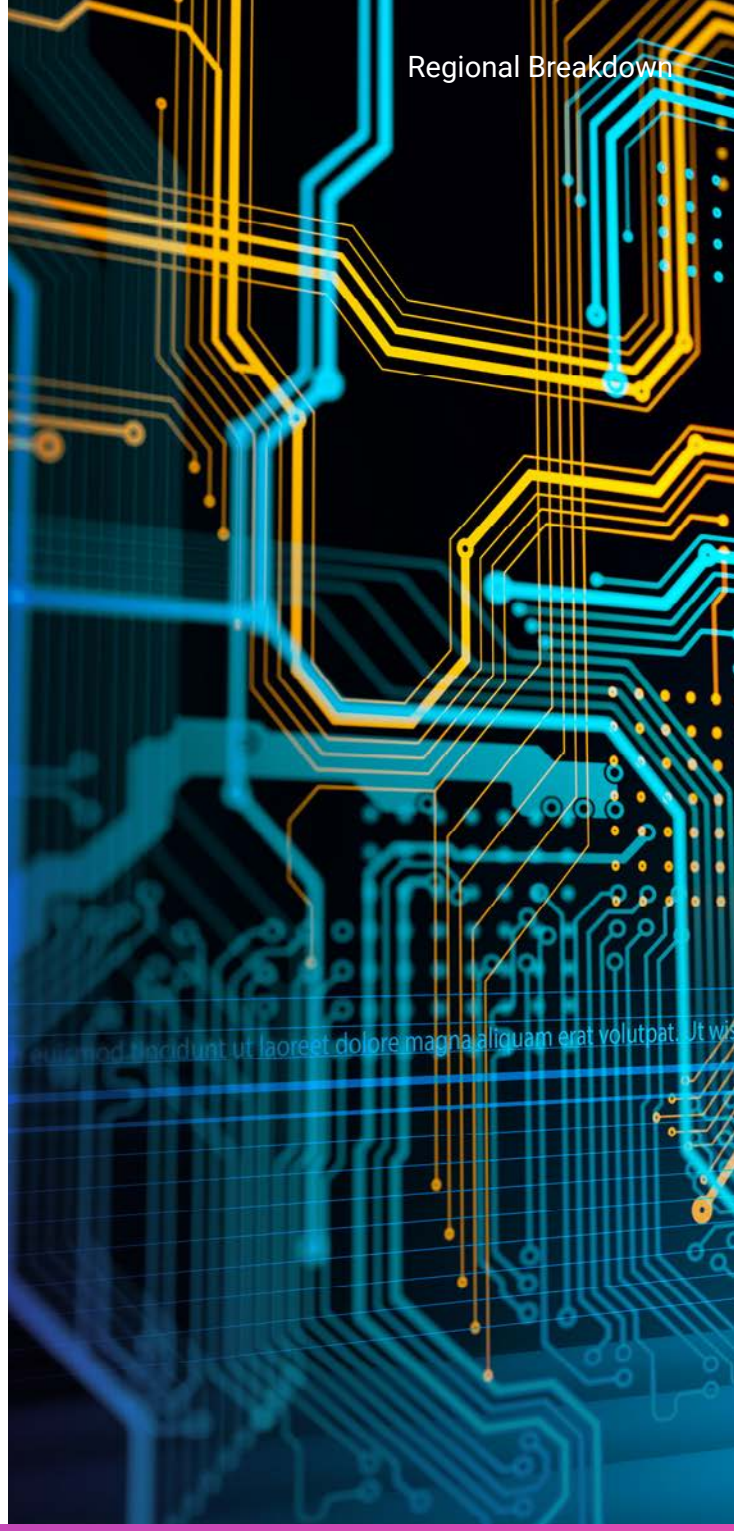
5.35	5.37	5.47	6.41	6.99
Inner London - West	Inner London - East	East Wales	Outer London - East and North East	West Midlands

The amount tech SMEs raised in investment also varies significantly by region. Expectedly, a greater proportion of companies received equity investment in areas such as Inner London, Oxfordshire and East Anglia.

ITL2 location	Total count of companies	Has secured equity funding	Proportion secured equity funding
Inner London - West	25,989	3,095	11.9%
Inner London - East	22,674	2,234	9.85%
Outer London - West and North West	8,999	377	4.19%
Berkshire, Buckinghamshire and Oxfordshire	8,368	633	7.56%
Surrey, East and West Sussex	8,135	470	5.78%
Greater Manchester	6,263	350	5.59%
Outer London - East and North East	5,796	119	2.05%
East Anglia	5,675	525	9.25%
Bedfordshire and Hertfordshire	5,306	254	4.79%
Gloucestershire, Wiltshire and Bath/Bristol area	5,255	376	7.16%
West Midlands	4,817	202	4.19%
Outer London - South	4,425	143	3.23%
Hampshire and Isle of Wight	3,878	210	5.42%

ITL2 location	Total count of companies	Has secured equity funding	Proportion secured equity funding
East Wales	3,606	172	4.77%
West Yorkshire	3,550	164	4.62%
Kent	3,516	153	4.35%
Essex	3,412	120	3.52%
Dorset and Somerset	3,003	104	3.46%
Leicestershire, Rutland and Northamptonshire	2,964	108	3.64%
Eastern Scotland	2,934	369	12.6%
Derbyshire and Nottinghamshire	2,898	119	4.11%
Herefordshire, Worcestershire and Warwickshire	2,724	119	4.37%
Cheshire	2,435	118	4.85%
Lancashire	2,144	66	3.08%
Shropshire and Staffordshire	2,041	62	3.04%
West Central Scotland	2,021	170	8.41%
Merseyside	1,945	135	6.94%
Northern Ireland	1,876	162	8.64%

ITL2 location	Total count of companies	Has secured equity funding	Proportion secured equity funding
South Yorkshire	1,765	97	5.50%
Northumberland, and Tyne and Wear	1,693	180	10.6%
West Wales and The Valleys	1,636	118	7.21%
Devon	1,492	89	5.97%
North Yorkshire	1,209	70	5.79%
Tees Valley and Durham	1,097	61	5.56%
East Yorkshire and Northern Lincolnshire	882	35	3.97%
Lincolnshire	782	23	2.94%
Cornwall and Isles of Scilly	666	60	9.01%
Southern Scotland	567	32	5.64%
North Eastern Scotland	480	44	9.17%
Cumbria	421	17	4.04%
Highlands and Islands	375	19	5.07%



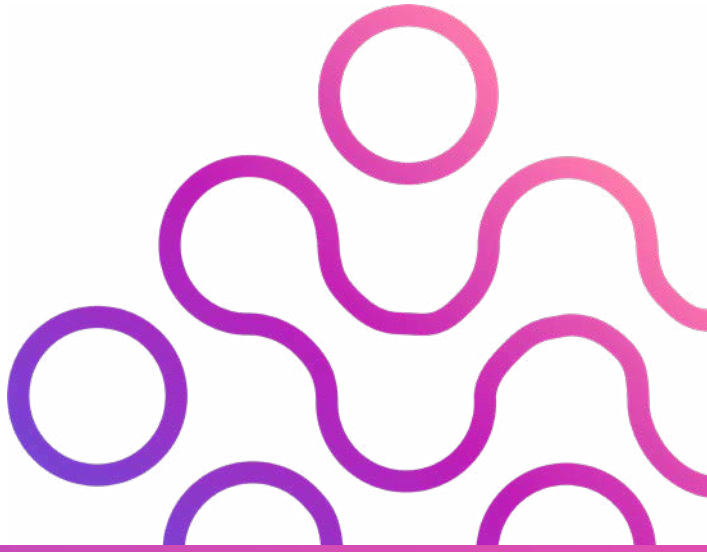
Grant funding also varies by region. Areas that have clusters around leading universities, such as East Anglia, expectedly have much higher proportion of grant funding than areas without.

ITL2 location	Has secured grant funding	Proportion secured grant funding
Inner London - West	506	1.95%
Inner London - East	409	1.80%
Outer London - West and North West	69	0.77%
Berkshire, Buckinghamshire and Oxfordshire	271	3.24%
Surrey, East and West Sussex	144	1.77%
Greater Manchester	107	1.71%
Outer London - East and North East	22	0.38%
East Anglia	262	4.62%
Bedfordshire and Hertfordshire	80	1.51%
Gloucestershire, Wiltshire and Bath/Bristol area	201	3.82%
West Midlands	99	2.06%
Outer London - South	27	0.61%
Hampshire and Isle of Wight	108	2.78%

ITL2 location	Has secured equity funding	Proportion secured equity funding
East Wales	52	1.44%
West Yorkshire	64	1.80%
Kent	42	1.19%
Essex	46	1.35%
Dorset and Somerset	43	1.43%
Leicestershire, Rutland and Northamptonshire	66	2.23%
Eastern Scotland	168	5.73%
Derbyshire and Nottinghamshire	82	2.83%
Herefordshire, Worcestershire and Warwickshire	56	2.06%
Cheshire	38	1.56%
Lancashire	27	1.26%
Shropshire and Staffordshire	27	1.32%
West Central Scotland	69	3.41%
Merseyside	55	2.83%
Northern Ireland	80	4.26%

ITL2 location	Has secured equity funding	Proportion secured equity funding
South Yorkshire	52	2.95%
Northumberland, and Tyne and Wear	59	3.48%
West Wales and The Valleys	66	4.03%
Devon	40	2.68%
North Yorkshire	26	2.15%
Tees Valley and Durham	30	2.73%
East Yorkshire and Northern Lincolnshire	9	1.02%
Lincolnshire	19	2.43%
Cornwall and Isles of Scilly	24	3.60%
Southern Scotland	9	1.59%
North Eastern Scotland	23	4.79%
Cumbria	10	2.38%
Highlands and Islands	11	2.93%

To allow local growth plans to thrive and help drive economic growth, more data is needed from government on a more localised level. In the spirit of open and data led government, HMRC should publish and release information on an annual basis and on a Combined Authority or ITL2 geographic model that allows companies, policy makers, investors, planners and others to improve forward planning and create the conditions for economic growth. This will enable better assessment of the actions and activities being done on a local level to determine if they are having an impact.



Recommendation

> Improve public data leads and publish on a regular basis to improve policy making and interventions for SME support.

Interview Analysis - Main Challenges Facing Tech SMEs

Comprising of over 190,000 companies, employing nearly 700,000 across the UK, and developing a range of innovative technologies, tech SMEs clearly make significant economic and social contribution to the UK.

To better understand this impact, we conducted interviews with 30 tech SMEs. The primary objective was to gain examples of the impact and challenges outlined in the data above, as well as hear the potential impact going forwards.

The SMEs interviewed in this report represent some of the leading companies in the tech industry. They demonstrated the strengths that tech SMEs have, including agility, innovation, and ability to establish a highly skilled, diverse workforce. They are pioneers in AI, leaders in protecting against cyber threats, developing solutions to the climate crisis, and delivering essential services in healthcare and defence. Many have successfully scaled their business to an international level.

However, despite the successes and impacts tech SMEs have, they undoubtedly continue to face several challenges. These challenges place barriers on their growth ambitions and prevent the UK from benefiting further from SMEs creating jobs and innovating new technologies. This section will outline some of key challenges the SMEs interviewed currently experience and demonstrate how addressing some of these challenges can ensure more tech SMEs succeed further to the benefit of the UK.

Scale-Up Investment

As the data illustrates, very few tech SMEs benefit from equity investment, with just 7% nationally receiving equity investment. This may be due to many tech SMEs uninterested in seeking outside investment. Research has shown only 43% of SMEs use external finance and 35% are permanent non-borrowers.[2]

Many of the SMEs interviewed became established without any external finance, with nearly 50% of respondents not receiving any private investment. One company, which has grown from two employees in 2021 to 45 employees in 2024, explained they were entirely boot-strapped and have never tried to get any external finance in the belief they could build the company alone. Another company based in Birmingham explained they had grown from 16 to 40 employees the "old-fashioned way, by ensuring we keep profitable all the time."

> ***We've grown the old-fashioned way, by ensuring we keep profitable all the time.***
> Phil Evans, CEO, Orlo

Nevertheless, external finance can undoubtedly support tech companies looking to expand or conduct further research and development, and for those looking for equity investment, challenges persist. The challenges for raising investment are more pronounced when seeking later stage investment. The UK is recognised as a world-leading destination to innovate and create new technologies, some of which are outlined in the SMEs interviewed. However, as companies begin to scale, domestic capital becomes much scarcer.

The lack of domestic capital is made harder when investors are seeking quick returns from their investment. One company interviewed, which had previously received £2.5m in angel and seed investment, had recently begun its Series A funding round. The interviewee felt the investors engaged in the round were much more focussed on the short-term pipeline rather than the promising long-term potential of the company. Another interviewee highlighted that many investors demand an exit strategy within three to five years, which is an insufficient timeframe to build a sustainable business.

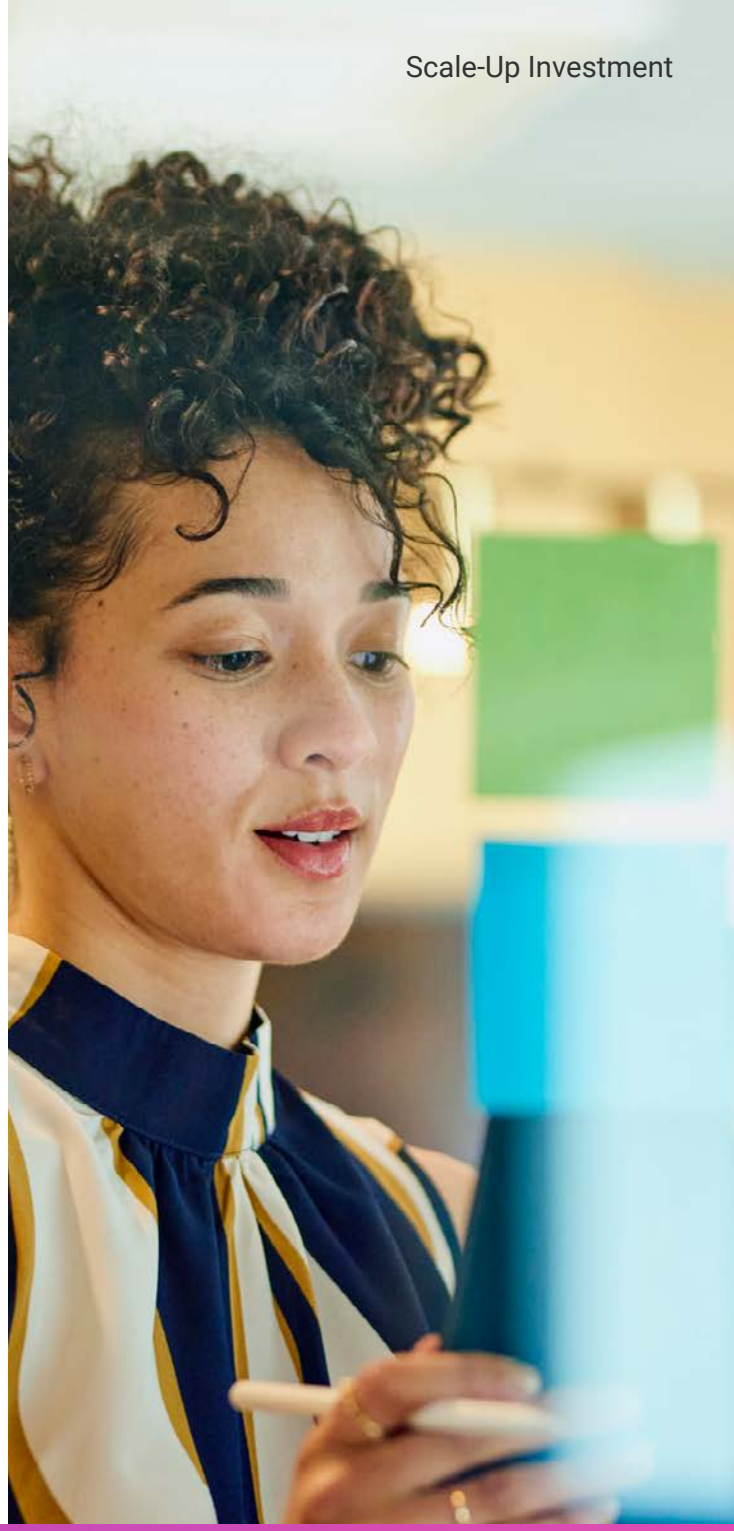
Raising equity investment can be much more challenging for female founders. Research from the British Business Bank shows that in 2023, all-female founder companies received just 2% of equity investment.[3] One female founder commented that when she was raising seed

investment, male founders with businesses less advanced were finding funding much easier and recalled receiving comments from investors related to choosing between having a family and a business.

Another commented that female founders do not have the same access to high-net-worth individuals, who are typically men, and there are simply not enough women making decisions around investment or enough female-led organisations. As such, "talking to tech companies and investors, 99% are male and the unconscious bias is still very noticeable."

Location can also be a challenge when raising investment. As shown in the data, the percentage of SMEs receiving equity investment can vary by region. One company based in Leeds highlighted that at the time of seeking investment in 2019, only six private equity and venture capital type firms were available in the Leeds region. When they first approached the London market, they did not get a single investment offer from pitching to 30 to 40 investors, adding that "most of them switched off the minute they found out we were from Leeds."

> ***Raising finance was disproportionately hard. Not only did I have to sell the benefits of the business, but I had to sell the Leeds ecosystem too. I had to convince investors there was enough of a digital economy and talent pipeline to support an investment. In 2019 there were only six active private equity, venture capital firms available in the Leeds region. All did end up providing an offer. When we approached the London market, we pitched to 30 to 40 investors and didn't get a single offer. In fact, most of them just switched off the minute they found out we were from Leeds. Given the Leeds area is the number one, fastest growing tech startup ecosystem in the UK at the moment, this seems short sighted.***
>
> Zandra Moore, CEO, Panintelligence



The type of technology can also act as a barrier for equity investment into the company. Data from Beauhurst has shown that software continues to form the majority of investment deals in tech companies. One hardware company interviewed noted that VCs are not particularly supportive of hardware companies, commentating that "there's a low risk with software as you don't need to build a manufacturing plant, you don't need much stock, you don't have components or supply chain issues."

Another company developing hardware solutions to reduce carbon emissions spent a year dealing with a VC firm that ended in no investment, with the company believing their business model was probably "never going to suit their expected revenue model and returns were never likely to be comparable to what might be expected from say, a SaaS business."

Digital health is another industry which is struggling to attract VC investment, with one HealthTech company interviewed arguing private investors have become nervous about investing in digital health following high-profile HealthTech company collapses. The result is UK HealthTech companies either closing or re-locating overseas, meaning any initial public investment is wasted, future job creation and revenue is lost, and the technology moves overseas to the detriment of patients that could benefit from it in the UK.

Of the companies that had managed to secure later-stage investment, the process can be time-consuming, with companies flagging they spent 70% of their time seeking funds. One company that had recently secured Series B round funding said the process took over a year and a half before finalising. Another company flagged that their investment process also took 18 months, 9 months of which consisted of technical due diligence.

Due to the scarcity of domestic capital, many of those interviewed sought investment from overseas investor. As techUK's UK Tech Plan noted, UK institutional investors such as pension funds have often under invested in asset classes that support the tech sector, such as venture capital. In the United States, 9% of pension assets are directed into private equity, Australian pension funds invest 4% however in the UK the figure is 0.3%.

A cyber company interviewed had managed to secure investment from US and Asian companies and described the investment culture in these areas as more positive and risk-averse. Another interviewee said that it was much easier to raise small amounts of finance abroad due to bigger incentives for investors to take risks.

An AI company currently looking to raise Series A funding was exploring options in the US saying that there is a more 'can-do' culture within US venture capitalist, explaining that the starting position in the US appears to be, 'how they can get an idea to work', whereas in the UK the focus appears to be 'on why a concept won't work.'

This lack of available finance is clearly preventing tech SMEs scaling their businesses, particularly outside London and the South-East. One company interviewed suggested that more patient capital should be made available to companies, and that better understanding by investors of an SMEs IP would encourage more patient capital investment and subsequent long-term, sustainable growth of SMEs. Expansion of initiatives like the British Business Bank's Future Fund: Breakthrough scheme, which provides equity investment alongside private

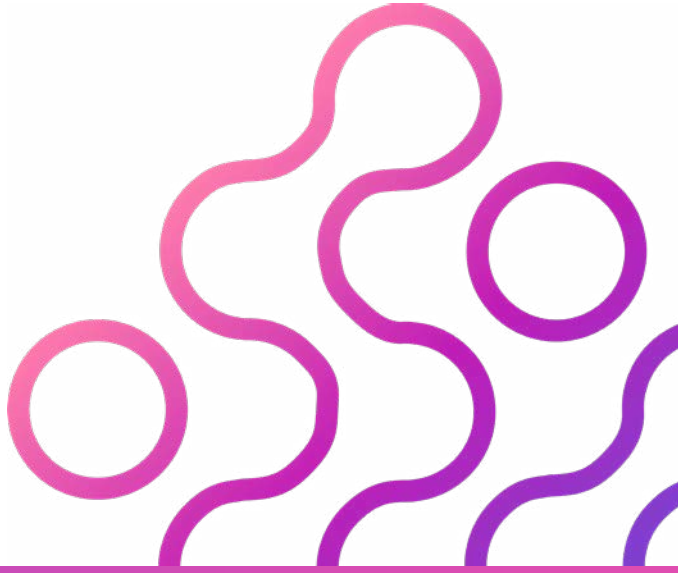
investor to R&D intensive companies, could help with increasing long-term later-stage equity investment in tech SMEs.

Despite the challenges, some of the interviewees have been successful in securing later stage finance. One interviewee had recently secured $75m in a Series C round earlier this year, whilst another had secured $39m Series B funding in late 2023. One interviewee said that to address the lack of investment in female-founded companies in different parts of the UK, networking groups for female founders should include access to investment ecosystems, advisory ecosystems, high net-worth individuals, and potential non-execs to allow them to build relationships in these areas.

One project aiming to address this is The Lifted Project, a data and ecosystem-led approach to increasing the flow of capital to regional, high growth female founders. A five-year project aligned with the Rose Review and Treasury, the Lifted Project will act as an orchestrator for positive change in five cities. Sustainable data served via embedded dashboards will enable opportunities to be identified, progressed and monitored. The platform, created by Paninteligence, has measurements taken in several areas, including on investment made to female founders, such as grants and other funding data. Businesses are segmented by growth stage, turnover, employee numbers, and in which sectors they operate, such as AI, FinTech, health, and Net Zero. It has five regional initiatives, with female-led high growth Boards, being created in Edinburgh, Birmingham, Leeds, Newcastle, and Liverpool, and impact analysis will be undertaken by each of the five cities for them to robustly establish where there has been success and why. Instrumental to the Lifted Project is bringing women together with advisors and investors with a common goal to increase the number of female-founded high-growth enterprises by 50% within three years.

TechWM's One to Win competition is another example of an organisation seeking to tackle the lack of investment outside of London and the South East. The competition will showcase the region's vibrant and thriving tech sector on the national stage. The £1m cash injection prize money will be awarded to a West Midlands business that is demonstrating game-changing innovation and is on track for further impressive growth.

By analysing better data on capital flows and business operations with the unlocking of more private and public sector funds, more later-stage investment can be targeted towards tech SMEs looking to scale.

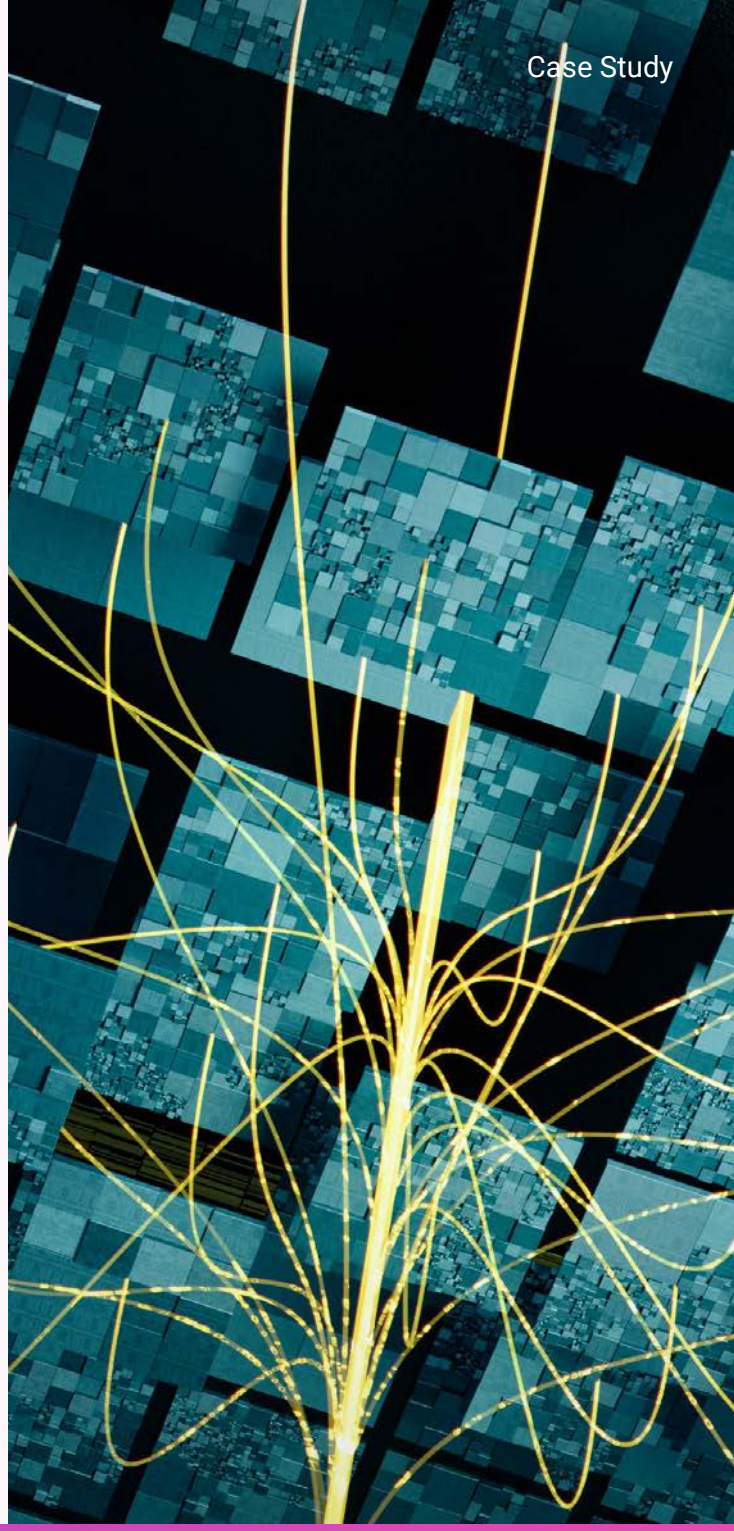


Case Study

Bek Simmons, Chief Operating Officer, Riverlane

Founded in 2016, quantum company Riverlane has grown to over 100 employees and established itself as a world leader in quantum error correction. Following funding from Innovate UK and the British Business Bank, Riverlane was able to establish the commercial viability of its product and has since been highly successful in raising later stage finance, most recently securing $75m in a Series C round.

Riverlane demonstrates the importance of patient capital, with the company taking several years to develop its product market fit, with the quantum industry still in its early stages. Following its recent commercial and fundraising success, the company is looking to build its team and accelerate innovations within quantum that could help us solve many of humanity's greatest challenges, from climate change to rapid drug design.



Recommendation

Unlock more investment for SMEs looking to grow by continuing the delivery of Mansion House Reforms, including a range of reforms to private pensions to ensure they are as effective as possible in unlocking institutional investment. This includes deploying the LIFTs Programme and Growth Fund that will catalyse investment into UK science and technology and stimulate the UK venture capital ecosystem.

Drive greater diversity into the scale-up ecosystem through targeted initiatives, including the Venture Capital Fellowship programme.

Grants and Tax Reliefs

As the data illustrates, few tech SMEs have received large grant funding, with just 2% nationally. This figure expectedly varies regionally, with more innovation awarded in areas with university links, such as Oxfordshire. For the SMEs that were interviewed, many had received innovation grants that made a significant impact on the business. Yet, many are unsuccessful for grants, and even if they are successful, the process can be particularly arduous.

One company interviewed flagged how there is a high degree of complexity of making grant applications which puts added pressure on an SME's resources. Another company highlighted that over the years, the company has won three or four out of 50 grant applications. When they have won, there was still a cost to the business to win it, partly because of the amount of paperwork. "This can include 400 pages of lowlevel design documents and high level drawings. When access to funding starts, there are many processes to follow, which means that a project that might have taken five months to deliver, takes three years."

Several companies interviewed flagged that there is more funding options at the prototyping stage than grants that support commercialisation. One company interviewed had been awarded three Innovate UK grants since founding the company, and 80% of their funding has been from public sector. Another company flagged that they had received £1m to develop their business but had struggled to find investment for commercialising their innovative product.

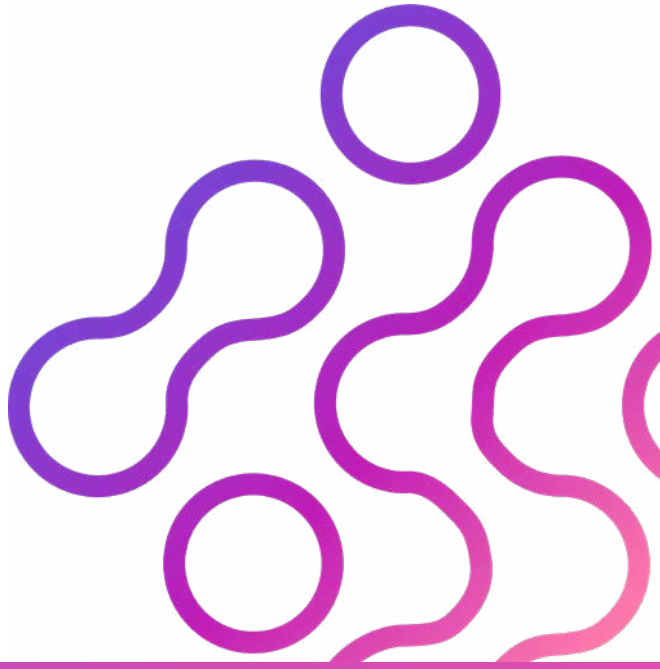
> ***I am pleased the Government has provided millions of pounds to support SMEs with new product development, but the same level of support is not available to help us commercialise our great ideas. Innovation is nothing without commercialisation.***
> Roisin McCarthy, CEO and Founder, Verifoxx

R&D Tax Credits are another form of government support beneficial to SMEs, with tax reliefs for developing innovation within the company. Latest figures from HMRC show that nearly 80,000 SMEs claim the tax relief.[4] However, a point raised by a fifth of interviewees is that the processing of R&D tax claims is becoming much harder by HMRC.

One company said that whilst R&D claims had been historically important to the company, as the rules have become more complicated, they are considering not applying for the relief, given the cost to apply for the rebate will be as much as the credit itself. Another company gave an account of how HMRC launched an enquiry into a past R&D Tax claim, and whilst they found the company had acted correctly, the whole process took two and a half years and cost the company £100,000. There was no recourse to claim back this lost time and money.

Despite the difficulties in securing grant funding, many of those interviewed have been successful in securing funding from public grants that enabled them to accelerate the business or pivot it to a new and emerging market. Several had received substantial funding from organisations such as Innovate UK, Horizon Europe and the British Business Bank, and have received additional support alongside the funding. One company scored highly on an Innovate UK Smart Grant, enabling it to join Innovate UK's Scale Programme and receive bespoke support from advisors at Innovate UK. Expansion of schemes like this that support the commercialisation of technologies, could help SMEs translate their grant funding into commercial success.

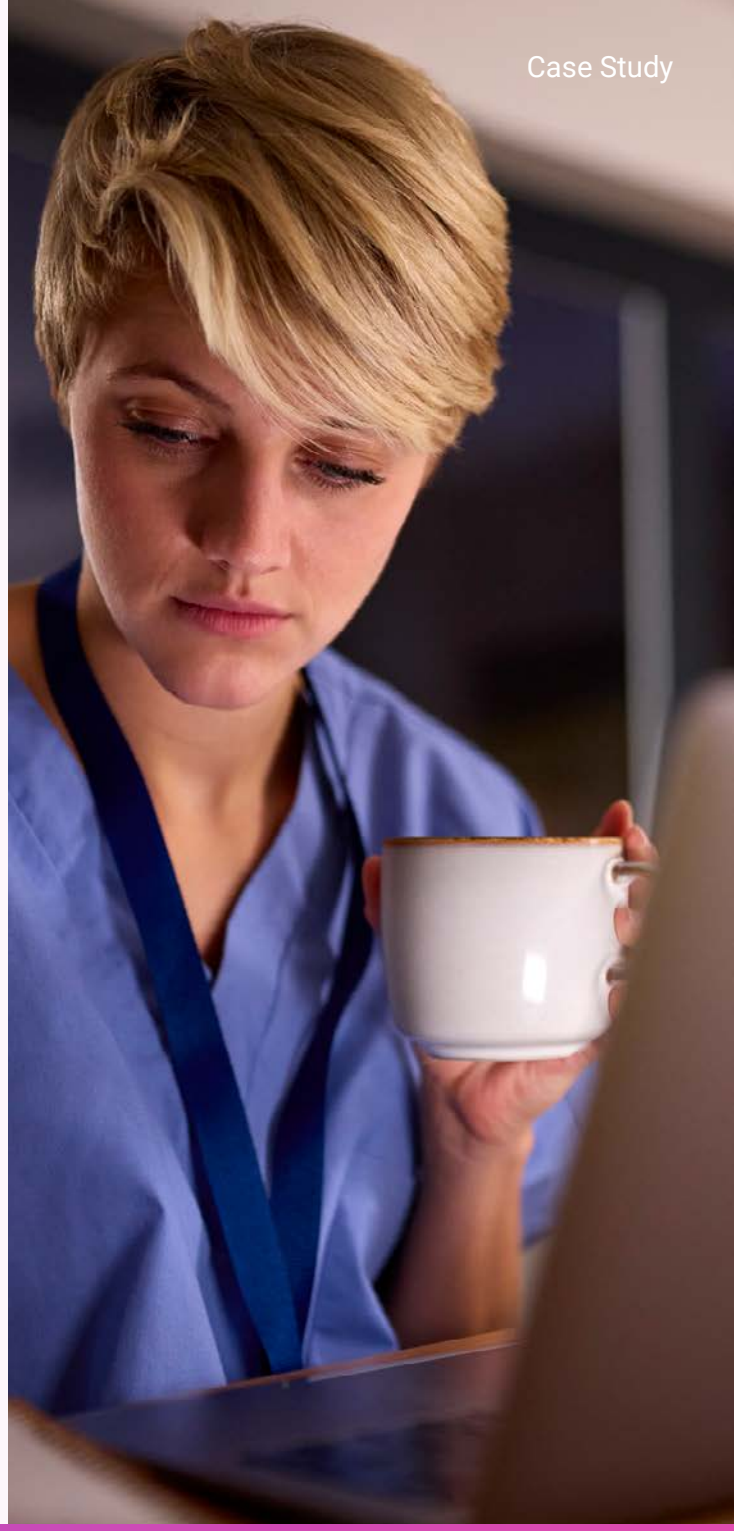
Improvements to the R&D tax credits could also support SMEs to commercialise their innovations. The introduction of geography and sector specific expert teams within HMRC alongside the introduction of a de minimis qualifying R&D expenditure threshold and expansion to the Enhanced Research and Development intensive support to include profitable SMEs could improve the uptake and performance of R&D tax credit. This could also have positive consequences on the cashflow situation of businesses and individuals.



Case Study

Jill DeBene,
Chief Executive, SiteKit

Sitekit is a highly respected identity management and solution delivery company providing services and products for the UK health and social care sector which have international market potential. Sitekit has two business units reflecting the nature of its work covering integrated architecture solutions and digital experience. The company received £1.4m from UKRI to deliver its Project Care and Lifebook Platform initiative. The grant funding enabled the development of an AI-based app that makes access to care easier for recipients, associated family members and the care providers, including automatically matching carers and patients. Since the project was rolled out, local authorities have already fed back how helpful the service with the discharge of patients from hospital. The next challenge is to take this proven service to market, highlighting the continuing importance of funding the commercialisation of innovative technologies so they can be successfully rolled out.



Recommendation

> Restore confidence in the UK's flagship R&D tax relief scheme, prioritising longer-term policy stability, effective administration from HMRC and better support for SMEs.

> Simplify the process for securing public grants, such as InnovateUK, and explore options to provide more grant funding and support for the commercialisation of innovative technologies.

Generating Sales Opportunities

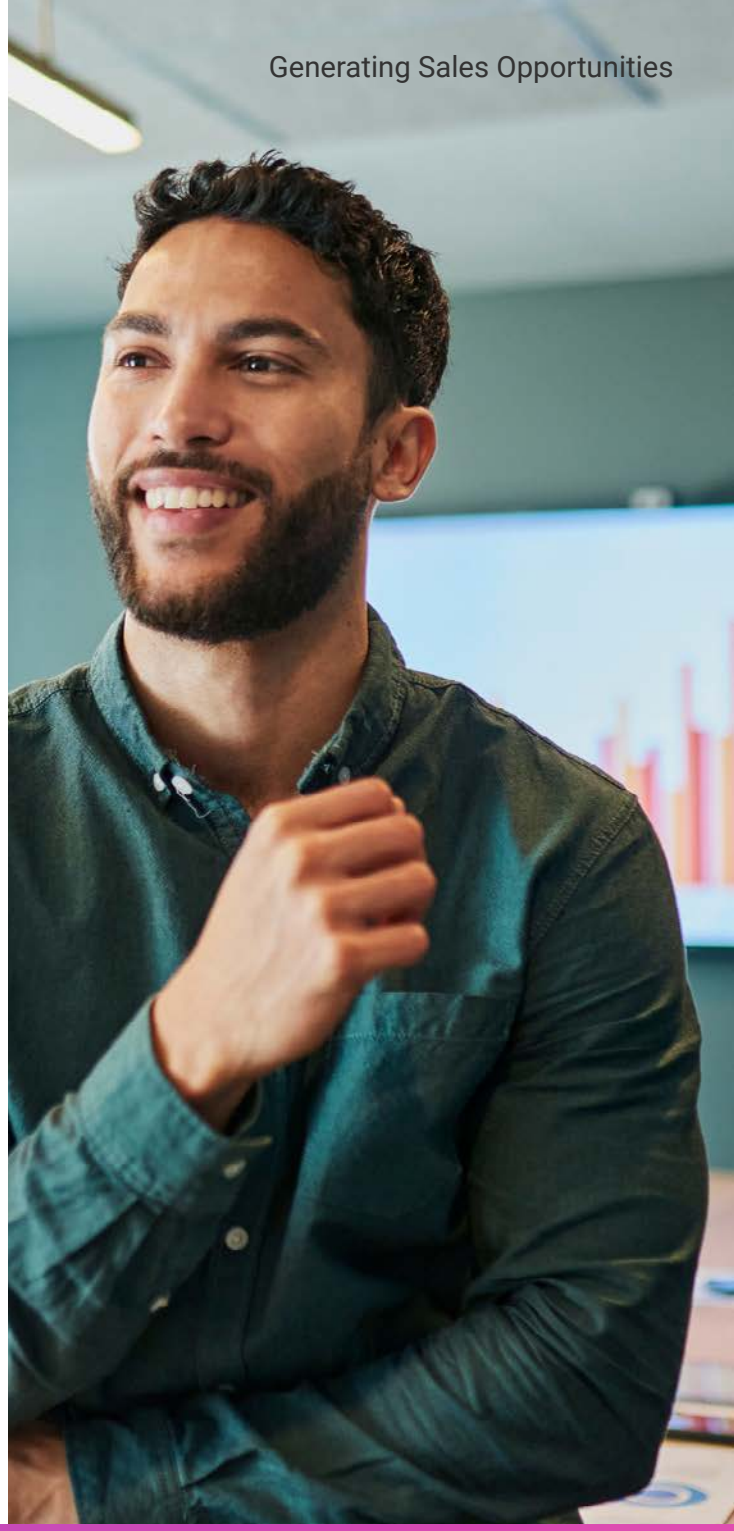
Despite UK tech SME community representing the UK's world leading science and technology industry, the UK has often been too slow to commercialise and deploy the very technologies that have their intellectual roots in the UK. For SMEs in the tech industry, lead generation and marketing can be particularly challenging when trying to sell a newly developed product.

Many of the tech SMEs interviewed discussed sales challenges at length. One interviewee highlighted that the harder aspect of innovation, is pitching a concept that no-one has ever heard of before and building awareness and educating a previously non-existent marketplace. As one company put it, "B2B sales is hard anyway but when you're selling innovative technology it really is the hardest of the lot." One AI company interviewed said they had found it hard positioning the company's value proposition in a manner the market can easily understand.

Another AI company interviewed said "there is a lot of fear with a new technology which can create barriers to companies adopting the technology."

> ***B2B sales are tough, but when you're selling innovative technology that people find difficult to understand, that makes it even tougher.***
> Roisin McCarthy, CEO and Founder, Verifoxx

Even established technologies can struggle to pitch their product or service. One cyber company interviewed reflected how cyber security provision is a very crowded and potentially confusing market. They said, "There's



an awful lot of general noise based on fear, uncertainty and doubt. If I see one more shady character with a hoody, I could scream!" They highlighted that instead, cyber security should be talked about as an enabler and core messaging should be based on companies investing their money better.

These challenges are exacerbated as companies scale and the sales leads generated within their existing network get exhausted. Generating sales prospects in different industries and having to sell the benefits of their technology to an industry that has not previously adopted it makes sales even more challenging. If the SME is unheard of within the industry, this challenge can become even harder. One interviewee highlighted that sales and marketing costs are one of the most challenging areas of the business, given the difficulty in finding the right business development team who can sell both a technology and concept.

The broad applicability of technologies to different industries can also present challenges. One company reflected that where best to target their sales resources is particularly challenging given their product could be used in so many industries. Another company illustrated this challenge, highlighting that their addressable market is almost infinite given their product provides protection for any device connected to the internet.

Many tech SMEs looking to increase sales often look at international markets to generate more leads. Tech SMEs successfully exporting has enabled the UK to become the fourth largest global exporter of digital tech services.[5] Over half of the companies interviewed were exporting internationally.

Despite the opportunities in overseas markets, challenges remain for tech SMEs. Many of the SMEs interviewed struggled to invest the time, money and resources to fully expand in particular markets. For some technologies, exporting can also be very complicated, trying to understand the necessary requirements of export licenses, for example.

Supporting tech SMEs to identify new markets within the UK and overseas by reducing the barriers to commercialisation and adoption of technology in different industries could provide these companies with substantial additional customers, as well as improve productivity in the wider UK economy as companies in different industries adopt more digital solutions.

Case Study

Phillip Sewell,
Founder & Chief Executive Officer, Predyktable

Predyktable's AI-powered predictive analytics platform helps businesses optimise operations by delivering accurate demand forecasts. Harnessing machine learning and real-time data, Predyktable generates real-time predictive forecasts that dynamically adjust to external factors. These forward-looking forecasts seamlessly integrate with existing planning systems such as supply chain and workforce management tools, providing businesses with enough time to fine-tune inventory, staffing levels, and resource allocation based on changes that will occur to the forecast.

This results in significant cost reductions and improved operational efficiency.

Predyktable has just launched its first case study with a food and services client, demonstrating the impact of Predyktable's solution: a 2.5% reduction in the annual cost base through a 15% improvement in operational efficiency. This highlights the significance for businesses seeking to navigate today's volatile market and enhance their performance.

Public Sector Procurement

With the UK having a large procurement budget of nearly £400 billion[6] and forming some obvious customer bases for technologies in defence and healthcare, it is clear why many tech SMEs target public procurement for sales opportunities. The creation of the Digital Marketplace buying platforms and sandboxes on financial services and age verification have helped open opportunities for government to access a wider range of suppliers and created a more open market for UK SMEs.

However, there remain several barriers in procurement, meaning tech SMEs continue to struggle to generate sales leads from the public sector. Currently, government has a target of achieving 33% of its supply chain with SMEs, but data from Tussell shows that last year, only 20% of contracts awarded were with SMEs.[7]

techUK's 2023 SME GovTech survey found that the top barriers for SMEs to access to the public sector market were a risk-averse culture within the civil service (69%), too many frameworks (53%) and a lack of meaningful early industry engagement (51%). Many of the SMEs interviewed for this report highlighted the struggle of winning public sector contracts.

The process of bidding for public sector contracts can be particularly onerous for tech SMEs, often with stringent and unnecessary viability requirements. One interviewee said that "public sector procurement is an enormous exercise that typically consists of very large and complex tender documents that potentially costs SMEs out of the market who do not have the resources of dedicated bid-teams and bid-writers, to handle what might may be 200 pages of response forms." They reflected,

"When I was a buyer, no-one liked writing lengthy requirement specifications, no-one liked answering them and no-one liked evaluating them!" Another company described the public sector as "absolutely impenetrable", noting that they had been on frameworks such as G-Cloud and DOS but with mixed levels of success, despite responding to bids where they felt they strongly matched the required capabilities and expertise. Whilst there is support for purchasing frameworks that can connect suppliers and consumers with little overhead, the reality is they continue to face significant barriers.

> ***When I was a buyer, no-one liked writing lengthy requirement specifications, no-one liked answering them and no-one liked evaluating them!***
>
> Steve Tredinnick, Vice President of Business Transformation, Jadu

The timeframes for bidding and securing public sector grants can also be long. One company flagged that the NHS is typically slow, even for relatively modest sums, giving the example of a £50,000 website development project they are delivering that has taken three years to reach fruition. Another company selling to the NHS highlighted it is not uncommon for the NHS to cluster projects together, asking for bids on very short timelines. The result is added pressure on public sector staff managing the implementation of these projects and a mismatch of contracts to the most appropriate suppliers. Many within public sector are also unaware of comparable and successful cases elsewhere within government.

When speaking of Public Sector procurement many respondents argued that a lack of experience and risk aversion among buyers in government means that bids for contracts are often given to the 'safe bet', usually large incumbent firms, meaning SMEs lost out. One interviewee highlighted "the challenge for all tech companies of conveying the company's strengths is harder when those assessing a bid are not necessarily experienced and able to detect the nuanced merits of one supplier verses another, and that the only procedure for challenging a tender award, is putting in a legal challenge through the courts." One company with experiences of several past failed tenders believed the company had offered the best and most cost-effective deal but were "suckered on a whole bunch of subtleties in the procurement process that lead to the big guys taking the lion's share."

Other interviewees highlighted the impact this preference towards large, single contractors can have on tech SMEs. One company highlighted an instance where a procurement organisation working on behalf of a large public sector client decided to award their contacts to one, large company. This resulted in their company losing 80% of their revenue and withdrew income to 250 companies, many of which went out of business, with experienced employees lost in the process. Many interviewees expressed their view that the procurement system often acts as a sign-off procedure rather than a formative part of the decision-making or selection process, with one company highlighting instances of large contracts being awarded with no tendering process.

Several companies spoke of the opportunity for large companies to loss-lead, and to provide volume discounts, with SMEs unlikely to have the resources to adopt this approach. This practice can restrict new market entrants and thereby reduce choice for buyers, resulting in public sector missing out on the most innovative solutions. While there is agreement that the

onus should be on SMEs to prove themselves as being suitably matched to any specified supplier selection criteria, many of the SMEs interviewed believed pre-conceptions of insufficient maturity or capability just based on overall company size should be dispelled.

For some, the inequality starts with even the opportunities to promote themselves, with one saying it is generally hard for SMEs to get market visibility of their expertise, particularly in the technology Industry, which they described as a 'very noisy space'. Large companies have larger budgets to promote their work and as a result, successes made by SMEs within the public sector are missed by other public sector departments.

In spite of the challenges, tech SMEs can break through in the public sector market. 70% of the companies on Tussell's Tech200 for 2023, a list recognising the fastest-growing technology suppliers in the UK public sector, were SMEs.

The successes made by the SMEs interviewed who were awarded public tenders show the impact tech SMEs can have in delivering public services.

Circularity First, a sustainable IT company, extended the life of the technology on UK battleships and aircraft carriers with minimal impact to battle readiness, which made a saving of $15m to the public sector and avoided 1.8 tonnes of e-waste.

Orlo, a social media management platform provider, is working with over 400 public sector organisations, including local government and police forces, to help communities with issues such as knife crime and antisocial behaviour.

Jadu has created accessible and responsive websites for local authorities, with the top ten council websites for accessibility in the Silktide Index all run by Jadu.

Virtual reality developer RiVR has delivered immersive storytelling and training to police forces, NHS, network rail and counterterrorism, helping public sector workers in a range of areas, from extracting genomic information from DNA to helping explosive investigators respond to terrorist incidents.

HealthTech company e18 Innovation, which provides Intelligent Automation solutions to the NHS, has helped tackle some of the pressing

challenges in healthcare, in one instance removing 13% of patients from the waiting list.

Informed Solutions has delivered large-scale and complex digital transformation services to government, including running the National Police Coordination Centre's Mercury platform. Whilst there is inevitably competition to win public sector contracts, many interviewed believe SMEs' agility and ability to collaborate with other SMEs and large companies, provide benefits to both business and public services.

> ***We love our work and are hugely passionate about it because we know we're making a difference. Supporting NHS cancer services and making a difference to cancer patients is what gets us up in the morning.***
> Louise Wall, Founder and Managing Director, e18 Innovation

Many of the interviewees have successfully partnered with large companies and global system integrators to deliver public sector projects. One respondent operating in the public sector, highlighted that better collaboration of tech companies, government and industry bodies across the UK's tech ecosystem would enhance the strength and resilience of the tech industry, and enable the industry to succeed further and make unbounded potential gains to the wider economy. Others have also partnered with other SMEs, with one interviewee saying SMEs can be specialists in very specific areas that gives healthy competition and drives innovation. They commented that "the combination of all of us SMEs coming together builds totality for customers."

SVGC, a tech SME operating in the public sector, has successfully collaborated with large companies, SMEs and government to deliver a range of projects, including ensuring UK defence gets the right equipment that is safe and secure. Andrew Dixon, SVGC Managing Director, highlighted the importance and impact of collaboration, stating "SMEs work together in clusters and working collaboratively with larger and smaller businesses in an integrated manner delivers the value and flexibility which the public sector needs. Let's work together to deliver that value."

> ***SMEs work together in clusters and working collaboratively with larger and smaller businesses in an integrated manner delivers the value and flexibility which the public sector needs. Let's work together to deliver that value.***
> Andrew Dixon, Managing Director, SVGC

By reforming public procurement to ensure it is open to all types of vendors, including large, scaling, and smaller organisations, future procurement choices can produce dependable outcomes for the customer, more effective solutions, and create greater cost certainty. As outlined in techUK's Growth Plan, the establishment of the Technology Procurement Development Body combined with streamlining public procurement to remove entry barriers and take advantage of competition, can drive meaningful social value and economic growth.

Case Study

Chris Tate,
CEO, Condatis

Edinburgh-based Condatis provides specialist services in Identity and Access Management (IAM).

The company has been successful in delivering its specialist services to the public sector. DEFRA is one of Condatis' biggest clients, where it provides a bespoke common Customer Identity and Access Management (CIAM) solution to allow its customers and staff to access multiple services using a single credential.

Condatis has successfully implemented digital identity solutions for central government departments, such as the Department for Work and Pensions, the UK Hydrographic Office and the NHS. The success in winning central government clients has enabled the company to grow at a rate of over 40% year on year and employ over 50 employees.

Recommendation

Establish a commercialisation Tech Taskforce comprised of regulators, businesses and Government to identify markets within the UK where tech innovation could drive significant change and identify and resolve fundamental barriers to commercialisation within the regulatory system.

Establish the new Technology Procurement Delivery Body (TPDB) to improve procurement processes and tackle existing barriers to procurement that levels playing field for SMEs in the procurement process. This will act as a check on Government aiming to ensure departments fulfil the aims of the Procurement Act and drive best practice across how Government both buys and develops new digital services. The Body should include Ministers, high-ranking civil servants, operating at the Director General tier, from departments with extensive procurement involvements to ensure accountability for procurement improvements.

Recommendation

> Engage with tech SMEs to identify what information and support they need to expand and export internationally to inform how to improve and update government insight and support on expansion across in foreign markets.

Talent

Despite the UK having a flexible and open labour market, the demand for digital skills continues to massively outstrip supply, and upskilling those already in work is a major challenge. Hays' latest salary guide revealed that 95% of tech employers have experienced skills shortages in the last year.[8]

Skills shortage was frequently discussed issue by interviewees, succinctly put by one company, who said, "many technical jobs are advertised, but very little talent is available." Another said, "across the whole country, there is a skills gap and wages in some instances have been through the roof", with another company looking to scale flagging that they wanted recruit more software developers, but it is a challenge given they typically cost £80k to £90k pa. One company highlighted that since the pandemic, day rates for software engineers and developers have doubled.

The impact of the "war of talent" is restriction on growth. An SME talked about wanting to scale up, but finding enough people with the right skills, expertise, experience and ethos challenging. These recruitment challenges can be intensified in roles that have greater competition. One company said they find it harder to source the more generic support roles such as software engineers, verification engineers and hardware engineers, as they compete with large tech firms. Another company flagged that cyber security and Identity Access Management (IAM) is one of the biggest skills gaps in the UK. One company highlighted the difficulty they have in recruiting for data science roles, given the increase in companies looking to develop AI applications, and the data scientists they do employ are often paid 40% more than staff in the company with comparable skills in other areas. One interviewee was concerned

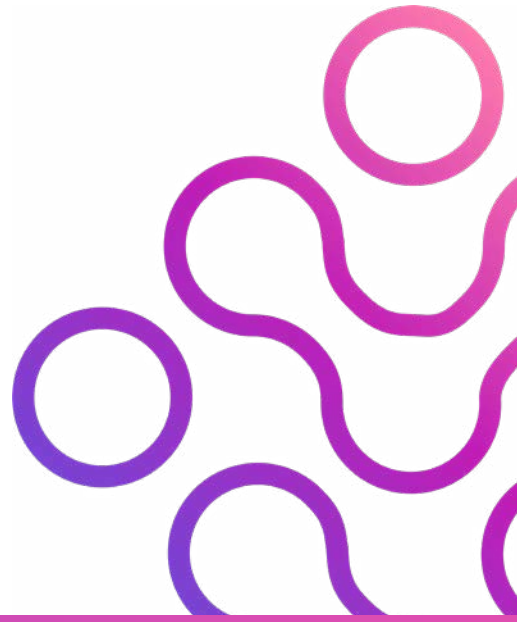
computer science graduates will move to more attractive new areas such as AI, and that traditional core IT that under-pin these developments will be left under-resourced.

Several interviewees also found challenges ensuring a diversity of applicants. One company flagged that they find it hard to recruit female engineers and argued there is still a strong issue in society that stereotypes women against taking certain roles, such as software engineers. Another interviewee called for incentives for companies to make strategic investment in developing high demand skills such as AI, cyber, and cloud architecture, with some mechanism in place to stop staff being immediately lured away after being invested in and trained by their existing employer.

To combat the skills shortages, many of the companies outlined the initiatives they have implemented within the company. Many were seeking to develop talent within the business by creating training opportunities within the business and clear career paths. One highlighted that they had signed up to the Tech Talent Charter and the Armed Forces Covenant, to provide more recruitment options with the aim of re-training recruits once hired. Some of the interviewees had employed apprentices and taken advantage of the apprenticeship levy.

Many interviewees were also implementing a range of initiatives to ensure they built a diverse and inclusive workforce. This included ensuring skills and leadership development opportunities were available within the business. One company with a high proportion of females in technical roles had provided several employee benefits aimed at attracting more women, including work time flexibility to help with potential childcare responsibilities; re-skilling opportunities for women who may have left the workforce to have children; and supporting women-in-tech initiatives and networks. As one company commented, “In addition to the inarguable moral reasons for encouraging diversity, it would be crazy to ignore half the talent pool by not being inclusive to all genders.”

As the interviewees have outlined, tech SMEs provide great opportunities for digitally skilled workers, but the lack of supply continues to prevent these SMEs furthering their economic and social impact. By making digital pathways more accessible and enabling tech SMEs to upskill and retain employees and apprentices, SMEs can deliver greater economic and social impact through job creation of high skilled digital workers. Better connections with local and national skills initiatives, especially with universities, will also help tech SMEs connect with various talent pools.



Case Study

Rachel McElroy,
Marketing Director, Axiologik

Rob Stanger,
Founder, Axiologik

Axiologik is an advanced digital delivery consultancy delivering cutting-edge digital services in public and private sectors. As the company has grown, it has been successful in building a strong culture and positive employee experience. The company has invested in training to equip employees to foster a culture of inclusion, equity and belonging, and personal development.

It has partnered with organisations such as WILD and BY Network to champion minority group representation, the Leeds Community Foundation to tackle economic inequality, and become members of the Women Pivoting in Digital Taskforce. The company are also signatories to the Armed Forces Covenant and the Tech Talent Charter. As a result of this focus, the company has been recognised with Sunday Times Best Companies 1* Star Accreditation and achieved five consecutive years of 100% year-on-year growth.

Recommendation

- Deliver a reformed ‘Growth and Skills Levy’ that prioritises flexibility, enabling employees to fund training through routes alongside apprenticeships.
- Build on previous success of the Skills Toolkit launched in Spring 2020, to build a ‘Digital Skills Toolkit 2.0’.
- Develop practical ideas to connect SMEs to pools of talent, for example by facilitating partnerships with universities, allowing greater certainty over when visas will be granted by the Home Office and connecting SMEs to national and devolved government skills initiatives.

Regional Challenges

As illustrated by the data, tech SMEs continue to be predominately based in London and the South East. However, the rise of regional tech clusters and focus on developing regional economies has resulted in growing numbers of tech SMEs starting and scaling in different parts of the UK.

The interviewees highlighted the challenges and benefits of basing the company outside the Golden Triangle region. Lack of access to finance, specialist advisory support, talent and decision makers were all cited as challenges for SMEs based outside of London and the South East.

One Newcastle-based company argued distance from where so many large companies are based is a hindrance to growth, as buying decisions are made when people can easily meet face-to-face. A company based in Belfast echoed this comment, flagging that getting to decision makers is quite a challenge. A company based in Birmingham highlighted that conferences and industry events also tend to be in London.

In addition to access to finance, customers and talent, the travel infrastructure and costs were also prohibitive to tech SMEs growth. Several interviewees flagged the lengthy travel time and considerable cost of travelling to London for engagement opportunities as a challenge for the company, which can be particularly pronounced at start-up stage.

Despite the challenges of location, many SMEs remained positive about being based in different parts of the UK. Many commented that the growth of remote and online working meant location was less of an issue. One interviewee

commented that a map of their staff 20 years ago would have shown all employees living within a 5-mile radius of the office, whereas now employees are scattered all over the country including Scotland, Wales, Cornwall, Cambridge and Gateshead.

Several companies highlighted that the emergence of regional tech clusters along with the strengthening of regional government through the development of Metropolitan Mayors and Combined Authorities has enabled stronger regional ecosystems to develop. One company based in Leeds flagged that there is a “rich ecosystem in the North” with a strong focus on regional tech development, highlighting that several public sector organisations have established a presence in Leeds, including the Financial Conduct Authority (FCA) and Bank of England.

Many of the respondents also cited the important support received from local and national organisations. On a national level, programmes such as Tech Nation, Virgin StartUp and Google for StartUps Cloud Programme were cited as examples of useful business support. At a local level, chambers of commerce, combined authorities, and growth programmes such as Grow London, were all highlighted as organisations offering substantial support for SMEs.

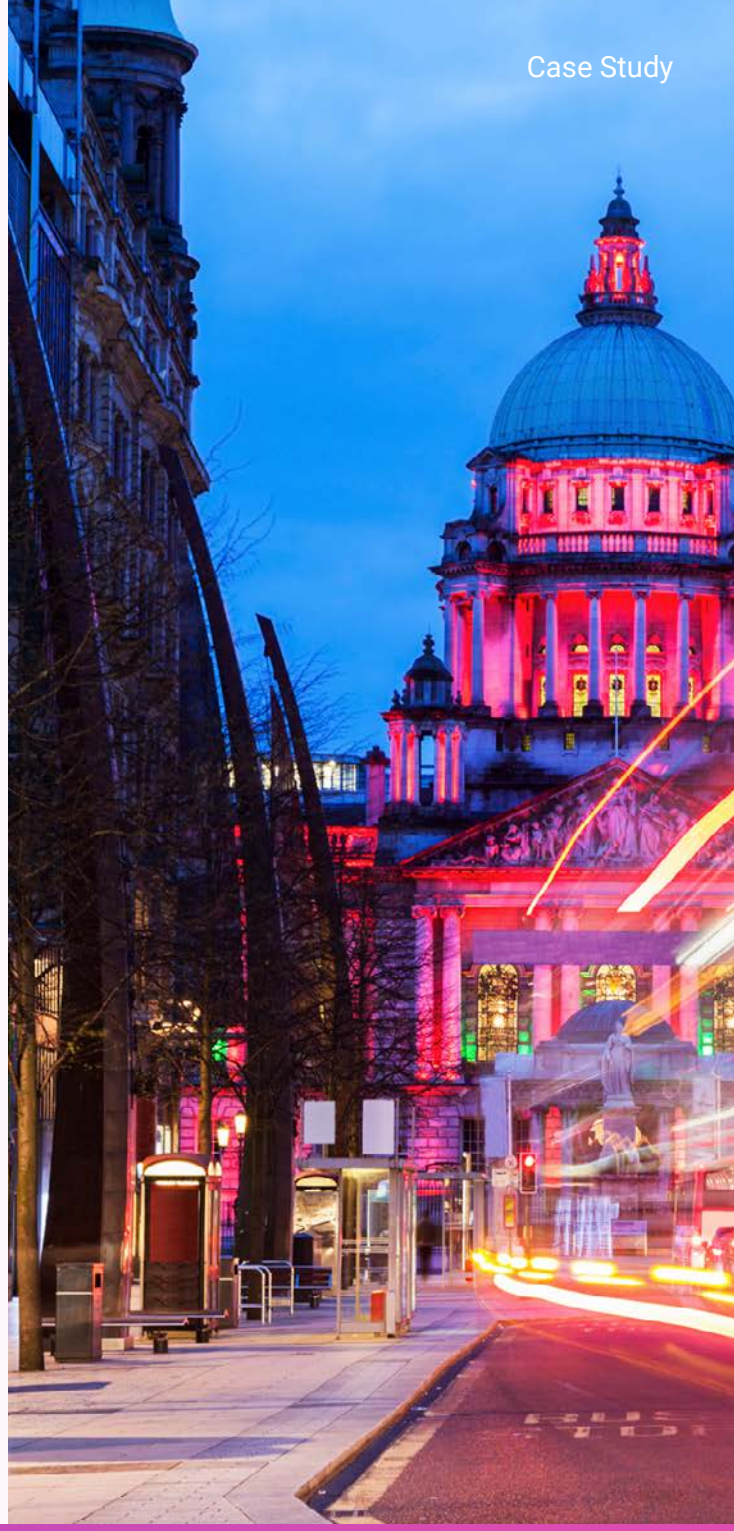
Building on the success of Metro Mayors and improving the physical and digital infrastructure, such as transport links, could encourage greater investment into different parts of the UK, and enable more tech SMEs to scale in locations across the nations and regions. Better signposting and linking tech SMEs to existing support will also enable more SMEs to access resources for some of the challenges they face.

Case Study

Stuart Harvey,
CEO, Datactics

Belfast-based Datactics demonstrates the success of tech SMEs scaling in different parts of the UK. With just five employees in 2013, Datactics has grown to nearly 60 employees.

The award-winning data company has raised nearly £8m over three investment rounds and has also received significant R&D funding from local innovation organisations, including Invest Northern Ireland. The company has been able to tap into Northern Ireland's pool of highly talented graduates to meet its recruitment requirements. As a result, Datactics has been able to deliver transformational projects, such as its work with the Home Office, where it is improving and consolidating policing data from the UK's 43 police forces to help inform crime predictions and government measures to deal with major issues such as county line drug dealing. Looking forward, the company is looking to expand its international presence, with the US and Singapore priority markets.



Recommendation

Deliver on the recommendations of the Harrington Review to create a more joined up investment offer with the support of metro mayors and devolved governments.

Review different scaler and start-up support initiatives across the UK's nations and regions to identify how to better facilitate joined up thinking and reflecting on best practice.

Cashflow

One challenge that tech SMEs share with SMEs in other industries is cashflow within the business. Research from Xero showed that payments to small businesses were on average seven days late[9] and costs small business £1.6 billion.[10] As well as worsening the cashflow within the business, late payments increase the time and money spent on chasing customers.

Many of the tech SMEs outlined the issues they had with cashflow and late payments. One company highlighted that each sale is worth £30,000, so just one payment delay can have a significant impact. Another company explained that many clients insist on 60- or 90-day payment terms. Given the company must deliver a system before getting paid, this can present cash-flow challenges. If a project takes three months, then it can get up to six months from starting the project to get paid. Longer term projects can present particular cash flow challenges given these payment timescales.

Other companies highlighted the long timeframe for sales to complete and turn into revenue as having a negative impact on the cashflow within the business. One company highlighted they had supported a project where the eventual purchasing decision was made six months later than the originally stated timeframe, making it very hard to budget and plan on areas such as whether to take on extra staff. Another company highlighted they received the first order for a product 18 months after delivering a demo to the prospect.

Conducting further innovation and R&D can also be challenging given cashflow constraints. One company commented that “Innovate UK funding is a great concept, but winning a grant doesn’t mean a company won’t still end up with a huge cashflow problem.” Another noted that it is difficult to resource money and time to go through an entire process of new product development, whilst also servicing existing clients. They added: “When investing time and money in innovation, new revenues might take many months after a new product is first conceived.”

> ***When investing time and money in innovation, new revenues might take many months after a new product is first conceived.***
> Richard Clarke, Executive Director, Fivium

As outlined in techUK’s Small Enterprises, Big Impact report, Open Finance can unlock many acute challenges faced by SMEs. This ranges from supporting the management of cashflow, late payments, access to finance, winning new customers and financial business administration. Enabling more SMEs to take advantage of Open Finance will help many lessen the impact of late payments and improve the cashflow within the business.

Future Success - What are the Benefits of Supporting Tech SMEs?

The data from *Beauhurst* and interview responses show tech SMEs have already made significant impacts to both the UK's economy and society, but continue to face many challenges as they seek to scale the business.

However, if government and organisations can address the challenges outlined, the impact of tech SMEs in the UK will be greatly enhanced. On a macro level, if tech SMEs are able to continue to start and grow just at the same rate as the past ten years, there could be an extra 100,000 tech SMEs employing close to 1.4 million people in highly skilled, highly paid jobs. These companies will continue to spearhead technological innovations witnessed over recent years, developing the solutions into areas such as an aging population and the climate crisis.

Support for SMEs to scale is also integral to the growth of all sectors across the economy. The innovative

technologies SMEs are producing can improve the productivity of businesses in the economy, and lowers barriers to accessing often critical public services for individuals, flowing through to economic growth.

Despite the challenges many of the SMEs interviewed were optimistic about the future, illustrating the economic and social impact of tech SMEs if they are successful. Several are growing at a rapid rate. One business achieved $5m of turnover in its first year and is continuing to expand at an increasing rate. One company's commented their turnover has risen to about £17m a year and is expecting a 50% increase next year. Another company grew by 15% this year and in the next two to three years the intention is to accelerate the growth to 25% per annum. Many also talked about being part of fast-growing regional tech clusters, with Leeds, Birmingham and Manchester all mentioned as great locations to start and scale a tech business.

Linked to this is encouraging news for job creation. One interviewee expected to double their headcount, while another is expected to grow its employee size by two thirds to 50 staff. Another company employing 50 staff is growing at 40% year-on-year.

Many of the SMEs spoke about actively looking to expand their international presence. One AI company has established teams in the US and Australia, highlighting that there is no limit to their international expansion given they operate their service using over 100 languages. One CleanTech company is now operating in every continent and plans to expand further into new markets. Another CleanTech company has the aim of supporting the sustainable heating needs of SMEs and corporates globally, starting with North America and Europe next year.

The growth in these companies is also leading to further innovation in new and emerging technologies. One HealthTech company looking to grow said the digital healthcare market has matured and is "on the cusp of exploding." A defence company working on drones highlighted that the market capitalisation of drones detection is double every two and a half years.

The companies interviewed are also set to make significant societal impact. One company working on quantum computing anticipated that by 2026 quantum computers will for the first time perform better than any other computer that currently exists, which will translate this technology into helping with the launch of ground-breaking new drugs. Another company was playing a leading role in the UK's transition to more sustainable energy.

By improving the data for policy solutions and interventions, and addressing the challenges faced by tech SMEs, namely access to later-stage finance, opening of public and private sector markets, and increasing the pool of talent, tech SMEs can unleash their potential and bring substantial gains to the UK economy and society.

Case Study

Matt Craggs, Co-Founder & CTO, Deep Green

Deep Green designs, builds and operates sustainable datacentres that enable the heat created from these facilities to be re-used to provide free heat for energy-intensive organisations, like leisure centres.

After successfully showcasing its innovation by heating a swimming pool in Exmouth, Octopus Energy invested £200 million into the company to help scale its operations.

Looking forward, the company is looking to play a significant role in the national economy's transition to more sustainable energy by expanding into new industries, such as healthcare and agriculture and international markets, with Europe and North America the main targets.

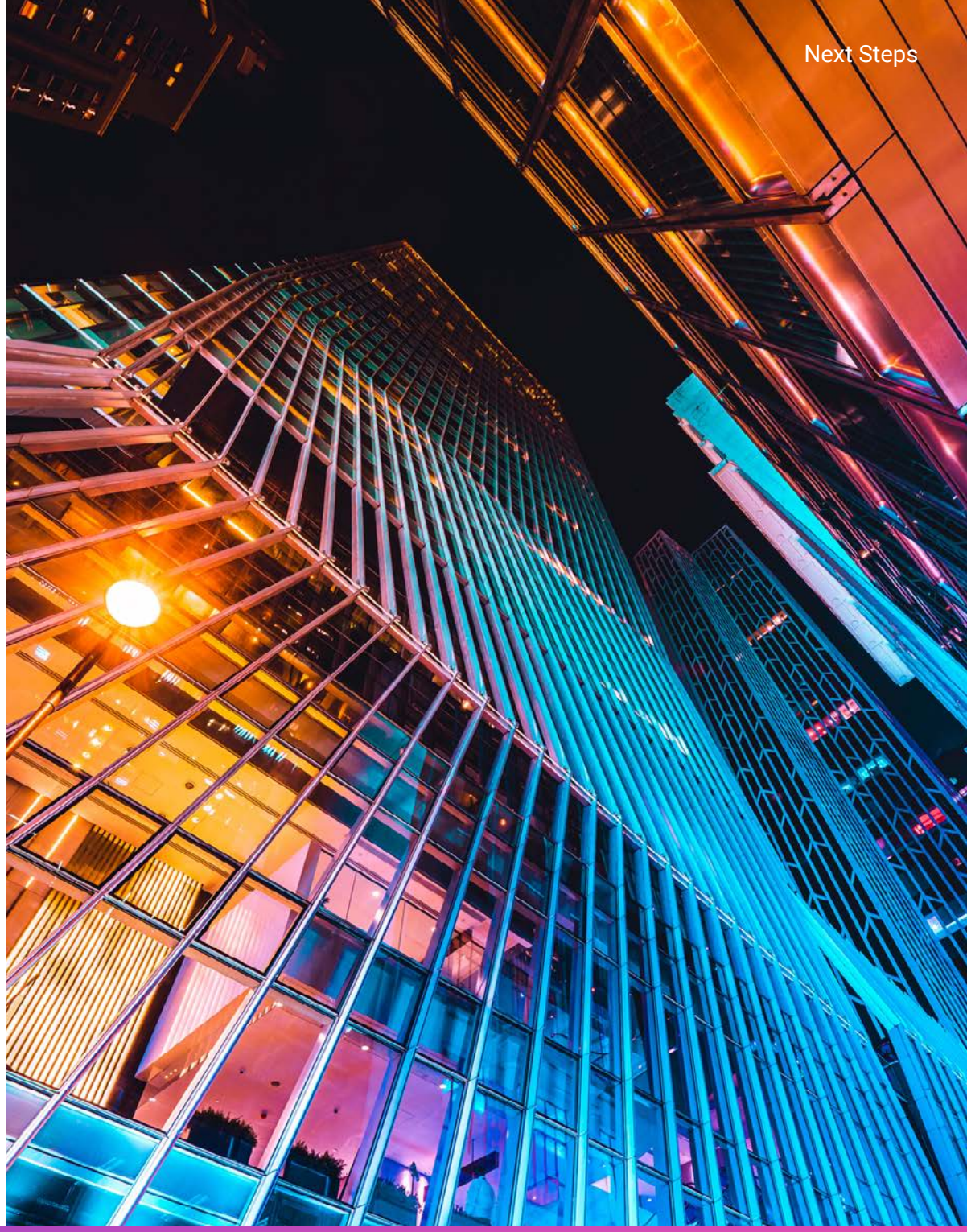
Next Steps

techUK will continue to engage with government to develop the proposals outlined to support the government's growth agenda and ensure the tech SME ecosystem is a key part of this.

We will also focus on supporting our SME members with the challenges outlined. This includes providing greater insight and connections for members with private and public investors to build greater understanding on the finance options available to them.

We will look to build on our work with local networks to support the development of regional tech ecosystems, and better connect members with national and local support networks.

We will also continue to build connections with other industry bodies to support SMEs commercialise their innovation, with insight into different markets and applicability of different technologies to various industries.



Methodology

Interviews were conducted between May 2024 and July 2024 with founders and senior executives of tech SMEs.

The SMEs were sourced from techUK's membership.

The sample size of 30 was chosen as a typically robust number for a qualitative study.

The approach was aimed at providing in-depth understanding along with flexibility to explore the key topics raised by interviewees.

Therefore, interviews were conducted in a semi-structured manner with a 45-minute discussion undertaken on the following framework:

1. Company Background and Achievements to date
2. Growth Challenges - Past & Future, in areas listed below *1.
3. External Support - Past & Future, in areas listed below *1.
4. Future Success

*1 Key Assessment Areas:

- Innovation & R&D (Developing your products and services)
- Route To Market (Business development, sales and marketing)
- External Finance (Raising investment and working capital)
- Talent & Skills (People recruitment, training and retention)
- Other (Strategy, Operations, Financial, Legal and Exports)

Interviews were all conducted by David Milnes, Director of Customer Insight, KyteMark Solutions Ltd.

Definitions

Data for the report was collected by Beauhurst and finalised in August 2024. Technology SMEs were identified for this reporting as companies falling within the 'technology' classification developed by Beauhurst.

Active companies

"Active" companies refers to companies that have an active or dormant Companies House status.

Equity investment

To be included in our analysis, any investment must be:

- Some form of equity investment
- Secured by a UK company
- Issued between 1 January 2011 and 31 Dec 2023.

Large Innovation Grant Funding

A company that has met our innovation grant trigger is one that has formally accepted a grant offer for a specific innovation project worth £100,000 or more. The project's primary focus must be fostering 'New to the market' innovation, as opposed to other aims such as job creation. The grant must have been received between 1 January 2011 and 31 Dec 2023.

SME stands for Small and Medium-sized Enterprises, and are businesses that fall within a specific range of size and annual turnover. The general definition is as follows:

- Employ fewer than 250 people
- Annual turnover does not exceed £50m (or the equivalent in euros)
- Balance sheet total does not exceed £43m (or the equivalent in euros)

Technology SMEs were identified for this reporting as companies falling within the 'technology' classification developed by Beauhurst.

Beauhurst

Beauhurst is the ultimate private company data platform. Beauhurst sources, collates and analyses data from thousands of locations to create the ultimate private UK company database. Whether you're interested in early-stage startups or established companies, Beauhurst has you covered. Beauhurst's platform is trusted by thousands of business professionals to help them find, research and monitor the UK's business landscape.

For more information and a free demonstration, visit beauhurst.com

kytemark solutions

KyteMark provides a range of market research services, designed to uncover new sales opportunities, and to provide organisations with a competitive advantage.

David has 30 years of experience in business research, including supported mid-sized technology, marketing services, property and professional consultancy companies in their business development activity.

For more information visit www.kytemark.com/

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Regional Breakdown

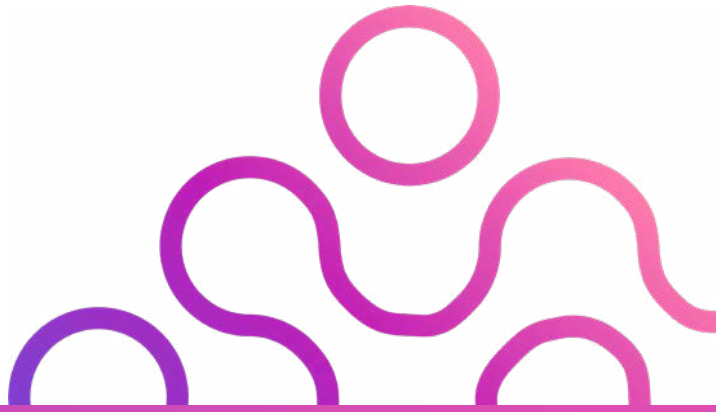
Number of UK tech SMEs by ITL2 (August 2024)	
ITL2	Number of companies
Inner London - West	31,205
Inner London - East	25,006
Berkshire, Buckinghamshire and Oxfordshire	9,846
Outer London - West and North West	9,834
Surrey, East and West Sussex	9,127
Greater Manchester	7,136
East Anglia	6,386
Gloucestershire, Wiltshire and Bath/Bristol area	6,051
Outer London - East and North East	5,997
Bedfordshire and Hertfordshire	5,868
West Midlands	5,303
Outer London - South	4,748

Number of UK tech SMEs by ITL2 (August 2024)	
ITL2	Number of companies
Hampshire and Isle of Wight	4,438
West Yorkshire	3,984
East Wales	3,950
Kent	3,893
Essex	3,712
Leicestershire, Rutland and Northamptonshire	3,399
Derbyshire and Nottinghamshire	3,306
Eastern Scotland	3,235
Dorset and Somerset	3,218
Herefordshire, Worcestershire and Warwickshire	3,184
Cheshire	2,720
Lancashire	2,375

Regional Breakdown

Number of UK tech SMEs by ITL2 (August 2024)	
ITL2	Number of companies
Shropshire and Staffordshire	2,291
West Central Scotland	2,215
Merseyside	2,151
Northern Ireland	2,135
South Yorkshire	1,971
Northumberland, and Tyne and Wear	1,917
West Wales and The Valleys	1,795
Devon	1,661
North Yorkshire	1,381
Tees Valley and Durham	1,218
East Yorkshire and Northern Lincolnshire	1,001
Lincolnshire	872

Number of UK tech SMEs by ITL2 (August 2024)	
ITL2	Number of companies
Cornwall and Isles of Scilly	735
Southern Scotland	628
North Eastern Scotland	546
Cumbria	455
Highlands and Islands	406



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FOR WHAT COMES NEXT

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