

# Local Digital Index **2023**

**Building Stronger Local Economies**



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# Introduction



Those familiar with techUK will be aware that this is the third edition of our Local Digital Index. Since the pandemic and our initial thinking as to how we can assess the strength of the tech sector across the UK's nations and regions, the Index has grown. I am pleased to say that in 2023 we have added important new features on regional Gross Value Added (GVA) for the tech sector, a data ecosystems measure, and refined the data sources to keep up with the changes in our sector.

Our Index is constructed using publicly available and transparent data that can be found and analysed across the UK's Nations and Regions. This is often supplied and published by government or government agencies. You won't be surprised to hear me say that inconsistent data or something only used in one area of the country but not another makes the task harder. Improving the data collected, used and shared by Government (national, devolved and local government) is essential to help us know how things currently look but also how we can make changes to improve, grow and develop the tech sector, businesses, workforce changes, innovation and our position internationally.

So, what do the Index's findings suggest?

After three years, the Index still offers a mixed assessment of the UK's digital landscape, albeit with noticeable improvements. Digital

Infrastructure scores are improving, including in rural areas, with better broadband speeds and mobile coverage available across the UK. Digital Skills remain a concern in terms of the current and future workforce; however, digital skills data is poor and hard to track. We did find however that the percentage of the population accessing public services online is 61% in London and the East of England, 57% in the South East, and as low as 30% in Northern Ireland. There's a mixed picture in terms of Digital Adoption. Business counts have fallen, and the regional digital employment share is mixed. Finance and Investment shows increased Foreign Direct Investment (FDI) in ICT in some regions, venture capital and equity finance is still heavily weighted toward London, but the continued drop in high growth companies should be a concern. A rise in Research and Development spend is welcome but a reduction in R&D tax credits does not suggest a universally positive outlook for future innovation, with some steep

drops in grant funding in some regions. Trade measured in goods and services exports has risen on last year with data compiled from 2022 and 2021, and we may not see the impact of inflation and interest rate rises until the next iteration of the Index. The new Data Ecosystems component has no previous data to benchmark against but does provide a starting point for future, much needed, analysis in this space.

In 2023, the addition of the GVA of the digital sector in each region and what this means per person adds a new significance to the Local Digital Index. In doing so we can see that digital sector GVA per person in London is £9,083 when compared to the West Midlands, £2,055, or Scotland, £1,979, or Wales, £1,348.

If the six regions with the lowest digital GVA reached the UK median this would add £4.8 billion to the UK economy, and specifically to regional economies, creating new jobs, new companies, new opportunities, new growth and improved productivity.

That doesn't mean we should hold London back. It means we need to empower all the UK's regions.

The UK's tech sector has weathered difficulties before and has the capabilities of doing so again, but that doesn't mean we should be ignorant of the facts. Further intervention is needed to support the sector, future jobs and skills training, companies adopting tech, digital inclusion and financing of the sector across the UK.

If tech companies and digital technology in the UK are to succeed, then the sector needs to be flexible to be at the forefront of global changes, delivering regulations that work and creating spaces to encourage and develop ideas that change lives, society, the economy and the planet.

With the increase in investment in tech around the world and the explosion of new digital tech deployment in so many industries, from Greentech to Fintech to Biotech, this is the time for all of the UK's regions and nations to benefit from adopting digital technologies.

My thanks to the techUK Nations and Regions working group, to Henham Strategy for their work to bring the Index data together, and to all techUK members who've supplied case studies and insights. Your stories about the impact you are having across the UK help to tell the wider story about the UK's growing tech sector.

**Julian David**  
**CEO, techUK**

# Introduction

The 2023 Local Digital Index builds on the foundation of the 2022 and 2021 indices and, once again, provides the insights required to empower local and national policy makers to boost digital capital.



The Index is a vital tool for benchmarking regional performance. The 2023 Index demonstrates that, while progress is often gradual, there are remarkable instances where rapid improvement can be achieved in just a year. This is exemplified by the substantial advancements in mobile and broadband connectivity. The Index compellingly demonstrates the power of well-crafted policy and decisive action, even in the short-term.

In our commitment to strengthen the Index and to respond proactively to the rollout of new technologies, this year we have introduced a 5G coverage measure. Yet, amid these adaptations, we have strived to maintain a thread of consistency, allowing for meaningful year-on-year comparison.

We are pleased to have measured the data ecosystems component in this year's Index but recognise that there is more work to be done. It is vital that open, accessible and interoperable data at a national and sub-national level is continuously improved and viewed as a priority by policy makers. With the addition of an indicative GVA analysis, we have quantified what we all know to be true: that digital capital is key to unlocking local economic growth.

**Nick King**  
**Managing Director, Henham Strategy**

# Introduction

The unveiling of techUK's Local Digital Capital Index has become a much anticipated annual event, and I can understand why. Policy makers, business leaders, educators and change makers are adopting a growth mindset to unleash the full potential of the digital economy.



They have to. With the ravages of a post pandemic world, the cost of living crisis that is impacting families and businesses across all of our nations and regions, and a geopolitical backdrop that casts a shadow of fear and uncertainty - pioneers and entrepreneurs across politics and industry have aligned around a compelling understanding.

They know that connective tissue matters. The digital ecosystems we build matter. Our economic power has a multiplier effect when we connect together digital infrastructure, research and innovation, finance and investment – with trade support, data ecosystems, and digital adoption – all underpinned by investment in digital skills. Now more than ever with advances in AI, quantum computing and innovations in blockchain changing society.

The Local Digital Capital Index shines a light on how to do that. techUK has brilliantly begun to help us all share examples of best practice, so we can all learn from one another – the hard lessons and the success stories. This year's addition of regional Gross Value Added (GVA) data for the digital sector and its per capita implications is going to be a critical tool to help decision makers, particularly those of us who want to address digital exclusion.

I'm proud on behalf of BT Group to have been involved since the beginning. We connect for good, and each of us has a part to play in helping build the future we need.

**Professor Kerensa Jennings**  
**BT Group Director, Data Platforms and**  
**Chair, techUK Local Digital Index Working Group**

# Executive Summary

At International Territorial Level 1 (ITL1) the overall Index scoring means that London finishes top, followed by the South East and the East of England. At the other end of the Index it's Northern Ireland, Wales and Yorkshire and The Humber making up the bottom three.

London is powered by a strong digital skills base, more roles in IT and the digital sector, strong digital infrastructure, financing (that vastly outperforms the rest of the country) and high R&D results. Data ecosystems is a new component for this year and while London finishes at the top, the gap with 2nd place (South East) is small and could be easily bridged in the future, though we would need better future data on this metric.

The North West of England, West Midlands, Scotland and the North East of England all move up in the overall scoring, mostly at the expense of the South West of England.

Data to note:

- **Digital Infrastructure** – the West Midlands is 2nd through good 5G connectivity to over 80% of homes and gigabit broadband to over 73% of premises. Of note must be Northern Ireland's score on gigabit broadband with over 85% of properties having access to the fastest broadband.
- **Digital Skills** – the percentage of people finding/downloading information for work/business/school/college/university/homework is 75% in the South East and West Midlands. But this doesn't marry with the percentage of the population accessing public services online which is 61% in London and the East of England, and 57% in the South East (in Northern Ireland its 30%). The high proportion of students studying computing and engineering and technology in the North East is to be welcomed but their lower overall



student number holds them back. And 96% of businesses in the East Midlands 'strongly agree' or 'tend to agree' that their business has sufficient data skills to meet its needs.

- **Digital Adoption** – this component is driven by digital occupation employment share and investment in ICT. The high scoring regions align with the overall high scorers. Of note is the investment in ICT equipment in the North West, West Midlands and Scotland. However, Scotland's digital employment share has dropped slightly impacting its overall position on this component. The UK Business Count has dropped since last year in every area of the UK, except Yorkshire and The Humber.
- **Finance and Investment** – The data used for this component needed to be amended (as the previous data source was unavailable). The nationwide fall in high growth companies since last year should be a concern, especially as this continues a trend going back to 2018. However, despite some difficult global and domestic economic forecasts, inward investment in ICT is higher in the West Midlands, East Midlands, Wales, the South East, Scotland, the North West, North East and London. London outstrips the rest of the country still.
- **Research and Innovation** – the South East leads the way on R&D spend and the rise has gone up (£6,060m) since last year, almost as much as the entire North West of England's figure (£6,533m). And there's no comparison between total spend in London, the South East and East of England (£34,554m) compared to the North of England (£11,165m). Scotland is much more comparable in terms of R&D measures with regions in the North of England, though it should be noted that Scotland's InnovateUK grants are more akin to regions in the South of England.
- **Trade** – the data on goods and services exports is up across every region. This is welcome news, but the regional disparities remain, and the gaps aren't closing. For example, the gap in service exports between London and the North West of England has increased since 2022 (by £1,608m).





- **Data Ecosystems** – while London is the top scoring area, the gap between first and fifth is smaller than in other components with Yorkshire and The Humber in third, the West Midlands in fourth and North East in fifth. Data acquisition shows strong scores for many regions; however, data roles are much more prevalent in London and the South East of England.

**At International Territorial Level 2 (ITL2) the data allows us to look more closely at ‘city regions’ and smaller geographic areas of the UK.** These areas are more closely aligned with Mayoral Combined Authorities, and while techUK would like to go even further to focus on smaller geographic areas, the data reduces or becomes more limited the more specific the geography, making analysis difficult.

The top 10 from 2022 remains unchanged against 2023 with a few regions moving up or down slightly, but the top 5 is unchanged

1)	Inner London West	n/c	6)	Derbyshire and Nottinghamshire	+2
2)	Berkshire, Buckinghamshire and Oxfordshire	n/c	7)	Herefordshire, Worcestershire and Warwickshire	-1
3)	Inner London East	n/c	8)	East Anglia	-1
4)	Outer London - West and North West	n/c	9)	West Midlands	+1
5)	Gloucester, Wiltshire, Bristol/Bath area	n/c	10)	Hampshire and the Isle of Wight	-1



Changes to the UK's tech sector won't be quick and change will take time. It should be noted that placing too much stock on direct comparisons year on year should be guarded against as some data sources have changed or needed to be updated.

Outside the top 10 performing ITL2 regions a few other areas fared well and entered the top 5 for different components, notably North East Scotland on digital adoption and trade, Northern Ireland on trade, and Surrey, East and West Sussex on digital skills.

Turning to the city regions is a mixed picture. As noted above, Gloucester, Wiltshire, Bristol and Bath score well on skills (8th), finance and investment (6th), and R&D (5th) but fall outside the top 20 for digital infrastructure (22nd). The West Midlands is a strong performer on digital infrastructure (6th) as is Greater Manchester (7th) and West Yorkshire (8th).

In terms of the overall scores for 2023, the 'northern cities' - Greater Manchester (21st), Northumberland, Tyne and Wear (23rd), Merseyside (26th), West Yorkshire (27th) and Tees Valley and Durham (28th) - are in the middle of the pack, showing strengths in some components but also some drawbacks.

Scotland remains a mixed picture with a distinct urban vs rural divide as noted in 2022's Index. Overall, Eastern Scotland (containing Edinburgh, 13th) and West Central Scotland (containing Glasgow, 15th) score well especially when considered against major cities in Northern England. However, the Highlands and Islands remains in 41st and Southern Scotland only marginally better in 39th. North Eastern Scotland remains the enigma, scoring very strongly in some components but finishing middle of the pack (20th) overall.

It would be remiss if we did not show where progress has been made in Scotland. The data shows Eastern Scotland's gigabit broadband coverage has increased from 50.1% of premises to 70.6%. West Central Scotland's 4G coverage increasing from 90.3% of premises to 94.2%. And in the Highlands and Islands there's been an increase from 14.9% of premises able to access gigabit broadband to 23.1%.

On the face of the result, it would appear that Wales and Northern Ireland score poorly. However, given their relative size of economy, population and tech sector, and the in-year progress made, this would fail to demonstrate the push to ensure digital technology is rooted in both nations. Both score

well in terms of R&D and investment which are key drivers of innovation and rooting companies in regional economies.

Ensuring that the digital tech sector is on the right trajectory isn't a simple process and doesn't have one simple measure. The same can be said for measuring our regional tech sector and economies. The success of London is often seen as a problem for the wider UK. That's not true and often not helpful. However, over reliance on the tech scene in London and the South East of England to drive the UK tech sector and economic growth is also unhelpful.

techUK's Local Digital Index for 2023 shows there are great examples of innovation, funding, skills, connectivity and more across the UK. To track and monitor this in the future there must be a move to improve the data captured, shared and analysed. Making more of this data publicly available helps to see the true picture of our digital sector and economy.

# Recommendations

## 1.

### Improved data leads to improved policy making

At the moment, not enough good data is collected and not enough is released by Government. If digital skills are a priority, why don't we have better data on this? Data shouldn't be collected just for the sake of it, but if we want policies to have an impact we need the correct data to know if policies, programmes and interventions are working. Oflog has begun the process of gathering Local Authority data and making it available and comparable. We believe this could be improved and go further by including Combined Authority data, linking with the Levelling Up missions, producing real time dashboards and, crucially, including digital data going forward.

The Government's National Data Strategy is making slow progress on mission one ('unlocking the value of data in the economy') and this has meant measuring and tracking data ecosystems across the UK remains difficult. A new impetus in this area, especially considering the importance of data to AI, would help the sector and the role of data.

## 2.

### Modernise the National Curriculum

As technology advances and the workplace changes, it's becoming clear that the UK's National Curriculum isn't preparing the next generation with the skills and learning needed to grow our economy or create new roles at the pace of our international peers. This isn't the fault of teachers, schools, or students. Tech moves quickly, so the curriculum needs to be agile enough to adapt. A review of the national curriculum should aim to embed technology and the skills needed in the modern workplace more deeply into the curriculum. It's important that STEM support is available to classroom practitioners together with a more visible partnership with businesses to encourage entrepreneurship from an early age and preparation for the changing work landscape. Any future curriculum must ensure digital literacy and digital skills are cross-curricular and integrated throughout primary and secondary education. The UK also needs to incorporate mandatory digital ethics education into the curriculum to encourage the responsible use and safety of digital tools for young people.

## 3.

### Update and renew the path for Apprenticeships and Skills

Apprenticeships and improved skills training are crucial to the UK economy. techUK's UK Tech Plan published in summer 2023 noted the need to plug the digital skills gap to boost pay, opportunity and our national resilience. The UK should help raise British workers' pay by £5.69 billion by making the Apprenticeship Levy more flexible, delivering an Employment Bill, and building an online Digital Skills Toolkit to help individuals and employers identify accredited courses to boost digital skills.

## 4.

### Businesses starting and growing in the UK

While techUK supports growing our own talent and businesses, we also want to make the UK the most appealing country in the world to base and grow a business. TechNation used to be responsible for Global Talent Visa. There's confusion on where this now sits in Government and if this is a priority. The UK needs an improved landing package including, seeking to help companies setting up in the UK with even the simple things like starting bank accounts. We must also ensure visas are expedited quickly to remove any uncertainty over status.

To help the start-up community, the UK should provide more certainty by making the Enterprise Investment Scheme (EIS) and Venture Capital Trust (VCT) schemes permanent, as well as reforming the Seed Enterprise Investment Scheme (SEIS) by raising the cap for both investors and start-ups. Additionally, the period under which businesses can claim SEIS should be extended to three years. While these might seem small changes, clarity and certainty send the right message to investors, start-up's and scale up's seeking to make the UK their destination and home. Furthermore, these schemes should ensure that the whole UK benefits from investment, not favouring London and the South East of England, seeking to offer support across the UK.

Additionally, the entrepreneurial and start-up culture we need must include opportunities for everyone. The recent [Pathways Report](#) for the Scottish Government outlined a number of recommendations to help promote entrepreneurship and encourage more women to start businesses. The pre-start fund, £1.5m, to provide support, mentoring and advice launched in September 2023 is a good start but similar schemes should be available across the UK. Creating new ideas, new businesses and new ways of working should not be limited to a few who know how but must be expanded to many more that want to take that next step and make things happen.

## 5.

### Businesses Staying in the UK

The UK is recognised as a world-leading destination to innovate and create brand-new technologies. This has enabled us to produce almost 400 high-growth startups since 2000 (worth more than \$250 million in value), including 144 unicorns – companies with valuations of \$1 billion or more.

techUK's UK Tech Plan has called for the launch of a British 'Scale-up Sprint' to identify, within six months, new investment vehicles and regulatory changes that could create new investment opportunities into critical technologies such as green tech, AI, quantum and semiconductors.

Once a company expands and grows, we want them to know that the UK is where they can, and should, call home. The UK shouldn't be a stopping point on a company's expansion journey into Europe or the USA or Asia, but instead should be where companies are rooted. This means a pro-growth approach to regulation, digital IDs in financial services, Smart and Open Data schemes, leading on AI governance, with a long-term strategy for R&D incentives and reducing the cost of R&D facilities.

## 6.

### Regional Tech Sector

Each region of the UK should have a signed off and regularly updated digital strategy. That 12% of Local Authorities don't have a digital connectivity strategy is a concern. But the changing nature of the digital tech sector means that static documents are quickly out of date. These strategies should engage with and have the support of the private sector, including SMEs, innovators, including universities and incubators, and local cluster groups. There's an opportunity through devolution to create dashboards that show the progress against national priorities and local priorities in real time. However, this increased accountability should also be met with a new National Digital Inclusion Strategy, specific funding to support digital inclusion projects allied to data shared and a specified need for tech and business engagement in digital inclusion strategies.

As our case studies show, many techUK members and stakeholders are already making great strides in this space but much more can and should be achieved.

## 7.

### Small Business Digital Growth Allowance

SMEs are the backbone of the economy and are helping drive innovation, supporting millions of employees, and with customers across the globe. However, their tech adoption journeys are not all the same. If every business is now a tech business, then they need support on the journey. A new Digital Growth fund is required to keep digitising the UK economy. While there was merit in Help to Grow Digital (albeit poor design and narrow eligibility criteria led to 1% of the planned 100,000 firms taking advantage of it) there is now a gap in support and the underspend from Help to Grow Digital should be used to help support 600,000 SMEs adopt new digital technologies.

In addition, there needs to be better guidance on the tech support and grants being offered by Government and UK tech firms to support SMEs. Improving and streamlining the process will help time poor but willing SMEs to navigate to programmes and grants that support their needs much quicker.

## 8.

### Rural and Coastal Digital Support

The progress on digital infrastructure is welcome and must continue to ensure that the entire UK can enjoy the benefits of digital technology and the digital economy. In rural and coastal communities access to services and facilities can be more difficult and digital connectivity has an opportunity to help change that. There should be more support for businesses in these communities to encourage further digital adoption. The Agritech sector in the UK is has a total turnover of over £13 billion and employs over 35,000 (Data City). Helping farmers adopt equipment and products, update practices and embrace digital technology through examples such as precision farming can have an impact on the UK's food production, improve data and improve sustainability. DSIT and DEFRA should look to coordinate and apply flexible support such as a rural and coastal digital grant available to relevant areas across the UK.

## 9.

### Digital Infrastructure – From coverage to uptake

Project Gigabit, Shared Rural Networks and other similar programmes have already helped to connect new areas of the country with a faster and stronger digital network. The movement over the last 10 years to ensure people can access the internet or mobile coverage has had positive results, for people, businesses, communities and services.

However, the success in this space has meant there's a need to move forward and measure progress in new ways. Government should work with telecommunication companies, devolved government across the UK and elected Mayors to measure the uptake of better digital infrastructure. Gigabit broadband being available is different to people actually using it. Understanding this will allow the Government and sector to better target support to those people and businesses who need it most.

## 10.

### Investment Zones, regulation reform and planning expedited

After an optimistic but turbulent start, Investment Zones have been revived in 2023 with confirmation of IZ's in South Yorkshire and the Liverpool City Region. This should be welcomed; however, the pace must increase to ensure all IZs are agreed and operating by January 2025. In addition, the absence of an Investment Zone in the South West of England should be remedied. While some parts of the South West score strongly on the Index already, there is a need to build on the region's success and an Investment Zone in the South West could help drive new growth and investment and provide further support to the Western Gateway vision.

In our 2022 Local Digital Index, techUK suggested Investment Zones should be 'tech zones'. This remains true in 2023 as tech is the enabler of each zones stated sector priority. These new zones should be encouraging innovation by creating new testbeds, and attracting SMEs, start-up's and scale up's to interact and pioneer new ideas.

# 10.

## Investment Zones, regulation reform and planning expedited (continued)

Regulation can drive safety, standards and improvements in the economy, products and services, and can be a great help when they offer certainty to business. But regulatory uncertainty is a blocker of current and future investment in the UK. The Connected and Automated Vehicles industry is predicted to be worth £41.7 billion to the UK economy by 2035, but regulatory uncertainty and delays in legislation are stifling investment and innovation that would help us meet our transport needs. By providing clear directions to regulators, ensuring regulators are effectively resourced and encouraging regulators to take a solution and innovation-oriented approach we will help power the UK's but also our regional economies.

techUK's UK Tech Plan noted the delays in the planning process when strategically important schemes come forward, "at the moment over 40% of connection agreements sold have delivery dates of 2030 or beyond ...the Government needs to work with Ofgem and the National Grid to prioritise connections for strategically important projects as well as working with the energy sector to identify and action the near-term high impact upgrades to the national grid." Changing the prioritisation is essential to drive delivery of large strategic projects. Ministers should work on a formal footing with the devolved governments and elected Mayors to identify priority schemes that are expedited quickly based on the impact this can have on the economy, security and strategic interests of the UK including net zero ambitions (this will also add a further formal role for elected Mayors and Combined Authorities, helping encourage the devolution agenda). Strategically important projects can be delayed and there is merit in exploring introducing stronger decision deadlines and review dates to ensure projects aren't lost in a drawn-out planning process.



# New data for 2023

## Digital GVA

In this year's iteration of the Local Digital Index, we added the Gross Value Added (GVA), the economic productivity metric, for the digital sector in each region and what this means per person. This brought a new significance to the Index and shows that digital capital is key to unlocking local economic growth.

Our results show that the digital sector GVA per person in London is £9,083 when compared to the West Midlands, £2,055, or Scotland, £1,979, or Wales, £1,348.

If the six regions with the lowest digital GVA reached the UK median this would add £4.8 billion to the UK economy, and specifically to regional economies, unlocking new economic growth.

The table opposite shows the GVA calculation which ranks the regions on digital GVA per capita, indicates the link between digital capital and GVA, and indicates the potential GVA that could be realised with better digital capital.

	Digital Sector GVA per person	GVA per person uplift	GVA uplift	Index Ranking
Greater London	£9,038			1
South East	£5,287			2
East	£2,540			3
North West	£2,203			7
West Midlands	£2,055			5
Scotland	£1,979			4
South West	£1,912	£34	£114,766,949.21	6
East Midlands	£1,587	£359	£ 1,079,459,062.33	8
Yorkshire and The Humber	£1,563	£382	£ 1,311,595,171.87	10
North East	£1,561	£384	£ 640,400,942.76	9
Northern Ireland	£1,517	£428	£ 505,112,094.75	12
Wales	£1,348	£598	£ 1,158,413,692.62	11
TOTAL			<b>£ 4,809,747,913.55</b>	



## Index Components Digital Skills

- The percentage of people finding/downloading information for work/business/school/college/university/homework is 75% in the South East and West Midlands.
- But this doesn't marry with the percentage of the population accessing public services online which is 61% in London and the East of England, and 57% in the South East (in Northern Ireland its 30%).
- The high proportion of students doing studying computing and engineering and technology in the North East is to be welcomed but their lower overall student number holds them back.

Whilst at ITL1 level, Greater London takes first place on digital skills, it is followed by Wales on second place with a sharp rise from eighth place in last year's results, with a good percentage of people using online information for day-to-day activities as well as a high number of higher education students and NVQ4+ qualifications, indicating a growing group of skilled tech people. The table below shows the ranking at ITL1 for digital skills and the measures that make up this

component. An important aspect to mention is that we have introduced a new measure under this component – the data skills measure – which shows the percentage of businesses that believe they have sufficient data skilled people to meet the operational needs of the company.

The South East has also climbed a position since last year's results, however the South West has dropped from 2nd place to 4th place. The North East has climbed from 11th to the 8th; with a higher percentage of population who has access to public sector services online demonstrating the

progress made when it comes to public sector digital transformation; whilst the North West dropped from 5th to 11th place, as the number of students in the area studying computing and engineering decreased.

Region	Internet Users (%)	Public Services Use (%)	HE-Digital Study	NVQ4+	Downloading Info (%)	HE Students	Data Skills	Ranking
Greater London	95%	61%	2.32	3,603,800	61%	402,955	78%	1
Wales	90%	44%	1.92	732,400	71%	110,210	87%	2
South East	94%	57%	1.14	2,517,900	75%	289,525	82%	3
South West	93%	54%	1.16	1,399,300	70%	153,520	80%	4
East of England	92%	61%	1.25	1,496,700	69%	185,115	85%	5
Scotland	91%	45%	2.34	1,707,000	58%	193,115	80%	6
West Midlands	91%	47%	1.75	1,405,300	75%	191,650	77%	7
North East	89%	58%	2.30	559,200	48%	70,685	93%	8
East Midlands	91%	49%	1.71	1,050,020	67%	137,515	96%	9
Yorkshire and The Humber	91%	51%	1.70	1,279,700	62%	150,937	79%	10
North West	91%	43%	1.29	1,726,200	60%	220,220	84%	11
Northern Ireland	88%	30%	1.41	480,700	44%	65,840	83%	12

Our Local Digital Index shows that at a sub-regional level, after four areas in London, the top 10 for digital skills features two regions in Scotland (North Eastern Scotland on 7th place, Eastern Scotland on 9th place), as well as Surrey, East and West Sussex on 5th, with Berkshire, Buckinghamshire and Oxford on 6th and Gloucestershire and Bath/Bristol area on 8th. By contrast, two Lincolnshire areas sit at the bottom of the Index, alongside Merseyside and Tees Valley and Durham. The areas that score well here have a strong percentage of population that use online services, alongside a high number of people that have NV4+ qualifications as well as higher education students. It is worth noting that at NUTS2 some of the data is not available at this level, so some measures are not included in the making of the component, such as percentage of population with access to online public service, percentage of people finding info online for work/school and number of students that study computing and engineering technology in the area, however these can be found at ITL1 level.

Region	Internet Users (%)	NVQ4+	HE Students	Ranking
Outer London - South	96.7%	491,400	54,945	1
Outer London - East and North East	95.1%	629,300	70,364	2
Outer London - West and North West	94.0%	786,700	87,964	3
Inner London - East	94.9%	1,117,500	124,952	4
Surrey, East and West Sussex	94.6%	841,300	90,420	5
Berkshire, Buckinghamshire and Oxfordshire	94.8%	752,000	88,785	6
North Eastern Scotland	93.4%	166,200	19,265	7
Gloucestershire, Wiltshire and Bath/Bristol Area	94.4%	718,100	74,775	8
Eastern Scotland	92.4%	684,400	70,160	9
Hampshire and Isle of Wight	93.8%	494,900	56,055	10

The policy paper launched by the Government in 2022 [“UK’s Digital Strategy”](#) includes digital skills and talent as a focus area to be able to reform and improve the skills and talent needed.

Alongside strengthening digital infrastructure development, supporting the innovation ecosystem, improving access to finance, and supporting levelling up activities, government estimates that the GVA for the tech sector could grow with an additional £41.5 billion support the creation of 678,000 jobs by 2025.

As shown in techUK's ["Preparing the UK for the future of work"](#) report, in order to create a thriving digital economy, businesses and individuals need the right skills and conditions in the workplace. Therefore, the government should review and reform the Apprenticeship Levy, provide guidance for private and public sector for flexible work, create a Single Enforcement Body to drive standards on the gig economy, introduce a Digital Skills and Productivity Tax Credit and support the adoption of productivity-enhancing tech, and enabling businesses to attract international talent.

techUK's recently published ["A UK tech plan"](#) also highlights the need for Government to boost pay, opportunity and our national resilience by addressing the digital skills gap, by making the Apprenticeship Levy more flexible, delivering the Employment Bill, as well as building the Digital Skills Toolkit as an online resource to help identify accredited digital skills courses.



# Case Study



## BT Launches Immersive Spaces: the UK's first 5G-enabled, interactive simulation experience



Alex Foster,  
Director of Division X, BT

BT Immersive Spaces simulates real-life environments for business and public sector organisations – including education, healthcare, retail, transport and tourism. We will focus more specifically on how two schools in

Scotland and South Wales are using the technology to create fully immersive and interactive classrooms.

In May, BT launched immersive spaces for its business and public sector customers. Partnering with Immersive Interactive Ltd, it will create the UK market's first 5G-enabled interactive simulation

experience within an internal or external room, or mobile unit.

The project aims to combine interactive, 360 video content by connecting to the EE mobile network, and using cameras and HD projectors to bring it to life. This is complete with lights, sounds and smells and compatibility with augmented, virtual and extended reality, which will transport users from imagined scenarios into real life simulated environments.

This partnership has helped create spaces, with content libraries of over 3,000 computer-generated scenarios, real life environments, games and training experiences,

perfect for schools. Therefore, it is fitting that the initial customers for BT Immersive Spaces include Borders College in Galashiels, Scotland and Cadoxton Primary School in South Wales. Both of which are using the technology, to immerse students by helping make their classrooms more interactive.



# Case Study



## BT Launches Immersive Spaces: the UK's first 5G-enabled, interactive simulation experience

According to Hannah Cogbill, Senior Leadership at Cadoxton Primary School: 'The children absolutely love it. Their favourite one so far is life under the sea (pictured left). We are looking forward to using it to support our children's development and progression of imaginative writing.'

As well, David Lowe, Assistant Principal of Curriculum and Sustainability at Borders College (pictured below right), said: 'thanks to this new innovative 5G enabled equipment from BT, there will no longer be a divide between the opportunities offered to rural and inner city students.' Students can now learn from a vast range of developments, that can help them navigate career opportunities.

A few of the initiatives developed through this private partnership are listed below:

- Construction students at Borders College, who previously didn't have access to large-scale inner-city developments for on-site learning, can now experience a construction environment first-hand using this technology.
- Students taking courses from engineering to medical and health and social care at Borders College will benefit, as they will manage real-life scenarios such as electrical safe isolation, ambulance training and dementia training, which will help increase their understanding.
- Compatibility with VR, AR and XR technologies – can be used for anything from simulated training for paramedics such as roadside accident scene or hospital unit, to the recreation of important historical moments.
- The immersive space at Cadoxton Primary School will be used to support pupils with pre-experiences that they might be nervous about i.e. catching a train or going on an aeroplane.

To learn more about this partnership and find out more information [please visit here](#).



# Case Study



## How collaboration and partnerships are supporting local talent pipelines



Louise Wood, Employment & Skills Senior Manager (Digital Skills)

Louise Wood, Employment & Skills Senior Manager, is supporting the city's tech sector with workforce and talent needs through collaborations with like-minded partners.

on providing quality careers information for young people, so that they are informed and inspired about their future career options and demonstrates the rich and diverse opportunities that the city has to offer. A key area of the local economy is tech and digital, which will be a driver for innovation, growth, and transition to a green economy.

### Leeds Tech Careers Launchpad

In collaboration with [Northcoders](#) and [Infinity Works](#) part of [Accenture](#), the Leeds Tech Careers Launchpad series started in 2023 with a plan to deliver a mini-series of informal events aimed at demystifying the world of tech. Each session has a different theme which builds on the previous, starting with 'Routes into tech' and will end the year with 'Progressing in tech'. The series includes

### Leeds Future Talent Plan

The [Future Talent Plan](#), co-created with the city, identifies the need to support local people to gain new skills, identify sustainable career prospects and gain employment, especially in emerging and vital areas of the local economy. The plan focuses





# Case Study



## How collaboration and partnerships are supporting local talent pipelines

several guest speakers who share their knowledge and passion for tech. The events are open to anyone and are particularly targeted at those not currently working in the tech sector, but keen to know more. Attendees have been a diverse mix including international university students, people currently unemployed, career changers, college students, women returners, and Ukrainian refugees. Feedback has been immensely positive, with attendees saying it has helped to boost their confidence in applying for tech roles and has provided a platform for making meaningful connections to help with their tech career. The series will run again next year and there are also discussions about taking the programme national.

### University student tech career information sessions

Events aimed at local university students, their

lecturers and careers advisors have taken place as a result of a partnership with Bruntwood SciTech. The events all had the same focus of inspiring future talent to consider a career in tech, by understanding the diverse range of opportunities, demystifying roles, and highlighting that candidates don't always need a STEM background to work in tech. A range of students from local universities attended, with varying degree subject backgrounds, all keen to hear about tech career opportunities from some of our local employers and industry experts. A direct action from these events is to broker tech employer careers sessions with our education institutions.

### Leeds Digital Careers Fair

Now in its second year, the Leeds Digital Careers Fair, is an example of local employers coming together to showcase their career and training

opportunities to a wide range of people new to a career in tech. The event is more than just a recruitment event, with 3 pillars of 'inform, inspire and include' to attract a diverse new talent pipeline and inspire them through informative employer interactions, speaker sessions and tech demonstrations to help them access the possibilities which await them within one of the city's key growth areas. Last year the event showcased 50 tech exhibitor stands and attracted over 2000 visitors, with visitor age ranges from school students upwards.

### Collaboration is key

The Leeds tech eco-system is known locally to be supportive and collaborative, and this has been very clear through the work delivered across the city so far. Individuals have been keen to support the Leeds Future talent plan shared goals

# Case Study



## How collaboration and partnerships are supporting local talent pipelines

and work collectively for the city, helping to inspire emerging and future talent to consider their career path in the Leeds tech sector. Partnership and collaborations have been and will continue to be key in inspiring local talent and ensuring a diverse pipeline of future talent for our tech sector.



Leeds Tech Careers Launchpad 2.0  
'Getting noticed in tech' event, June 2023



Student insight - tech careers event,  
May 2023

# Index Components

## Digital Adoption

This continues to be one of the most challenging components to track. The data supporting this component is never sufficient for the range it could potentially cover and doesn't always reflect the complex nature of the digital adoption journey.

Starting our analysis again at ITL1 level, we note that 9.1% of the jobs in London are in the 'Information and Communication' sector, and this continues with 5.3% in the South East and 3.9% in the East of England. Of note is the 3.7% in Wales but that is only 56,000 compared to the 2.8% in the West Midlands which equates to 114,000 people.

Some may argue that the SIC codes don't adequately reflect the overwhelming and diverse nature of the tech sector, however, they do provide a barometer which we can measure and note the progress of the tech sector such as the growth in London from 579,000 in I&C in March 2023 compared with 239,000 in March 1996. We would also refer those questioning this metric to the 'digital employment share' metric to provide balance in the component.



Of concern is the drop, across the UK, in the number of businesses defined as operating in the 'digital sector'. This hasn't just dropped in one area but across the whole country since 2022's Index. The drop in London alone is 2,745, a 12% drop, more than the entire number of digital businesses in Northern Ireland and coming close to the North East of England.

Some of this may be due to takeovers or mergers, but with the rise in interest rates, inflation, sluggish growth and the drops in finance and investment (see that components scores) this could present a worry for start-ups and the sector. For further information see the Finance and Investment component.

We would also note that this must also be balanced against the increased overall employment in the sector but a more mixed local position. The 'digital employment share' shows an increase in digital employment in London that equated to 41,125 new jobs, in the East of England 15,470 new jobs, 18,595 new jobs in Yorkshire and The Humber and in West Midlands 31,575 new jobs.

However, this data also shows a drop in jobs in the North West 3,125 jobs and in Scotland 4,265 jobs.

This leaves the East of England, North West and West Midlands challenging each other for the 3rd spot in this metric (but still collectively on 378k jobs compared to London's 464k).

It should be acknowledged with the global and transient nature of the digital world this can be difficult to track (e.g. how many people work from home, the Government's own data shows less civil servants in the office) but does provide a barometer.

At ITL2 level the updated data presents a similar picture. Berkshire, Buckinghamshire and Oxfordshire as well as Outer London- West and North West both saw the largest drop in digital businesses (1,660) perhaps vindicating the 'fail fast' maxim.

No area saw a massive increase but it would be wrong to not acknowledge that some of the lower overall performing areas overall did see an increase in the number of digital businesses; 25 in East Yorkshire and Lincolnshire, 5 in Cornwall and the Isle of Scilly and only a small drop (-5) in the Highlands and Islands.

However, in Cornwall, despite the increase in

businesses, there was a drop overall in the digital jobs in the area (-355). Our data doesn't allow us to see if or how the increase in businesses relates to digital jobs, or even people moving to other areas, though a nearby strong performing overall area, Gloucestershire, Wiltshire and Bath/Bristol area, also saw a drop in digital jobs (-9,720).

Some areas did see big rises in jobs such as Inner West London, 24,210 or Inner East London, 10,830. And outside of London, the West Midlands 12,370 or West Yorkshire 10,660, East Wales, 7,110 or Merseyside 1,945. However Greater Manchester saw a drop (-1,570) as did Berkshire, Buckinghamshire and Oxfordshire (-4,490)

Overall the digital adoption component shows a mixed picture. There's a need to support small, starting and scaling tech firms, but also to gather better data (as set out in the introduction) on the tech being adopted by small businesses. The data on Help to Grow: Digital, [shared in Parliament](#), shows that 575 businesses (equating to c41.25% of vouchers approved) didn't redeem their Help to Grow voucher. When only £31.4 million of a £300 million scheme to aid digital adoption is claimed, with only c1400 applications accepted, then further work must be conducted and better data gathered in the future.

# Case Study



## Climate Essentials: Making Sustainability Accessible



Lucy Coomes, Marketing and Communications Executive, Climate Essentials

Small businesses are central to the UK's journey towards net zero. Accounting for around **one third of the UK's total greenhouse gas emissions**, we simply cannot afford for small businesses to be left behind

when it comes to decarbonisation. Simultaneously, 91% of UK local authorities have set net-zero targets in line with the Government's **legislation for 2050**. The problem is, they cannot meet their targets without bringing their business communities along with them, and currently local authorities lack comprehensive carbon emissions data that is necessary to inform effective policy.

**Climate Essentials provides a solution for both local authorities and small businesses.**

Climate Essentials' carbon management software tool supports businesses to measure their carbon emissions data and create bespoke reduction pathways. Through partnerships with local authorities, Climate Essentials licences are provided for free to small businesses, removing a financial barrier to climate action. Moreover, regional programmes enable the carbon data that is generated to be aggregated through Climate Essentials Analytics, for local governments. This fills the carbon data gap that is crucially needed to inform targeted, realistic strategies and policies that will help set and achieve net-zero pledges via local initiatives.



# Case Study



## Climate Essentials: Making Sustainability Accessible

### Boost Green Credentials: Buckinghamshire

As the “Tool of Choice” for the Visit Buckinghamshire: Boost Green Credentials programme, Climate Essentials licences were provided to 110 businesses in the tourism, leisure and hospitality sector; this was run by Buckinghamshire Business First (BBF) and enabled by the Community Renewal Fund to help accelerate the sector’s recovery. These businesses have become ambassadors of the climate agenda and have helped boost the green transition throughout Buckinghamshire. BBF also had access to Climate Essentials Analytics, where they were able to measure, visualise, and understand the carbon emissions of their business community and region.

### Net-Zero Business Support in Bournemouth, Christchurch and Poole

Broken down into sector-specific cohorts, Bournemouth, Christchurch and Poole Council (BCP) has provided local businesses with 250 Climate Essentials licences, along with Onboarding and Carbon Literacy for Businesses webinars. The project has provided carbon data for the Council to understand the community’s needs more deeply. From these analytics, the Council can see that businesses have been focusing on energy efficiency measures, such as installing heat pumps and double glazing. 81% of the emissions fall into scope 3, highlighting that supplier engagement and management is key to driving the journey to net zero. The Council’s engagement with businesses

has increased and strengthened through the use of Climate Essentials. The cross-sector collaboration we are seeing is a promising beginning to the rapidly growing climate action ecosystem in Bournemouth, Christchurch and Poole.

# Case Study


  
 DAC BEACHCROFT

## Supporting communities and promoting tech innovation



Chris Air,  
Partner at DACB

### Introduction

DAC Beachcroft LLP is a national law firm with dedicated technology expertise, strategically spread across 5 main UK cities, including Manchester, Leeds, Bristol and Newcastle

(as well as their office in London). They cover technology (including, in particular, deep tech - AI, blockchain technologies), regulatory, IP, data and information, commercial (including all types of commercial contracts) and corporate law. Unlike other regional offices who sometimes adopt a “near-shoring model”, where work is simply done for London-based clients in the regions, their teams

pride themselves on being stand-alone, successful regional practices in their own right, acting for high-profile local clients ranging from central government bodies, local authorities and the NHS, through to international tech suppliers, global corporates, and regional scale-ups.

### Our key role in supporting major regional organisations

As business advisors, they support a significant number of businesses (both suppliers and customers of technology) and their legal services play a crucial role in the success and growth of major players in the regional digital economy. Their regional tech transactional work in 2022 has seen them involved in projects collectively worth billions of pounds and their clients collectively employ millions of people across the regions. Notable



# Case Study



DAC BEACHCROFT

## Supporting communities and promoting tech innovation

projects we have recently been involved with, that have contributed to the regional digital economy include:

Acting for Transport for Greater Manchester on its transformational smart-ticketing project (Manchester is a city which has more than 5.6 million journeys made across its transport network every day);

Acting for The Leeds Teaching Hospitals NHS Trust (which employs 21,000 people) on various projects involving the implementation of clinical information systems;

Supporting Ultraleap (a highly successful Bristol University spin out) on a number of fundraising rounds, including on its \$82m Series D fundraising and advising on its acquisition of Silicon Valley based Leap Motion.

They are part of various initiatives with regional tech incubators and umbrella organisations, supporting the growth of the tech industry across the regions. For instance, they have developed an innovative new product encouraging inward investment by overseas technology companies into the UK, identifying key legal services to enable their expansion.

### Their wider contribution to communities and promoting tech

Their role in supporting the digital regional economy extends beyond directly advising clients, and includes a wider commitment to investing in the communities which they are part of. For instance:

They recently ran a voluntary scheme whereby several of their young tech lawyers helped elderly

people in Yorkshire navigate their way around technology;

Their Manchester team are involved in a local mentoring scheme to encourage and support young female students get into careers in technology.

As far as diversity is concerned, they buck the trend when it comes to female representation in technology, with over 50% of their regional tech colleagues being female. This is supported by DACB's award winning Reconnect Programme, primarily focussing on helping women return to work after career breaks to raise young families.

If you are interested in learning more, please get in touch at [cair@dacbeachcroft.com](mailto:cair@dacbeachcroft.com)





## Index Components Digital Infrastructure

At ITL1 there are some metrics with huge differences between the different Nations and Regions of the UK, and others have very similar scores.

Gigabit broadband availability has increased rapidly with Northern Ireland leading the way as 86% of premises have access, with London on 81% and the West Midlands on 73% but Wales remains low with only just over half, 50.7%, of premises accessing Gigabit broadband.

Mobile coverage has increased across the country with notable rises in 4G from our Index in 2022 to our 2023 scores; in Northern Ireland there was a 5.5p.p rise, the North West 4.8p.p., and West Midlands 4.7p.p. rise, but London still leads the way on 4G coverage.

On 5G, London remains top of the pack with a whopping 99.6% of premises measured having access, the West Midlands then has 80.3% and Yorkshire and Humber on 77.7%. However Wales and Northern Ireland still lag with less than half of premises having access to 5G, and in the South West of England it's less than 60%.

The roll-out of superfast broadband shows all the regions with similarly 93%+ scores, and there has been universal progress made on ultrafast broadband to premises increasing, particularly in Northern Ireland (11.5p.p. increase), the South West (9.8p.p. increase), Wales (9.4p.p. increase) and the East of England (8.2p.p. increase).

At ITL2 the data shows that all areas of London are in the top5 and when drawn out to a top 10 it's more major cities that dominate. The gap between London and the rest of the top10 is surmountable however the gap in Index scoring between 5th (Outer London West North West) and 6th (West Midlands) is much smaller than the gap between 6th and 7th (Greater Manchester).

Since 2022's Index, the addition of 5G has helped to ensure the resiliency of this component and factor in growing technologies. There isn't any current data on 6G but this will be included when available in the future.

The inclusion of 5G may explain the changes in position on this component for the different areas of London. The only area of the UK comparable with London on this aspect is the West Midlands. Furthermore, the West Midlands has the best gigabit broadband coverage in the UK. However, other areas of the UK are catching up with the West Midlands which continues to improve its coverage but at a slower pace than other areas.

When considering some of the lower performing areas of the UK we can see that progress is being made to improve digital connectivity, a vital element, perhaps the most important, if we want to see a tech ecosystems grow and succeed across the country.

The lowest performing areas for this component are the Highlands and Islands, Cornwall and the Isle of Scilly, Cumbria, West Wales and the Valleys and North Yorkshire. Lincolnshire and East Anglia move out of the bottom 5 (but only just).



The positive news is that every area has seen an improvement across every metric used in this component since 2022. A good example is Lincolnshire with a 42pp increase from last year with 51% of properties having the ability to access gigabit broadband. Or Cumbria, which has seen a 23pp increase since 2022 so that there are now 29% of properties able to access gigabit broadband.

However these figures are still significantly behind other areas of the UK. There is a trend across all of the five lowest performing areas, decent and improving broadband connectivity but lower and slower improving mobile connectivity.

Region	2022 SFBB (% of premises)	2021 SFBB y (% of premises)	2022 UFBB y (% of premises)	2021 UFBB (% of premises)	2022 Gigabit (% premises)	2021 Gigabit (% premises)	2022 4G (% of premises)	2021 4G (% premises)	2023 5G (% of premises)
Highlands and Islands	80.9%	79.7%	23.1%	14.9%	23.1%	14.9%	58.6%	56%	28.7%
Cornwall and Isles of Scilly	88.7%	86.9%	42.9%	35.3%	42.2%	32.5%	68.7%	68.4%	28.8%
Cumbria	93.6%	92.6%	29.5%	15.5%	28.6%	6.4%	67.7%	65%	45.3%
West Wales and The Valleys	94.9%	93.4%	44.6%	34%	43.4%	26.8%	73.7%	72.8%	41.5%
North Yorkshire	93.2%	91.8%	44.4%	34.9%	43.0%	28.2%	73.1%	73.4%	54.0%

# Case Study



## Digital Transformation for Healthcare | Enabling better patient outcomes



Emma Gooderham, Commercial Director at Cloud Gateway

### About Cloud Gateway

Cloud Gateway are the UK's first fully managed SASE platform, offering intelligent, cloud native network and security solutions for the public and private sectors. They provide

a cloud-like networking experience that seamlessly connects people, places and devices with cloud, on-premise environments, and public sector networks.

Their SASE platform provides customers with the tools and support to future proof the performance,

reliability and security of their network. It allows IT teams to easily connect and secure all of the organisation's resources, data and users in an agile, cost effective and scalable manner. The convergence of all these capabilities into one managed solution can enable and accelerate transformation for businesses seeking to digitise services, tools and processes.

### What makes them different

Over the years, their technology landscape has changed, but the corporate network remains the same. Expensive lock-in contracts, long lead times, and poor service are still prevalent in the telecommunications sector. This is no longer acceptable in a cloud-native market that demands flexibility, choice and pace of change.



# Case Study



## Digital Transformation for Healthcare | Enabling better patient outcomes

At Cloud Gateway, they do networks differently. Cloud Gateway was created to address the technical and commercial bottlenecks that stifle digital transformation. They are bringing networking and secure connectivity into the digital age through cultural, commercial and technical innovation.

### Their mission

Their mission is to provide easy access to the technologies that drive innovation, progress, and collaboration for the benefit of everyone.

**“It’s important to me that we demonstrate what can be achieved with greater digital adoption and the positive results for our communities. With the help of the Local Digital Capital Index to map the strengths and weaknesses in our digital infrastructure across the UK, we can all plan for a better future.”**

Emma Gooderham, Commercial Director, Cloud Gateway

### Accelerating the adoption of digital infrastructure

All public sector organisations, including the NHS, are required to migrate services and infrastructure to cloud in order to realise operational efficiencies and cost savings, as per the government’s Cloud First policy and the NHS Long Term Plan. The purpose of these initiatives is to facilitate better citizen outcomes through the utilisation of cloud services. However, transitioning away from the legacy technologies and systems that under-pin critical, public facing services can be a daunting prospect. It requires specialist skills across multiple disciplines, including networking, cloud, and security, most of which are in short supply. Their fully managed SASE platform enables the customers to utilise new and emerging technologies to rethink the way healthcare services are delivered for the benefit of those who rely upon them. Read on to learn more!

# Case Study



## Digital Transformation for Healthcare | Enabling better patient outcomes

### Ortus iHealth

Ortus iHealth provides virtual ward and remote monitoring capabilities to 8 NHS centres across the greater London region. Its digital outpatients platform enables clinicians to assess, monitor and treat patients remotely, reducing appointment lead times by half and facilitating a 58% uptick in the total number of patients seen.

Ortus iHealth is revolutionising the way healthcare is delivered and in doing so significantly improving the outcomes and experiences of those utilising its solution:

1. A 75% reduction in 'Did-not-attend' appointments
2. 58% more patients seen across all clinics
3. Outpatient appointment lead times cut in half

4. 75% of users saved more than 1 hour of travel time
5. Post operative discharge lead time reduced by over half

Ortus iHealth's app allows clinicians and patients to capture, access, and share vital information about a diagnosis or treatment. To facilitate this, Ortus iHealth required secure, reliable connectivity to the Health & Social Care Network (HSCN). This is where Cloud Gateway could help...

They were able to meet all of Ortus iHealth's network and security requirements by deploying one of their flagship services, Health Connect. This enables secure, on-demand access to the HSCN, connecting users, sites and cloud environments to the network in a matter of minutes.

Once they had connected Ortus iHealth to the HSCN, they had secure access to all the resources and data stored there, including the patient records that would be required to deliver effective remote monitoring and care.

**“Our incumbent connectivity supplier was no longer able to meet our requirements. There were considerations around cost, speed of deployment, security and customer service, all of which Cloud Gateway were able to accommodate without delay or disruption.”**

**Nick Niziolomski, Director,  
Ortus iHealth**

# Case Study



## Digital Transformation for Healthcare | Enabling better patient outcomes

### Involve Kent

Their Health Connect platform enabled Involve Kent to achieve a 24% increase in community wellbeing as part of their Social Prescribing service. Launched in 2018, the initiative was created to tackle the root causes of ill health across the region, including isolation, loneliness, disadvantage and frailty. They fulfilled Involve Kent's requirement for secure access to the Health & Social Care Network so that Link Workers could quickly and reliably access patient records, appointments and other data.

Now that Involve Kent has secure, scalable remote access and HSCN connectivity in place, Link Workers can securely access patient information on the HSCN wherever they're

based. The Social Prescribing service, enabled by this connectivity, supports personalised care and improved wellbeing across the whole of the community, in line with government guidelines.

1. GP appointments reduced by 12%
2. A&E attendances reduced by 12%
3. Patients reported a 24% increase in wellbeing
4. Secondary care stays reduced by 11%

### endoscope-i

Based in Birmingham, endoscope-i Ltd have created the Telescopic referral pathway to streamline the management of patients with a potential head or neck cancer. It uses their own designed line of endoscope adapters, which connect an endoscope to the camera of an iPhone

enabling HD recording of the endoscopic image, and an associated app. The combination of these products allow the remote diagnosis and management of patients. This fast and innovative way of assessing patients for the early detection of throat cancer integrates into patients' hospital records, with Cloud Gateway providing the secure remote access into the HSCN.

This digitally integrated approach to delivery of a procedure, typically only found in a hospital setting, supports improved patient outcomes, reduces waiting times and decreases time to diagnosis. It has been created by an expert team of ENT specialists committed to ensuring access to clinical experts is easy and fast.

# Case Study



## Digital Transformation for Healthcare | Enabling better patient outcomes

Cloud Gateway's partnership with endoscope-i is delivering a range of benefits for patients, including:

1. Optimised cancer diagnosis process adhering to 28 day Faster Diagnostic Standard
2. Improved early detection of cancer
3. Bringing specialised endoscopy to primary care clinical settings
4. Increased efficiency in secondary care
5. Improved patient communication, experiences and outcomes

### Learn more

Get in touch to learn more about their work across the public sector - including healthcare, local government and the justice and emergency services - and how they can support your organisation's objectives with digital and data.





# Case Study



## Doing Digital Together: Manchester's digital ambitions



Sherelle Fairweather,  
Digital Strategy Lead

Manchester is a bold, exciting, inclusive, pioneering city, where digital plays a part in everywhere we go and everything we do. It goes without saying that embracing digital and technology is hugely important to the city, both for

the opportunities it creates for our residents and for the potential it has to providing solutions that tackle many of Manchester's biggest challenges.

The home of the Industrial Revolution is now a hub for digital and tech and continues to experience rapid growth. Our digital economy is worth over

£5bn, employs over 88,000 people and is home to over 10,000 digital and tech businesses, that range from nationally and internationally recognised brands to small scale start-ups and entrepreneurs, across sectors. The creative & digital ecosystem really is central to the city's continued economic success.

This ecosystem is supported and complemented by the strength of our people, and we are home to an ever-growing number of tech professionals who provide the talent which makes our city so attractive to digital businesses. The city is a place where people always look to the next big thing and what the latest innovation could mean for both place and the people who call the city it's home.



# Case Study

MANCHESTER  
CITY COUNCIL

## Doing Digital Together: Manchester's digital ambitions

It's Manchester's people that will make this digital future a reality. A fair future, where everyone can benefit – from young to old residents and everyone in between, from small start-ups to global corporations, public to private sectors.

To make this vision a reality, the City Council is working in collaboration with the whole digital ecosystem, including industry, the voluntary sector (VCSE), and research organisations, to deliver the Strategy's ambitions. The Digital Strategy has been informed by a diverse range of partners at every stage and at every level - from the Strategy's first design to its Advisory Board membership, and its project delivery.

### Case study: free public Wi-Fi via smart street furniture

Manchester City Council has worked with JC Decaux to roll out free public Wi-Fi across 22 city centre smart screens. The Council and JC Decaux have worked together to provide a service that requires and collects only the most minimal amount of user data, which aligns with the Manchester Digital Strategy's commitment to ethical tech and data usage. Over 26,000 users have accessed the service to date since its launch in May, with a 27% increase in users between June and July. In the future, the potential to expand free public Wi-Fi around the city will be explored, including the opportunity to connect University managed Wi-Fi to make the city even more accessible to its lively student population.



# Case Study



## Case study: free public Wi-Fi via smart street furniture

**“If we want Manchester to be a world-leading digital city, we need everybody on board with that vision, that’s why partnerships will be key to making sure the projects and priorities set out in Manchester’s Digital Strategy happen. We are already engaging with industry on key projects under the digital skills agenda, zero-carbon and digital connectivity – and we are looking forward to seeing how these relationships progress as we deliver more projects under the digital strategy – but there is more to do to make sure people are at the centre of our Smart City approach”**

Sherelle Fairweather,  
Digital Strategy Lead

Other current projects we are working together with key stakeholders and organisations on include:

- Linking the relationships between the digital inclusion agenda and our social value agenda through our contracts and partnerships
- Increasing diverse, safe, and reliable access to public Wi-Fi and Wi-Fi in shared units
- Understanding the potential of digital careers, skills gaps, and how to address inequalities in the digital workforce
- A Digital Infrastructure Design Guide for the city and experimenting with a Digital Connectivity Asset Map
- Exploring the investment landscape for start-ups and high growth organisations
- Working with responsible tech leaders to increase our regional reputation
- A variety of digital ecosystem roundtables, events and workshops to better engage with, get feedback from, the voice of industry and VCSE organisations on the Strategy’s delivery
- Consulting with sustainability and tech experts on the future relationship between Manchester’s net zero targets and its digital ambitions

To find out more about Manchester’s Digital Strategy and find out how you can get involved, email the Team at [manchesterdigitalstrategy@manchester.gov.uk](mailto:manchesterdigitalstrategy@manchester.gov.uk) or visit the website at [www.manchesterdigitalstrategy.com](http://www.manchesterdigitalstrategy.com)

# Case Study

CITY OF  
WOLVERHAMPTON  
COUNCIL

## Futureproofing the City of Wolverhampton's Digital Infrastructure



Heather Clark, Head of Digital Projects, City of Wolverhampton Council

The City of Wolverhampton recognised very early on the importance of getting futureproofed Digital Infrastructure right in order to achieve our digital and wider city ambitions with 'driven by digital' a cross-cutting theme of Our City: Our Plan.

Leadership was crucial so we identified a senior level Digital Champion, Digital Co-ordinator and Councillor Champion, later evolving into a Cabinet Member for Digital City.

Futureproofed Digital Infrastructure: although we had relatively good superfast and ultrafast broadband, there were key gaps in particular

in our City Centre and less full fibre than many rural areas with no commercial plans to upgrade. We were successful at securing Local Full Fibre Network funding in wave 2 to connect 170 public sector buildings to full fibre broadband, including Council offices, libraries, schools and community hubs. This removed a barrier to the commercial rollout and combined with our proactive approach including introducing non-exclusive block wayleaves to support the rollout on social housing, proactive planning and dig once policies, has had a significant impact with gigabit coverage increasing from 2% in 2020 to 90.8% in 2022 and full fibre from 1% in 2020 to over 50% in 2023, one of the top 5 Councils in terms of the increase of fibre to the premise.

We've worked very closely with WM5G to support the rollout of 5G in the city. This has included developing standardised rooftop and greenfield



# Case Study

CITY OF  
WOLVERHAMPTON  
COUNCIL

## Futureproofing the City of Wolverhampton's Digital Infrastructure

leases, based on the GLA templates, to replace both existing leases and for new sites and also agreeing Code compensation and consideration. Our Planning team also encourages pre-engagement discussions relating to the location of 5G masts on Highways. This proactive approach has accelerated the rollout of 5G in the city by at least 6 months. Building on the upgrade of our streetlights to Smart Street Lights, we have also made our streetlights available to Code Operators to support the rollout of small cell, through developing a toolkit and license agreement based on best practice elsewhere.

Smart City: the significant progress made with our futureproofed digital infrastructure has enabled us to move forward with our Smart City ambitions as outlined in our Digital Wolverhampton Strategy. We are now moving

forward with phase 1 of our smart city programme, using emerging technologies to improve service delivery and the quality of life of our residents.

Phase 1 projects include:

- Environmental sensors including smart bins, street cleaning and fly tipping cameras.
- Home and care sensors monitoring living conditions, technology enabled independent living, monitoring health to prevent and manage health conditions.
- Using footfall to measure dwell times and demographic data to inform event planning within our 5-year event strategy increasing vitality of our high streets.
- Air quality and traffic management sensors housed on a street furniture to assess the impacts caused by poor air quality on public health.

An IoT data platform will capture all data from the sensors and cameras to provide data intelligence in one place, showing trends and informing policy and interventions.

Digital Inclusion: it is crucial that all our residents benefit from digital so we been proactively working with a community network of over 60 trusted partners to provide devices and connectivity to get online supported by our partners.

Wolverhampton are happy to share their learning and templates with other local authorities.

For more information, contact [Heather.Clark2@wolverhampton.gov.uk](mailto:Heather.Clark2@wolverhampton.gov.uk)

# Index Components

## Finance and Investment

At ILT1, unsurprisingly, this component shows a strong London score, however, perhaps of more interesting, is the 3rd place score for the North East of England and the 5th place score for Wales. Both regions' strong placings are a result of the SME lending metric. The SME lending data has changed this year because the data source from 2022 wasn't available, it now "measures the total value of bank lending (loans and overdrafts) to SMEs in a region. We have divided this number by the count of SMEs in each region, in order to see the approximate value of lending by SME in GBP." With this in mind the high level of SME lending can be interpreted as confidence in SMEs abilities to pay this back, or the need to borrow more to keep the business going.

Equity finance data gathered from the British Business Bank continues to show a vast proportion of funding (65.8%) continues to be located in London. The South East comes 2nd with 8.85% and East of England 3rd with 7.74%. The lowest areas are Wales (0.46%), Northern Ireland (0.49%) and the East Midlands (0.85%).



Venture Capital in tech follows a similar trend as Equity Finance with the vast majority being located in London. As the same data set used in 2022 wasn't available, the 2023 Index monitors year to date. As deals can be completed at different times of the year a direct comparison in the Index scoring is avoided but for the purposes of information and seeing the % trends we have shared the data gathered in VC in tech for 2022 and the YTD for 2023 used in the Index. The trend shows the vast majority continues to be raised in the same areas, London, the South East and East of England.

The number of high growth companies in most regions has shown a downward trend except for the North East of England. Our data source used shows that there has been a national trend with a fall in high growth companies since 2018. The Local Digital Index shows that the London and the South East both lost 245 high growth companies each since last year's Index.

Region	VC in tech (2022 full year)		VC in tech (2023 YTD)	
East Midlands	1,400	4.5%	64	0.7%
East of England	1,200	3.9%	594	6.9%
London	22,600	73.8%	5,700	66.6%
North East	271	0.8%	55	0.6%
North West	897	2.9%	209	2.4%
Northern Ireland	123	0.4%	76	0.8%
Scotland	649	2.1%	147	1.7%
South East	2,100	6.8%	1,100	12.8%
South West	538	1.7%	236	2.7%
Wales	66.1	0.2%	115	1.3%
West Midlands	111	0.3%	180	2.1%
Yorkshire and The Humber	650	2.1%	75	0.8%
	30,605		8,551	



Furthermore, Inward Investment in ICT has seen a rise in the North West and West Midlands speaking to the growth in the tech economies of those two regions.

At ITL2 the Index data shows that Inner London – West, Berkshire, Buckinghamshire and Oxfordshire and then Inner London – East are the top 3 performing regions (with two and three switching position since last year). The major urban areas all fall within the top 20 with the exception of the West Midlands that has risen five spots since last year but is behind areas such as Greater Manchester, West Yorkshire, Merseyside and even Derbyshire and Nottinghamshire, that scores a commendable 5th spot in 2023.

The fall in high growth companies is largest in the areas with the most high growth companies (e.g. London Inner West sees a 145 fall, down to 1,145 and this makes up the largest share of the 245 fall overall in London). And some areas do buck the trend e.g, Lincolnshire retains the 100 high growth firms they had in 2022. There's perhaps further analysis to be done by other agencies on the types of companies present in regions, who they're employing, and if the drop is down to M&A or even specific sector changes.



# Case Study



## Glasgow showcases open-access database to profile regional tech ecosystem and investment



Gavin Smyth, Tech Ecosystem Manager, Glasgow City Council

Over the past two years, Glasgow City Council worked with Dealroom.co, the foremost data provider on startup, early-stage and growth company ecosystems in Europe and around the globe, to build the most

comprehensive database of its rapidly growing regional technology ecosystem.

The result is the [Glasgow Tech Ecosystem Platform](#) - an open-access database offering to better connect start-ups with investors and corporates, providing real-time insights on the health of the regional innovation economy

and showcasing the City Region's wider tech ecosystem to the world.

The single platform is specifically designed to support scaling tech communities, with reliable intelligence, overarching trends and headline figures as well as detailed data on a range of ecosystem actors across the city region. The data covers both funded and unfunded startups and scaleups as well as investors and accelerators, universities, co-working spaces, tech meetups and more.

The new database provides a detailed picture of the evolving tech ecosystem in all its facets and will be refreshed through collaboration with the many stakeholders across the city region. Any startup, investor, or ecosystem stakeholder can add their company and organisation details



# Case Study



## Glasgow showcases open-access database to profile regional tech ecosystem and investment

and enhance their profile - ensuring both open access to real-time data for the community and opening up windows of market opportunity. Better tech and investment industry data will support improved local ecosystem connectivity and help promote the Glasgow Metropolitan Area internationally as a promising emerging hub for tech and innovation.

The comprehensive mapping of the pipeline of tech-enabled SMEs allows the tech ecosystem to be more effectively benchmarked and promoted. This robust market square of activity and community fabric was highlighted as an essential ingredient to strengthen resilience and scale and grow SMEs per the recommendations of the Scottish Technology Ecosystem Review (STER).

The first [Glasgow City Region Ecosystem Report](#) was recently published to showcase the platform and highlight the strengths and potential areas of growth in the startup ecosystem. By analysing data on funding, exits, and talent, the aim is to provide insights that can inform the decisions of founders, investors, and enablers operating in or considering entering the Glasgow startup market. Additionally, founders, investors, and enablers can claim and enhance their profile on the Database, thereby improving the visibility of their company or portfolios and contributing to the growth of the ecosystem.

Glasgow City Council has also developed and supported a number of other complementary key initiatives to address these national priorities. These include the support of increased market

square activity through an ecosystem event grant to subsidise the proliferation of larger scale tech events and conferences. This in turn complements the recent launch of two Tech Smart support grants to support both collaborative space rental and community events for tech meetups. Glasgow City Council's Digital Economy team ensures the city attracts and grows the required digital foundations including skills, innovation environment, tech-enabled businesses, connectivity and infrastructure.

Aligned to the national Government-commissioned Scottish Technology Ecosystem Review, a central objective is the attraction and funnelling of investment to strengthen and grow the 'market-square' for Glasgow's technology ecosystem.

# Case Study



## Glasgow showcases open-access database to profile regional tech ecosystem and investment

If you would like to understand more the Dealroom-powered platform or for interested parties looking to get plugged in to Glasgow City Region's tech ecosystem, please email [gavin.smyth@glasgow.gov.uk](mailto:gavin.smyth@glasgow.gov.uk)

**"The Glasgow Tech Ecosystem has entered a virtuous cycle. Catalysts such as the Innovation Districts, Tech Scaler, and an increased focus from our universities on entrepreneurship are combining to create more, and stronger startups. These, in turn, create more belief, and strengthen the ecosystem's experience base, leading to further start-up creation. It's the most exciting entrepreneurial environment we've seen in Glasgow in living memory."**

Mark Logan, Chief Entrepreneurial Advisor at Scottish Government



# Case Study

The Sage logo, consisting of the word "Sage" in a green, sans-serif font, is centered within a white circular background.

## North East England Chambers of Commerce Levelling Up partner report Theme: Productivity



Paul Struthers,  
MD, UKIA, Sage

The UK has one of the most dynamic and entrepreneurial economies in the world, where small and mid-sized business (SMBs) are drivers of growth. Despite the challenges over the past few years, the UK's five

million small and mid-sized businesses have remained resilient and agile. Sage data shows that in Q4 2022, North East SMBs profitability rose by 9.6% year-on-year at a time when GDP rose by just 0.1%.

When it comes to technology, the link between digitalisation and productivity is well known. Sage's

Digital Britain report shows that digitalisation is driving performance of SMBs in new ways. It has reduced average payment times for North East businesses, from 31 days to 22 days over the last 4 years and is contributing £10bn to the North East economy. The Enterprise Research Centre (ERC) found that, three years after adopting digital tools, productivity increased when measured via sales per employee, for example, CRM systems boosted growth by 18%. The French government also predicts adoption of electronic invoicing in France by 2024 will represent a gain for France's economy of at least €4.5bn.

Despite this, a 2021 report by the ERC found that 25% of UK SMBs do not use basic digital tools such as E-commerce or Accounting and HR Software. Further, inflationary pressures, and low cash balances, mean UK SMBs are not in a



# Case Study

The Sage logo is a green, stylized wordmark inside a white circle, which is partially overlapping a dark red banner.

## North East England Chambers of Commerce Levelling Up partner report

### Theme: Productivity

strong position to invest in tech. North East businesses who have invested more in tech are more confident in their future success, yet SMBs across the UK plan to increase technology investment by only 13%, below the European average of 18%. As our economy rapidly moves towards digitalisation, we need to ensure that we scale tech adoption if we are to achieve a step change in productivity, needed to “level-up” the economy.

Progress remains slow. Government initiatives to help businesses move into the digital age and be more productive, such as Making Tax Digital (MTD) and incentive schemes like Help to Grow: Digital have recently been delayed or have closed altogether.

To address this, Sage has published a Blueprint for Digital-led Growth setting out a co-ordinated plan for how to make the UK an advanced digital economy and address flatlining productivity. The Blueprint contains policy proposals that will prevent the UK falling behind other hi-tech nations and trigger much needed investment in innovation and automation to increase productivity and strengthen the UK economy.

There is potential to accelerate growth in the UK to the tune of £232bn extra per annum through increased digitalisation by providing the right investment incentives. To achieve this, the Government needs an ambitious plan to fully digitalise the economy and boost British business, or the UK risks falling behind other nations.

As we look to the challenges ahead, the Government should underpin tech investment by providing a time-limited tax relief on productivity enhancing software. Like the Australian Technology Investment Boost, a “Small Business Digital Growth Allowance” would offer tax reliefs on investment in productivity software to help UK SMBs overcome financial barriers to digitalisation and stimulate the investment needed for the UK to remain competitive and power growth.

More progress also needs to be made to tackle the significant burden of late payments, which stifles innovation and reduces productivity. Although the overall trend in late payments has improved, 40% of invoices are still not paid on time with the average business owed £22,000 at any point in time. Digitalisation and technological advances have a

# Case Study

The Sage logo is a white circle containing the word "Sage" in a green, sans-serif font.

## North East England Chambers of Commerce Levelling Up partner report Theme: Productivity

key role to play in addressing this. Accounting software has enabled businesses to streamline billing processes, get paid faster and as a result, be more productive.

However, the Government's MTD programme to create a tax system fit for the 21st Century has now been superseded by leading tax authorities around the world, for example, in the European Union (EU) and South America, who are introducing e-invoicing. This is central to the digital innovation needed to tackle late payments. It means businesses do not need to manually handle invoices, allowing them to be more productive and will help create a world-leading digital economy in the UK.

As the backbone of the UK economy, it is vital that SMBs are empowered to embrace digitalisation and harness emerging technology,

needed to become more productive and grow sustainably.

### About Sage Group

Sage exists to knock down barriers so everyone can thrive, starting with the millions of small and mid-sized businesses served by us, our partners and accountants. Customers trust our finance, HR and payroll software to make work and money flow. By digitising business processes and relationships with customers, suppliers, employees, banks and governments, our digital network connects SMBs, removing friction and delivering insights. Knocking down barriers also means we use our time, technology and experience to tackle digital inequality, economic inequality and the climate crisis.



# Case Study



## The West Midlands: A world-class tech investment destination



With a strong track record in driving innovation, the West Midlands is building a reputation as an ideal environment for ambitious, groundbreaking international firms to develop and commercialise new

technologies. So, what sets the region's tech ecosystem apart from its global competitors and why is it fast becoming a foreign investment hotspot?

In 2022-23, the West Midlands cemented its reputation as a globally sought after investment destination, emerging as the UK's top regional

location for attracting foreign direct investment (FDI) outside London. According to [official data](#) from the Department for Business and Trade (DBT), 181 projects and 8,252 jobs landed in the region during the 2022/23 financial year and it's no surprise that tech-focused investments represented a prominent trend.

Valued at over £15bn, the West Midlands is the most established and fastest growing tech sector outside of the UK's capital. As well as being a UK leader in emerging tech, with the largest spread of emerging technologies, the region is home to the highest number of companies developing new tech and is a hotbed of specialist skills, with 8,000 computing science students and 76,000 tech-related jobs.



# Case Study



## The West Midlands: A world-class tech investment destination

The West Midlands is a unique three-city region, encompassing multiple, distinct centres of knowledge production, that combine to create one of the UK's largest innovation platforms. Its quadruple helix of world-class research assets, broad and deep talent pool, valuable public sector support and unique technology capabilities makes it the ideal location for groundbreaking companies to thrive.

Recently confirmed as the best-connected UK destination for 5G, the West Midlands also sits at the top of the connectivity table. As well as being home to the UK Telecoms Lab – an £80m, state-of-the-art facility researching and testing 5G and 6G technologies – the region is the site of the nation's only multi-city 5G testbed. This offers businesses unique opportunities to pilot, stress-test and evaluate new 5G user cases and applications.

The region's unique, collaborative R&D ecosystem – which includes nine world-class universities, three UK catapult centres and 100+ innovation accelerators and incubators – makes it an ideal location to drive innovation at pace and scale. For this reason, international companies such as global product engineering and digital services company, Tata Technologies and cybersecurity specialist, Goldilock are choosing the West Midlands to trial and validate their innovations.

### Tata Technologies' expansion of its European Headquarters, Leamington Spa

- Indian-owned Tata Technologies wanted to scale up its West Midlands operations in order to leverage the region's wealth of STEM talent, while continuing to drive world-class innovations for its international clients.
- The business expanded at its state-of-the-art European Headquarters in Leamington Spa, creating 350 skilled roles across areas such as cybersecurity, project management and business analysis.
- Tata Technologies also established new Centres of Excellence in partnership with the University of Warwick and University of Wolverhampton, helping local people to fast-track their careers in the mobility industry, while diversifying the workforce.
- The investment emphasises how the region stands out to global heavyweights, looking to take advantage of its strengths in specialist areas, including cybersecurity and AUTOSAR, supported by the region's world-class universities and deep tech talent pool.



# Case Study



## The West Midlands: A world-class tech investment destination

- Tata Technologies' investment also exemplifies the birth of an engineering supercluster in the West Midlands, resulting from the convergence of the region's world-class advanced technology sector and the UK's largest automotive, aerospace and rail clusters.

### Goldilock's expansion at Wolverhampton Science Park

- In September 2022, Canadian cybersecurity firm, Goldilock expanded in Wolverhampton to accommodate its growth strategy, with plans to create an additional 25 jobs over the next three to five years.
- Goldilock's new base at Wolverhampton Science Park provided state-of-the-art R&D

and production facilities for accelerating developments in its patented remote security technology, supported by the University of Wolverhampton's world-class strengths in cyber research.

- Being based in the West Midlands provides the business with access to cyber skills on a practical and affordable level, while being within easy reach of London's tech ecosystem.
- The West Midlands Growth Company (WMGC) kept Goldilock connected to significant tech events taking place in the region, creating valuable networking opportunities and allowing them to amplify their voice within the region's booming tech marketplace.

While the West Midlands is already home to an internationally competitive tech sector, it's vital that the region makes the most of the new powers and £1.5bn budget provided by the Deeper Devolution Deal, which will help it to attract more FDI from global tech firms. As part of the deal, the region's development of a new international strategy, led by WMGC, will also be key to pulling ahead of its global competitors and unlocking the sector's future investment pipeline. While the region is already becoming recognised as the ideal environment for innovative overseas tech firms to thrive, it's clear that there's so much more to come.

To find out more about the West Midlands' Creative & Digital Technologies sector, [visit here](#).



## Index Components Research and Innovation

At regional level, following Greater London, East and South East of England, Scotland sits on the 4th place with a rise of four places since last year's results, due to an increase in the Innovate UK grants the regions has obtained. On 5th place, it is followed by West Midlands. The North West and South West also score well in this component showing the strengths of these regions in securing long-term funding for innovation. It is worth noting that at ITL1, the R&D spending by all sectors data is not comparable with last year's figures due to a different methodology being used by ONS when breaking down regions.

Region	R&D Spend	Innovate UK Grants	HMRC R&D Tax Credits	Ranking
Greater London	9,340	6,090,475	2,065,000,000	1
East of England	11,425	1,462,375	765,000,000	2
South East	13,589	3,554,010	1,210,000,000	3
Scotland	5,033	2,685,089	295,000,000	4
West Midlands	4,710	2,320,140	430,000,000	5
North West	6,533	864,461	480,000,000	6
South West	4,377	801,203	325,000,000	7
East Midlands	3,708	262,616	330,000,000	8
North East	1,434	156,311	125,000,000	9
Wales	1,658	280,508	135,000,000	10
Yorkshire and The Humber	3,198	301,793	290,000,000	11
Northern Ireland	1,164	138,118	130,000,000	12

At ITL2 level, we can get a clearer picture of where the money for innovation is being distributed to, according to data from HMRC, ONS and UKRI, and below we have a snapshot of our Index results for the top 10 performing areas. This shows Berkshire, Buckinghamshire and Oxfordshire and Herefordshire, Worcestershire and Warwickshire on the first two places, with a combined £8.1 billion in R&D spend, £121 million Innovate UK grants obtained and £1 billion in R&D tax credits. By contrast, the last 20 areas in our Index combined would make up £123 million in Innovate UK grants, similar to the top 2 scoring areas of Berkshire and Herefordshire.

Compared to last year's results, we see East Anglia moving up one place with an increase of around £165,000 in the R&D spend, switching places with Herefordshire which sees a decrease of £321,00 in R&D spend.

The total cost of HMRC R&D Tax Credits awarded to businesses in the top 10 best-scoring areas, has also decreased from £3.92 billion in 2022 to £3.85 billion in 2023, whilst the Innovate UK grants allocation remained the same.

Region	R&D Spend (£ millions)	Innovate UK Grants (£ millions)	HMRC R&D Tax Credits (£ millions)
Berkshire, Buckinghamshire and Oxfordshire	4076.4	81	595
East Anglia	4112.3	40	455
Herefordshire, Worcestershire and Warwickshire	1332.9	55	170
Inner London - West	3944.6	59	1595
Gloucestershire, Wiltshire and Bath/ Bristol area	1890.7	106	230
Derbyshire and Nottinghamshire	1555	69	125
West Midlands	1273.3	71	375
South Yorkshire	439.4	49	60
Bedfordshire and Hertfordshire	2079.2	24	250

techUK's ["A UK tech plan"](#) calls on the government to ensure we have a competitive innovation economy, building on UK's world-leading research landscape, from which over 5,000 start-ups have spun-off across 125 education institutions. The report highlights the need for a long-term strategy for R&D incentives, allowing businesses to invest here, focusing on the future of the R&D tax credits. It will also be important to reduce the cost of R&D facilities, as lab spaces are very expensive, and the

Government should improve the planning system for research sites. These changes would also sit alongside reducing the grid connection times and cutting the cost of investing in new compute power and networks. Furthermore, more traction needs to take place when it comes to commercialising and deploying emerging technologies and innovation and ensure this is market ready to be able to support a thriving economy.



# Case Study



## Connected Innovation Programme (Norfolk and Suffolk)



Julian Munson, Chair of  
Connected Innovation Network

The joined-up approach to better innovation support across Norfolk and Suffolk has been driven by the desire for collaboration across a wide geographic region and to make our businesses and

innovation hubs easy to navigate for national and international partners.

The global societal challenges facing the East of England are complex, but the ideas and solutions are often local. To unlock our world leading science and research base and technology capabilities highlighted in the Government's Innovation

Strategy, a step change is required. Fresh thinking is needed, and the programme plays to the region's reputation for openness, friendliness and inclusion.

Innovative places also have the potential to become magnets for talent and investment and it's vital that we continue to push forward and invest in our homegrown talent as well as attracting skills and technologies from around the world. Norfolk and Suffolk and the wider East of England is in an exciting position to be, at the very forefront of science and innovation in the UK helping to position the country as an 'Innovation Nation with Global Impact'. Norfolk and Suffolk is already leading the way in progressing a fully connected rural and urban innovation cluster through the Connected Innovation Programme, curated by New Anglia LEP in alliance with a wide range of partners. This brings together incubators



# Case Study



## Connected Innovation Programme (Norfolk and Suffolk)

and co-workspaces, the academic and research community and Government support organisations, such as Innovate UK and the Catapult Network, as well as private investors and specialist business networks.

Connected Innovation is a multi-sector initiative that joins the dots across 25 innovation centres, research institutes, science parks, universities, incubators and collaborative business spaces with a combined network comprising well over 500 innovative businesses with high growth potential.

Our approach is very much about collaboration, not competition, creating a dynamic and growing network and a platform where people come together. With our successful track record and support from partners to date, we can continue to build on our existing diverse science, research

and technology capabilities covering digital tech (including AI, 5G/6G and Fintech) health & life sciences, cleantech, agritech, renewable energy, marine science, robotics and satellite technologies.

### This regional partnership:

#### Facilitates collaboration:

- Between our globally leading research, education and business base
- Between the innovation hubs and their geographic clusters, to share best practice and engage in new innovative activity.
- Across the UK's regions, building on existing cross-cluster relationships formed around digital tech, energy, maritime, space, agritech, and manufacturing and engineering.
- By connecting the dots between innovation hubs, universities, businesses and the region's

support networks and organisations.

- Through simplifying the business and innovation support landscape for businesses working closely with key innovation funding and mentoring programmes (e.g., New Anglia LEP's Growth Through Innovation Fund, Innovation Grant Mentoring Programme, Innovate UK EDGE, etc.) and investor networks (e.g. Anglia Capital Group and Oxford Innovation Finance).

#### Drives cross-sector innovation:

- Linking up key business clusters with the innovation assets and key emerging technologies to transform productivity and deliver the transition to Net Zero
- Linking key technologies with Norfolk and Suffolk's strategic and emerging sectoral opportunities, supporting agrifood, aquaculture, creative industries, digital, health and social

# Case Study



## Connected Innovation Programme (Norfolk and Suffolk)

care, hydrogen, manufacturing, marine science, offshore wind, space and the visitor economy

offshore wind, nuclear, hydrogen, marine and clean tech innovations.

### Key networks and sectors engaged by the programme:

- Tech East
- LEP Industry Council for Digital Tech
- Innovate UK
- Innovate UK EGDE
- Innovate UK KTN
- Catapult Network – including the Satellite Applications Catapult, Offshore Renewable Energy Catapult, High Value Manufacturing Catapult and Digital Catapult.
- Barclays Eagle Labs
- EEEGR and Sector Councils
- LEP All-Energy Industry Council – supporting

- Agri-Tech-E
- LEP Agrifood Industry Council
- New Anglia Advanced Manufacturing & Engineering (NAAME)
- Space East and satellite industries
- Freeport East
- FIG Norwich and FIPS Ipswich
- Creative East and the Norfolk & Suffolk Creative Industries
- MENTA
- New Anglia Growth Hub
- Education – Universities and Colleges
- Public Sector - Local Government, Health & Social Care, Education etc
- New Anglia Innovation Board

### Connected Innovation Programme in numbers (2021-23):

- 28 events delivered with 600 attendees
- 86 collaborations and introductions made as a result of project activity
- Over 60 hub businesses engaging with the Growth Hub
- 32 hub businesses accessing wider support schemes
- 31 hub businesses applying for support through the Growth Through Innovation fund

Read the full case study <https://newanglia.co.uk/wp-content/uploads/2023/03/New-Anglia-LEP-Innovation-Prospectus-Feb-23.pdf>

Find out more about the Connected Innovation Network in this short video - [Connected Innovation - YouTube](#)

# Case Study



## Journey to the Stars: From Idea to Ignition



Andrew Butt, Head of Business Development and Commercial, Reliance Precision Limited

### How Reliance won a £3.5m contract to supply a space prime

Space Hub Yorkshire is a coordinator of Space activity across the Yorkshire and Humber region, driving collaboration, investment and advocating Space

research and industry opportunities. Set up in November 2020, Space Hub Yorkshire have grown to successfully support businesses, academia and investment in the region while consistently advocating the skills and capabilities of all involved. Promoting funding from the UK Space Agency and European Space Agency is all part of their mission, all while making businesses aware



Felix Barr, Cluster Development Manager, Space Hub Yorkshire

of how they can get involved in the Space sector to advance the UK industry. One such member of Space Hub Yorkshire is Reliance Precision, an advanced manufacturing company based in Huddersfield. Space

Hub Yorkshire helped to promote the company after they successfully won a contract to supply a space prime.

### Where did it all start?

Airbus had a need for a non-[ITAR](#) restricted motor-gearbox and reached out to Reliance as an established supplier of gears for satellites to see





# Case Study



## Journey to the Stars: From Idea to Ignition

they we were interested in the project. Like all businesses they evaluated the opportunity: cost, resource, time, profit, etc. They decided that undertaking design, development, prototyping and manufacture for one of the largest space companies in the world was a good idea and a fantastic opportunity for long term business development. It was therefore over to the experienced design engineering team to produce a Statement of Work and define how they would deliver an innovative solution to meet Airbus' needs and wants.

Airbus Satellite

### Funding, Research and Development

Reliance applied to the [European Space Agency \(ESA\)](#) via the [UK Space Agency](#) for funding from their Advanced Research in Telecommunications

Systems ([ARTES](#)) programme. Costs were split between Airbus as the Prime customer, ESA as the innovation agency, and Reliance as the product owner. The funding secured was to mature the design for the [EuroSMG](#), capable of driving the Solar Array Drive Mechanism (SADM) on Airbus' [Eurostar E3000](#) satellite.

After several delays to the project the design was re-purposed to suit first the Eurostar NeoSAT, and later the OneSat platform, with the revised project launched on 20th September 2017. The Critical Design Review took place a short 6-months later (19th March 2018) and the initial Qualification Model delivered on 23rd April 2019.

### Qualification and Launch

The design then needed to be tested, and so began an almost 3-year long flight qualification test

programme, running concurrently with production volume manufacturing scale-up. The product was put through an accelerated life test (circa 35 years), along with all the other usual testing regimes. Following life-test, the unit was returned to Reliance for a full strip and component level survey such that any anomalies could be identified and analysed. This exceptionally expensive process is needed to prove out the performance of the design and de-risk the products used in satellites that cost can cost up to €200 million each!

### Rate Ramp Up and Investment

The first flight took place aboard [Eutelsat Hotbird 13F](#) and 13G, launched from a SpaceX Falcon on 15th October 2022. This paved the way for follow on production contracts which required further substantial investment in tooling, clean rooms, processes, training etc such that the product

# Case Study



## Journey to the Stars: From Idea to Ignition

could be built in a production, rather than a test, environment.

### Spreading the Word

As a business, Reliance learnt a lot more about the space industry: quality assurance, product assurance, **ECSS standards**, project planning and control, change management, estimating, etc but despite the challenges they faced, they stuck with it and were ultimately successful. As a result, Andy now represents the business at industry events, spreading the word, sharing best-practice and understanding to help other businesses starting their space journey. Andy am also a member of the management team for the regional space cluster, **Space Hub Yorkshire**, where they connect companies, build capability, share knowledge and ultimately support the delivery of the UK Space Agency's **National**

**Space Strategy** and UK Ministry of Defence's **Defence Space Strategy**.

[www.reliance.co.uk](http://www.reliance.co.uk)

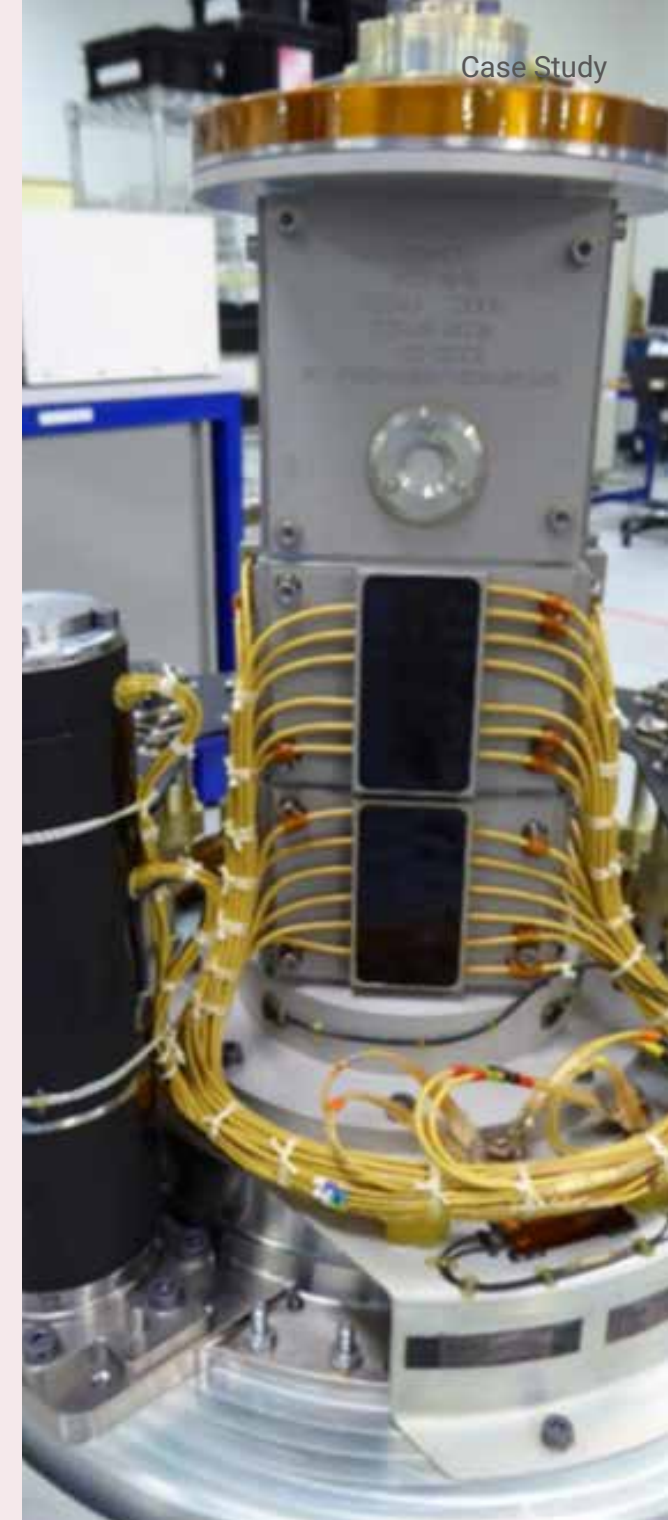
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# Index Components

## Trade

The data on goods and services exports is up across every region. This is welcome news but the regional disparities remain and gaps aren't closing between regions since 2022's Index. For example, the gap in service exports between London and the North West of England has increased since 2022 (by £1,608m).

The trade component measures the total value of exports in goods for UK's nations and regions on an annual and quarterly basis in GBP millions, this is benchmarked against the highest figure achieved in any nation or region and measured across both the ITL1 and ITL2 levels. We are also looking at the value of service exports which is benchmarked against the highest figure achieved in any nation or region and measured across both ITL1 and ITL2 levels.

At ITL1, the top 3 is made up by London, Scotland and East of England, showing the region's strengths in the services sector, followed by Wales on 4th place, and South East on 5th. The West Midlands scores on the 9th place and the last 3 spots are occupied by South West, Yorkshire and Humber and Northern Ireland.



We can highlight that trade measured in goods and services exports has risen on last year with data compiled from 2022 and 2021 and we may not see the impact of inflation and interest rate rises until the next iteration of the Index.

Zooming in to ITL2, we can see that Berkshire, Buckinghamshire and Oxfordshire, East Anglia and Herefordshire, Worcestershire and Warwickshire take the first 3 places with a combined value of goods exported annually of £31 billion, and value of services exported across all industries of £29 billion. By contrast, the bottom 9 regions, including Outer London South, Outer London East and North East, Highlands and Islands, and Lincolnshire, combined would add up to £31 billion worth of goods exported. However, when it comes to the value of services exported, the bottom scoring 14 regions would add up to £29 billion and catchup to the top 3 regions.

Region	Goods Exports (in £ millions)	Services Exports (in £ millions)	Ranking
Berkshire, Buckinghamshire and Oxfordshire	14,514	17,524	1
East Anglia	10,191	9,296	2
Herefordshire, Worcestershire and Warwickshire	6,431	2,334	3
Inner London - West	23,186	92,857	4
Gloucestershire, Wiltshire and Bath/ Bristol area	14,820	7,241	5
Derbyshire and Nottinghamshire	15,352	2,810	6
West Midlands	13,038	6,198	7
South Yorkshire	3,173	1,969	8
Bedfordshire and Hertfordshire	12,770	5,490	9
North Yorkshire	1,377	1,534	10

# Case Study

Hawksford

## Unlocking Success: The UK for Tech Startups



Gerard Rafferty, Director,  
Hawksford UK

### Introduction:

As the tech startup ecosystem continues to thrive globally, the choice of jurisdiction from which to launch/base operations can significantly influence a company's success.

From Silicon Valley to Silicon Roundabout and beyond to the regions, the UK has established itself as a powerhouse for tech startups. With increasing competition for such business, we briefly highlight some of the UK's primary attractions while also providing a nod to competing incentives in Singapore, Hong Kong, and Ireland.

### UK Advantages:

- 1. Access to Capital:** The UK offers ready access to capital with a well-developed venture capital ecosystem and a robust network of angel investors. London, as a global financial hub has long since attracted substantial investment for tech startups. The government funded start-up loans programme offers low-interest loans alongside mentorship and support for early-stage startups.
- 2. Talent Pool:** With continued and increasing focus on science, technology, engineering, and mathematics (STEM) disciplines, the UK continues to produce a steady stream of talented graduates and specialists who contribute to the innovation and growth of tech startups.



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Hawksford

## Unlocking Success: The UK for Tech Startups

**3. Government Policies:** The UK government actively supports the tech sector through various initiatives and policies including grants and funding programmes to foster innovation and research. One such example, the UK-wide Future Fund seeks to 'super charge' this sector through investment in research and development to help build a future economy, create skilled jobs, and cement the UK's status as a scientific superpower.

**4. Business Environment:** The UK's business-friendly environment is characterised by its stable legal system, strong intellectual property protections and transparent regulations. This environment enhances investor confidence, attracts international business and aides the promotion of innovation and entrepreneurship. The UK is also home to several prominent

and innovative tech accelerators that provide support, mentorship, and resources to help tech startups grow and scale their businesses.

**5. Taxation:** Amongst a broad range of benefits in this area, tech startups engaged in qualifying R&D activities can claim tax relief on eligible expenditures, resulting in availability of additional funds for growth. The Enterprise Investment (EIS) and Seed Enterprise Investment Schemes (SEIS) are tax relief initiatives designed to encourage investment in early-stage companies. These enable private investors access to generous tax breaks arising from investment in qualifying UK startups, again, making it easier for tech startups to secure funding.

**6. Global Talent Visa:** The Global Talent Visa

program enables the brightest and best worldwide tech talent to come and work in the UK's digital technology sector. This programme provides a streamlined process for obtaining a visa, making it easier for talented international entrepreneurs and tech professionals to relocate, work and establish their own startups in the UK.

### Singapore, Hong Kong, and Ireland:

While the UK offers numerous advantages and supports beyond those referenced in this article, Hawksford have had the benefit of accessing tech incentives across our global offices with some outlined as follows:

A Research, Innovation, and Enterprise (RIE) funding scheme remains one of the cornerstones

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of Singapore's national strategy to develop a knowledge-based information-driven economy, offering grants and support for R&D activities, assisting startups to accelerate their innovation and drive growth.

Hong Kong offers favourable tax rates, access to various government backed funds intended to boost competitiveness as well as programmes to support local enterprises' use of tech services and solutions. The recently introduced Top Talent Pass Scheme enables graduates from the world's 100 universities to obtain a two-year visa to work in Hong Kong, without the requirement for a sponsoring company.

Both Singapore and Hong Kong have long since served as key gateways to Asia markets, offering planning advantages and opportunities as regional

hubs for innovation, technological development, and expansions across the region.

Ireland offers its own range of incentives. The Knowledge Development Box, for example, provides a reduced tax rate of 6.25% on income generated from qualifying intellectual property. Such measures, combined with Ireland's ease of doing business, competitive tax regime and commitment to EU membership have further enhanced Ireland's attractiveness in this field.

### Conclusion:

Despite increasing competition, the UK continues to serve as the blue-chip planning jurisdiction of choice for ambitious tech startups primarily due to the factors outlined above.

Through a combination of resources and support from governmental and specialist trade associations such as techUK alongside the expertise of global start-up and expansion professional service firms such as Hawksford, the UK and all of its vested tech-growth contributors are well positioned to add further chapters to the UK tech startup success story.

Hawksford is a global corporate services, fund administration and private client services firm who have assisted numerous tech startups and expansions through our European and Asia offices.

## Index Components Data Ecosystems

This is a new component for 2023 and it's exciting to see this component added into the Index. It was always intended to measure this component but we previously didn't feel confident in the data. This is a strong first step and we hope that more data sources can be added in the future to improve the strength and changing nature of this important metric. While this is only measured at ITL1, as we don't have suitable data sources at ITL2, this does need to change if we are to take more action on a more local basis.

While London may be ranked 1st in this metric this doesn't reflect the smaller gap between the UK's Nations and Regions in this component compared to others when building the Index. This presents the scope for regions to take action to improve activity in this component and thus increase their position and stance in the Index. The South East comes 2nd, Yorkshire and The Humber finishes a credible 3rd and the West Midlands 4th.

The Index shows that the UK has 183,000 people in data roles, and there's significant numbers in London (36,000), the South East (34,300) and the North West (23,500). The



high number of roles doesn't always reflect their final position in the Index.

Perhaps slightly concerning is that across all the areas of the UK when businesses were asked if they 'acquire or collect data' there were a high number of businesses who suggested they didn't! The high was 34% saying yes in some regions, and the low was 17%.

As this is a new component we have no data from 2022 to compare this year's scores with. But some interesting elements show, 33% of businesses responding in the North East say they share their data with public bodies, charities and not for profits, the highest of any area in the UK (Yorkshire and Humber is 2nd on 31%). And in Northern Ireland when firms were asked "to what extent do you feel data from outside of your business has

become more readily available to your business within the past 3 years?", 59% of businesses responding said yes, the highest in the UK (the lowest was 46% in Scotland).

Region	Data Acquisition	Data Sharing	Data Recipients	Data Availability	Data Roles	Ranking
Greater London	34%	21%	22%	55%	36,000	1
South East	34%	19%	21%	53%	34,300	2
Yorkshire and The Humber	34%	18%	31%	48%	10,700	3
West Midlands	34%	17%	22%	53%	14,200	4
North East	27%	17%	33%	56%	4,600	5
East of England	30%	17%	22%	57%	15,700	6
North West	28%	15%	19%	56%	23,500	7
South West	28%	13%	23%	54%	15,700	8
East Midlands	28%	19%	21%	52%	7,900	9
Scotland	31%	16%	17%	46%	11,200	10
Wales	19%	10%	23%	53%	6,900	11
Northern Ireland	17%	13%	29%	59%	2,300	12

# Case Study



## GBG Investigate helps Oxford City Council stop millions of pounds' worth of fraud



Paul Daley, Director for  
Public Sector & Partners, GBG

Every year, Oxford City Council's Counter Fraud Investigation Team detects and prevents millions of pounds' worth of fraud.

### The Challenge

Oxford City Council's Counter Fraud Investigation team works across a wide range of council services, from social housing to Council Tax and Right to Buy. Its mission? To prevent financial losses, identify stolen funds for recovery and assist national agencies.

That might mean tracking down false housing or Right to Buy applications, illegal subletting, fraudulent Council Tax exemptions and many other

**"Right to Buy applications are one of our biggest fraud risks and we check GBG Investigate for every single one."**

**"GBG's strong support, along with Investigate's excellent data coverage and accuracy add up to a dependable, efficient and effective tool."**

**Nathalia Odwin, Intelligence Officer,  
Oxford City Council**



# Case Study

The logo for GBG, consisting of the letters 'GBG' in a bold, black, sans-serif font, centered within a white circle.

## GBG Investigate helps Oxford City Council stop millions of pounds' worth of fraud

crimes. The team's efforts protect public funds, ensure residents receive maximum value for money, free up scarce social housing for others and make criminals repay stolen funds.

"People give many reasons when dealing with local authorities," says Intelligence Officer Nathalia Odwin. "When the back story doesn't add up, it's up to our team to discover the truth. It's all about information gathering – double-checking and cross-checking data."

That demands a range of methods, from formal interviews to searching through reference data on UK residents, businesses and properties. For the latter, the team have long relied on GBG Investigate.

### The Solution

GBG Investigate gives Oxford's Intelligence team access to over 1.5 billion enhanced, interlinked records, with sophisticated yet intuitive searching and visualisation options. It's simple to opt out of the Electoral Roll, but GBG's multi-sourced, consented commercial data reveals otherwise hidden links to cohabitants, channel contacts and aliases. When just one email can open up a whole new line of inquiry, Investigate is the best starting point for any UK-wide investigation.

"We hold a lot of information on our own tenants but, when we have to look beyond Oxford, GBG Investigate is always our first port of call," says Nathalia. "We've previously used lots of different systems and how clearly GBG Investigate presents such a wide range of information really stands out."

You can immediately see how different people, addresses and businesses are linked together."

GBG Investigate's business and consumer data is a broad, detailed and intricately interconnected resource. This helped the Intelligence team discover that an application for social housing from a mother and daughter claiming to be "homeless and penniless" actually had money available and spent considerable time out of the UK – meaning they do not qualify for housing support. They withdrew their housing application.

In another case of fraud, an email address found via Investigate revealed that a tenant was mostly absent from Oxford and likely lived at her parents' address, disqualifying her for social housing. "It became clear she didn't live there and now that housing is available for someone else who actually needs it," says Nathalia.

# Case Study

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## GBG Investigate helps Oxford City Council stop millions of pounds' worth of fraud

### The Outcome

The team has now successfully closed thousands of cases. In the 2021-22 financial year alone, its investigators prevented losses and generated income totalling over £6.7 million for Oxford City Council – more than six times the team's annual target. Between April 2016 and March 2021, the total was a staggering £26.5 million, along with stopping £12.5 million of fraudulent and irregular Business COVID grants.

In fact, the team is so effective that, branded as the Oxford Investigation Service (OIS), it now serves external clients. In 2021-22, it recovered £2.1 million for them – and also generated an extra £164,272 income for Oxford City Council. Successes included the second-highest Unlawful Profit Order ever: the criminal had to

repay £145,178 to Riverside Housing for illegally subletting her flat.

“When you have a long list of cases to get through, it's so much more productive to just log into Investigate,” says Nathalia. “With a £98,000 discount, Right to Buy applications are one of our biggest fraud risks and we use GBG Investigate to check every single one. It's strange that, when we start asking questions, how many withdraw their Right to Buy application!”

GBG's strong support, ongoing training, 100% service uptime and, most of all, Investigate's excellent data coverage and accuracy: they all add up to a dependable, efficient, and effective tool. “Investigate is very intuitive and easy to use,” says Nathalia. “If we ever need help, we know we can rely on GBG.”



# Regional Recommendations

## East Midlands

The East Midlands shows strong fundamentals without finishing top in many of the metrics. Digital Infrastructure needs to improve across the region, with Lincolnshire one of the lowest performing parts of the UK but with only a narrow gap to the areas immediately above them. This naturally impacts digital skills metrics such as internet usage and public service usage. R&D spending in Derbyshire and Nottinghamshire is strong and needs to be used to attract additional investment and high growth firms.

## East of England

The East of England occupies third place overall and has some significant areas of strength particularly research and innovation, as well as digital adoption because of the significant digital employment share and high level of R&D spending.

East Anglia has high research and development spending (securing 2nd spot in that component) but its digital infrastructure remains low (36th in that component) and ensuring progress in this would help raise the area and regions Index score. The digital skills score for Essex outperforms East Anglia, Bedfordshire and Hertfordshire, making this another area for attention especially a strong tech sector score and proximity to other high performing areas.



## Greater London

London, and the areas within London, continue to feature highly in the Index. However, that isn't to say there isn't a need, as in all areas of the UK, to improve digital inclusion and opportunities for all to engage with digital technology. There's still work to be done on updating digital infrastructure, ensuring high growth companies remain in the UK and key to that is increasing the digital firms based in the capital as well as improving the digital skills of both the general public and the tech workforce.

## North East

While the North East lags behind its fellow Northern regions, much of this stems from low scores in digital skills. We see lower levels of internet usage, lower numbers of HE students and that is despite the number of HE students in the region studying computing and engineering + technology per 1K population being closely comparable to London. Additionally, those downloading information is the second lowest in the UK (less than 50% and 10p.p. behind the next region). In the Tees Valley, inward investment in ICT is some of the lowest in the UK making it difficult to compete with city region peers. Credit must go to Northumberland, Tyne and Wear on digital infrastructure which, despite some large rural areas which can be more difficult to connect, still scores well to compete with its city region peers on this measure.



## North West

Greater Manchester's Index scores show they're the regional centre for digital and tech but that shouldn't hide the good scores for Merseyside on inward investment in ICT, and in Cheshire on R&D spending. Greater Manchester produces the vast majority of students from the region.

Perhaps as expected, and as seen in last year's Index, Cumbria is the lowest performing area. Will a new elected Mayor for the area help drive improvements in the same way Andy Burnham in Greater Manchester has targeted tech, innovation and digital inclusion? Time will tell.

Improving the region will mean upskilling the population and tech workforce in Merseyside and ensuring Greater Manchester can draw in and build on R&D spend to champion innovation in the region. Cheshire's scores are good, perhaps due to proximity to both Greater Manchester and Merseyside, but do come from a small base with a significant digital employment share.

## Northern Ireland

On the face of the data, Northern Ireland's scores may look bad but this fails to acknowledge that data is often inconsistent in Northern Ireland e.g. delays on inward investment in ICT data, or acknowledge the positives in the data such as the excellent gigabit broadband score (85.5% coverage). techUK's own search using datexplorer from The Data City suggests the tech turnover in Northern Ireland could be as high as £37.6 billion, 118k digital employees and nearly 300 fast growing companies (over 20% annual growth).



## Scotland

Scotland remains a mixed picture. Eastern Scotland scores in the top third in every component with West Central Scotland just behind. Digital infrastructure scores are good, the number of HE students remains high (and more broadly in Scotland the number studying computing, tech and engineering is the highest per 1k of students in the UK and over 264k digital occupations in Scotland).

Rural areas such as the Highlands and Islands remain substantially behind in terms of digital infrastructure however the progress made is noted in the report.

techUK again examined the data explorer platform and saw significant turnover linked to 'net zero' businesses, and much company data linked to turnover driven BP or ExxonMobil.

This also showed significant employment and business counts being driven by Edinburgh, Glasgow and Aberdeen, and the cumulative growth in tech companies in Scotland had increased by 82% in 10 years.

Scotland needs to continue rolling out improved digital infrastructure especially in not spots, targeting and supporting further FDI into the tech sector in Scotland, increasing the number of digital occupations to retain more homegrown talent in Scotland and harnessing the R&D spend to raise the profile of innovation in Scotland.





## South East

The region scores well and sits in the halo of London while also being strong in its own right. Berkshire, Buckinghamshire and Oxfordshire scores 2nd in the ITL2 areas, with Kent the lowest in the South East in 29th. Improving digital infrastructure across all areas seems an obvious area for future investment and to improve the regions Index results, particularly in gigabit broadband and 5G.

The number of students studying computing or engineering could be raised in the region to cater for the large volume of high growth companies (the proportion of HE students studying these subjects is the lowest in the UK). This is particularly pertinent when the finance and investment scores are so positive and these should be take advantage of with a talent pool ready to take up new roles or develop their own companies and ideas.

## South West

Improving digital infrastructure again remains the overwhelming priority from the Index results. While Gloucestershire, Wiltshire, Bath and Bristol (GWBB) remain significantly ahead of their neighbours, digital infrastructure scores across the South West need improving. Less than 70% gigabit and 5G coverage in GWBB is far behind rivals such as Greater Manchester, West Midlands and West Yorkshire, particularly when considering that inward investment in ICT and investment in the ICT sector is far ahead of those comparison regions.

In fact, for finance and investment the GWBB area is 6th in the UK and 5th for R&D.

The other component to focus further attention on from our Index scoring in digital adoption, with the South West's digital employment share and occupations comparable with Scotland, and UK business count in digital comparable with the North West. The region should seek to take advantage of this and take all businesses on the digital adoption journey.



## Wales

Wales is split into two ITL areas and it's West Wales and the Valleys that prove to score lower than East Wales (the area that includes Cardiff). There aren't huge differences in the investment in ICT or UK business counts but digital occupations favour East Wales as does digital infrastructure (related to the topography and connection challenges in rural Wales). R&D scoring also shows a divide with East Wales scoring higher in the Index than West Wales.

Using dataexplorer from Data City, techUK noted that Wales recorded £2.6 billion in the tech sector and with the estimated company turnover attributed to Wales being £48.9 billion.

## West Midlands

The region scores well overall, featuring 4th in the Index. Each area within the region has its own strength and drawback. The West Midlands CA area has strong digital infrastructure scores with gigabit broadband at over 88% coverage and 5G coverage over 95%. Both are well above the other regional partners scores in the West Midlands. But the West Midlands CA area should look to improve finance and investment coming into the region, especially VC funding and harnessing digital skills in the area to take on the roles of the future.

Shropshire and Staffordshire present digital skills challenges in terms of volumes of HE level trained students, featuring in the bottom five nationally for this metric.

Herefordshire, Worcestershire and Warwickshire's R&D score is particularly strong (3rd nationally) driven by spending. The regions digital infrastructure is lower than it should be given the strong scores on other components and finance availability remains an anchor on future growth.

Using the data explorer platform from The Data City to aid the Index we see that it suggests the West Midlands has secured £9.35 billion investment funding, compared to £20 billion in Yorkshire and The Humber and £41 billion in the North West, holding back future growth.

## Yorkshire and The Humber

Yorkshire and The Humber's data offers some interesting results for the region. Improving digital infrastructure in North Yorkshire stands out as an area for improvement, with gigabit broadband and 5G coverage remaining below national averages.

In South Yorkshire, gigabit broadband tracks below neighbours like West Yorkshire, however of more concern is the lower levels of investment in the ICT sector to help drive future regional growth. East Yorkshire and North Lincolnshire also struggles East Yorkshire and North Lincolnshire also struggles with finance and investment but the low skills score (low HE students and low internet usage) is more of a priority to drive digital tech improvements, particularly as the digital occupations rank is much lower than its neighbours.

Finally West Yorkshire has moved up the Index scoring in each of the components but remains in the same place overall due to other regions improving more quickly. West Yorkshire should continue to prioritise skills and drives to increase digital adoption in the region.

Using the dataexplorer tool from Data City, techUK found that West Yorkshire received £3.9billion investment funding and had a estimated turnover of £45.5 billion with Leeds being the base for many of the companies and in turn employees with cyber and life sciences being particularly significant.



## About techUK

techUK is a membership organisation that brings together people, companies and organisations to realise the positive outcomes of what digital technology can achieve. We collaborate across business, Government and stakeholders to fulfil the potential of technology to deliver a stronger society and more sustainable future. By providing expertise and insight, we support our members, partners and stakeholders as they prepare the UK for what comes next in a constantly changing world.



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