UKTN
THE HOME OF UK TECH

January 2024

Regional tech report:

North East

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Foreword

Growing up in Newcastle, in the shadow of industrial greats such as Armstrong, Stephenson, and Rachel Parsons helped inspire me to become an engineer.

Today, Newcastle is the most active tech hub in the North East and the North East's tech sector continues to build on our region's history of innovation. This timely report by UKTN highlights the growing vitality of the North East tech ecosystem.

Our five universities are a source of great strength, producing skilled STEM graduates, developing cutting-edge technologies, and supporting high-impact spinouts – including Low Carbon Materials, a Durham University spinout which received the prestigious Earthshot prize, or AMLo Biosciences, a Newcastle University spinout working to save lives by improving cancer diagnostics. I mentioned both in Parliament last year.

From May 2024, the North East Mayoral Combined Authority (MCA) will enable new opportunities to support our tech sector. The MCA should further enhance public-private collaboration, making our region yet more attractive to tech investors.

As Labour's shadow minister for science, research, and innovation, I know all too well the challenges around skills, capital, and infrastructure facing tech businesses. Through listening to businesses, we are developing plans to address these.

We want everyone in the North East, and indeed across the country, to benefit from being home to a thriving tech sector: economic growth; better health; and cheaper, greener energy.

Chi Onwurah

MP for Newcastle upon Tyne Central and shadow minister (science, research and innovation)

Contents

Introduction from our sponsors

With roots dating back over 230 years in the North East, Womble Bond Dickinson (WBD) understands the region's potential for business. The North East's digital (technology and data) sector is among the fastest growing clusters in the UK, with specialisms in AI, fintech, cybersecurity and gaming rapidly expanding. This growth is bringing job opportunities and prosperity to the region, and we are committed to supporting it.

This report helps us to highlight the region's expanding strengths and areas of future reward, for example in Northumberland and Teesside (which are experiencing renewed levels of investment). It provides us with the ability to identify areas of potential and maximise the North East digital sector's development by attracting innovation, investment and talent.

We are excited to work with businesses locally, nationally, and internationally to expand our region's capabilities, drive further investment, and continue the North East's recognition as a tech and data hub.

Caroline Churchill,
partner,
Womble Bond Dickinson

Whether it be in Newcastle, Durham, Teesside, Sunderland or across Northumberland, the North East Tech ecosystem is continuing to grow at pace and attract deserved recognition as a high-value destination to start and scale innovative enterprises.

The North East's digital technology sector is growing four times faster than the wider regional economy, driven by a diverse mix of both a buzzing startup community and a collection of more established and well-known digital and tech firms. The region also benefits from an abundance of talent, both from leading universities which carry one of the highest proportions of STEM students in the UK, and the growing number of people taking a career change into tech roles from other industries.

Moving forward there is a real opportunity for the North East to establish itself as a go-to destination for tech investment and startups in the UK, supported by infrastructure build and seizing emerging tech trends.

As part of our ongoing support for British businesses, we have dedicated relationship managers across the North East to support businesses along their growth journey. Collaborative leadership and cohesion across the business and technology community in our cities will be crucial to realising this exciting potential.

Sam Baldwin,
technology sector director,
Lloyds Bank Business &
Commercial Banking

Introduction from our sponsors

Dawn Dunn,
digital and tech sector lead,
Invest Newcastle

The North East continues to be an attractive proposition for digital companies who are looking to exploit the region's strengths in research and development around data science, AI and immersive tech.

Over the past 12 months, we have seen a number of global businesses establish research sites in the region. Global defence and security company Leonardo, for example, has signed a partnership with the National Innovation Centre for Data to explore federated machine learning and smart data streaming.

We have also observed a material uplift in enquiries from domestic and international companies who are looking to locate in the North East and we expect this pipeline to continue to grow as economic conditions improve in 2024.

Our expectation is that 2024 will be a year of change for the North East as the new mayoral combined authority knits together seven local authorities to unlock a £4.2bn trailblazer devolution deal.

Devolution has the potential to transform the economy of the North East and we hope that the prospect of new fiscal incentives and streamlined decision-making will be appealing to digital companies who can invest and employ at scale.

As always, the decisive factor will be the availability of talent and skills to drive technology innovation.

The UKTN report offers a valuable lens through which we can gauge the current state of the North East's digital landscape and what needs to be done to cultivate the talent essential for sustained growth.

Regional tech overview

Ecosystem overview

*Organisations and networks which predominantly work in specific places feature in the relevant regional hub in the next section.

SPECIALISMS

- Gaming
- Fintech
- Cybersecurity
- Immersive technology
- Health
- Biotech & life sciences
- Advanced manufacturing
- Semiconductors
- Renewable energy
- Data science & AI

ACADEMIA

- Durham University
- Newcastle University
- Northumbria University
- Teesside University
- University of Sunderland

INVESTORS

- Northstar Ventures
- Maven Capital Partners
- Mercia Asset Management
- Foresight Group
- Business Growth Fund
- Fund Her North
- Open Ocean
- Business Investors Group
- NEL Fund Managers
- Business Growth Fund
- Northern Venture Managers
- Lloyds Development Capital

CROSS-REGIONAL BUSINESS SUPPORT

- Northern Accelerator
- Innovation SuperNetwork
- Sunderland Software City
- North East Growth Hub
- RTC North
- Regional Talent Engines (Royal Academy of Engineering)
- Digital Catapult North East
- FinPact
- North East BIC
- Ignite
- North East Screen

NORTH EAST-WIDE NETWORKS & EVENTS*

- Dynamo
- Women in Tech North East
- TechNExt Festival
- North East Entrepreneurs Forum
- CyberNorth
- Fintech North
- IoT North

North East tech hubs

Newcastle and Gateshead

Newcastle is the most active tech hub in the North East, with the highest number of tech companies, innovation centres, coworking spaces and networks based in and around Newcastle.

A number of established tech companies have a base in Newcastle, including fintech pioneer and global enterprise software company Sage, which launched in the city in 1981, French games studio Ubisoft and SEGA-backed Creative Assembly.

Both Newcastle University and Northumbria University play a central role in driving tech growth, through support for university spinouts, specialised STEM degrees which feed the talent pool, and initiatives like Arrow which connects regional businesses with academic partners for short-term innovation projects.

Spinouts from Newcastle University raised £40m investment in 2023, and the university's total 37 spinouts now employ 300 people, according to the university.

Newcastle's Ignite accelerator is one of the longest-running in Europe and is now one of a number of incubation and support programmes in the region.

In 2021, the Kalifa Review recognised Newcastle for its significant growth potential in the fintech sector . Alongside Sage, other fintechs in the city and surrounding area include Newcastle Strategic Solutions, Pockit and Kani Payments.

Gateshead has harnessed its concentration of expertise and success in immersive and creative technology. The new Advanced Media Production facility is dedicated to driving innovation in media production, and is home to PROTO, a multi-use production studio, provides creative tech businesses with the resources they need across virtual production, 3D scanning, motion capture and sound recording. Both are among the first of their kind in the UK.

ACCELERATORS & INCUBATORS

- Ignite
- Natwest Accelerator
- Barclays Eagle Labs
- TusPark Newcastle
- Northern Accelerator

BUSINESS & INNOVATION SUPPORT

- InnovationSuperNetwork
- Startup Grind
- PROTO Gateshead
- National Innovation Centre for Data
- National Innovation Centre for Ageing
- North East Battery Alliance
- The North East Energy Catalyst
- Digital Pathfinders

BUSINESS CENTRE & COWORKING

- Floe
- Cubo
- Newcastle Helix
- Toffee Factory
- Haylofts
- Hoults Yard
- The Beacon
- Portland House
- The Stamp Exchange

EVENTS & NETWORKS

- Silicon Mingle
- DevHub North
- IoT Meetup

North East tech hubs

Sunderland

With industrial roots in coal, glass and shipbuilding, Sunderland is now becoming a leader in transforming manufacturing with digital and tech innovation.

Nissan’s manufacturing facility in Sunderland is the biggest car manufacturing hub in Europe and is now generating a wave of activity around electric vehicle research and production.

The city has particular strengths in smart city technology and IoT. The City of Sunderland runs comprehensive initiatives in this area, including a 5G IoT accelerator for startups, connectivity and digital inclusion projects, self-driving vehicle trials and an assisted living smart house – open to the public and used as a research testbed.

Gambling business Tombola is an oft-mentioned home-grown success story, but the city also hosts local bases for global companies, including EDF Energy, Just Eat and Ocado.

ACCELERATORS & INCUBATORS

- Sunderland IoT Accelerator
- University of Sunderland Digital Incubator

BUSINESS CENTRE & COWORKING

- North East BIC - Coworking
- Sunderland Software Centre
- The Beam

North East tech hubs

Teesside

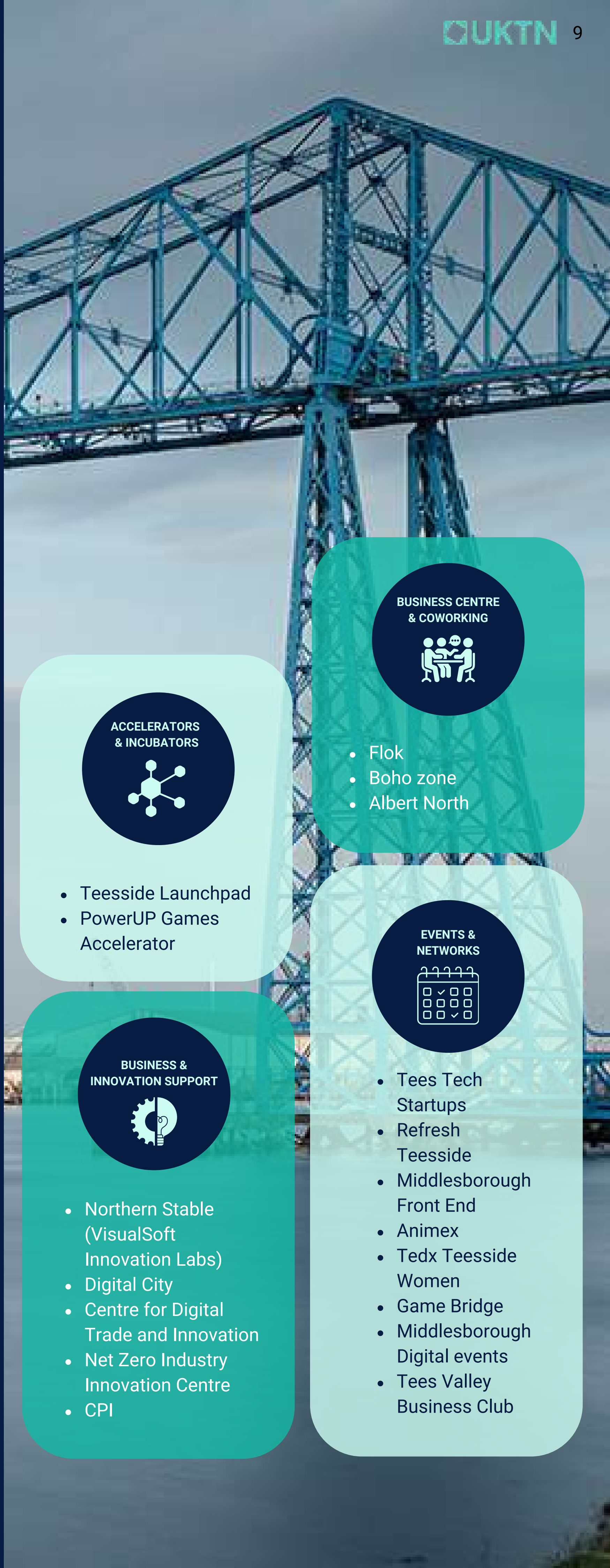
The Tees Valley has a vibrant tech community across Middlesbrough, Darlington and Stockton-on-Tees, with a particular focus on gaming.

Middlesbrough's tight-knit gaming sector has seen trickle-down effects from the bigger games studios – like Double Eleven – which have helped drive success for smaller and younger gaming companies through collaborations, including Sockmonkey and Radical Forge. The town hosts Animex – an international festival of gaming, immersive technology and animation.

The planning and development of Middlesbrough's Boho zone has created an epicentre for tech companies to work and connect, giving rise to a high number of events and networks on offer for the startup community.

Teesside University is engaged in tech and business support activities, and is home to the Centre for Digital Trade and Innovation, a national initiative to 'future-proof' UK and international trade through innovation and digitalisation. Tech and business leaders in the region are also working with 'traditional' industrial businesses and manufacturers to promote opportunities from digital and tech transformation.

Innovation support centre and programme Digital City has played a major role in the development of the digital and tech sector in Tees Valley, and is relaunching its activity following changes to its funding structure and sources.



BUSINESS CENTRE & COWORKING

- Flok
- Boho zone
- Albert North

ACCELERATORS & INCUBATORS

- Teesside Launchpad
- PowerUP Games Accelerator

EVENTS & NETWORKS

- Tees Tech Startups
- Refresh Teesside
- Middlesborough Front End
- Animex
- Tedx Teesside Women
- Game Bridge
- Middlesborough Digital events
- Tees Valley Business Club

BUSINESS & INNOVATION SUPPORT

- Northern Stable (VisualSoft Innovation Labs)
- Digital City
- Centre for Digital Trade and Innovation
- Net Zero Industry Innovation Centre
- CPI

North East tech hubs

Paul Armstrong,
managing associate,
Womble Bond Dickinson

"The ICC Centre for Digital Trade and Innovation in Teesside is one of the most exciting projects in the region. It has the potential to revolutionise the way businesses trade by focusing on the profitability, sustainability and security of supply chains.

The centre places importance on digitalisation and innovation, thereby supporting UK businesses in staying ahead of the curve and competing on a global scale. Recently, the Centre for Digital Trade and Innovation in collaboration with ICC United Kingdom, produced a report detailing the numerous opportunities brought about by the increased digitalisation of trade practices, stemming from the Electronic Trade Documents Act which came into force on 20 September 2023. This act confirms that electronic trade documents can be recognised as legally equivalent to paper documents. Utilising these developments can help businesses in the region unlock their potential through trade."

North East tech hubs

Durham

As a university city, Durham's startup community is largely centred around the student population. The university runs Venture Lab to support spinouts and has produced success stories like ocean agriculture startup Alora, Tred, and Charter, which became the first UK company accepted onto TechStars' space accelerator programme.

Unlike other university-centred tech hubs in the UK, Durham does not specialise in particular subsectors or industry – in part due to the fact that its university is more 'traditional' than vocational in its academic offering.

Stakeholders note that some of Durham's spinouts and locally founded startups relocate elsewhere as they grow, but Atom Bank stands out as a key player in the local tech and business community, working alongside the university and the city council to further grow the local tech sector.

Radiation detection technology provider Kromek has been based in Durham for twenty years after spinning out of the university in 2003. In 2004, the company was the first tenant at NETPark – a science and innovation hub – and has since grown from three employees to more than 100. NETPark itself is undergoing a £61m, 26-acre expansion project to meet the growing demand for innovation and lab space.

A new innovation campus – Durham Innovation District – is currently in development and will provide workspace, support and community for tech businesses, with a focus on fintech, data science, computing, low carbon energy and healthcare.

Business Durham leads a consortium of universities, public sector organisations and private companies focused on driving growth in the region's space and satellite sector, through the North East Satellite Applications Centre of Excellence.

ACCELERATORS & INCUBATORS

- Durham City Incubator
- Venture Lab

BUSINESS & INNOVATION SUPPORT

- Durham Energy Institute
- North East Satellite Applications Centre
- Business Durham

BUSINESS CENTRE & COWORKING

- NETPark
- Jade Business Park

North East tech in numbers

#1 UK region for density of postgraduate computing students in regional population.

Source: Assessing the UK's Regional Digital Ecosystems report 2021, Department for Digital, Culture, Media & Sport

£604 median gross weekly wage for North East digital sector jobs, compared to £458 across all North East jobs.

Source: Digital Technology Evidence Base, North East Evidence Hub

402 active high-growth tech companies in the North East region.

Source: Beauhurst

£222m investment into North East tech companies across 111 deals in 2023.

Source: Beauhurst

9.6% year-on-year increase in profitability for North East small and mid-sized businesses, compared to 0.1% GDP increase.

Source: Sage data in Local Digital Index 2023, techUK

More than 10 specialist support clusters for digital and tech businesses.

Source: Invest North East England

Natalie Boswell,
regional development director,
Lloyds Bank Business &
Commercial Banking

"The diverse range of talent across the North East has been a key driver of the region's rise within the UK tech ecosystem – underpinned by the high number of quality universities with relative strengths in STEM subjects, including Newcastle, Northumbria, Durham, Sunderland and Teesside.

A number of high-quality university spinouts are prominent within the startup scene, which sits alongside large established digital and technology businesses based in the North East. This breadth of scale demonstrates how the region can be home to innovative businesses throughout their lifecycle, powered by factors such as the talent pool and lower overhead costs compared to other regions."

Insider perspectives

Strengths, challenges & opportunities

Growth ambitions

In the last few years, distinct tech clusters have emerged in the North East and dedicated groups have been set up to ensure the region's potential in these areas is supported and directed with appropriate strategies.

For example, CyberNorth is spearheading the organisation of the North East's cybersecurity ecosystem, and FinPact launched in 2023 with a mission to promote the region's progress through collaboration, innovation and a focus on digital, data and tech skills to drive fintech growth. Sunderland Software City's Immex City project aims to bring together the immersive technology cluster and support the upskilling needed to develop further.

While this represents encouraging developments, stakeholders in the region remain concerned about the availability of and access to funding needed for innovative, ambitious North East businesses to scale.

Multiple well-connected tech leaders in the region told UKTN that the investment landscape in the North East – with low levels of venture capital funds available or accessible – has created a distinct culture among entrepreneurs. On the positive side, tech founders are more inclined to 'put their heads down' and achieve significant milestones while bootstrapping, but stakeholders also noted that founders were more inclined to accept unfavourable investment terms and less likely to proactively explore fundraising opportunities.

Steve Grainger, founder and managing director of Newcastle-based digital agency Enigma, believes that the characteristics of the North East's tech scene – including the relatively low investment activity – create both advantages and challenges for businesses' growth ambitions.

He says: "A real strength is the independent nature of the sector. We don't tend to have so many large, established corporates draining away the digital talent, so this allows smaller, more market-focused businesses to flourish and grow. These businesses are agile and able to rapidly pivot and innovate in a way that the larger corporations are simply not able to do."

"Because the North East hasn't historically had a large investment community, startups have had to be leaner and much more focused on revenue-generating opportunities, rather than just chasing funding rounds. This has meant tech startups here tend to be leaner and smarter, but perhaps are ultimately hampered when it comes to long-term, large-scale growth"

"That's changing now and out-of-region investment houses have become aware of the opportunities here, and it will be interesting to see how that changes the landscape over the next few years"

Caroline Churchill,
partner,
Womble Bond Dickinson

“Access to capital is one of the largest obstacles that North East companies are met with. Regardless of the region’s potential, it appears that investors continue to focus on the South East, making it difficult for tech and data businesses in the North East to secure sufficient funding. To reduce these barriers, encouraging investors to look beyond the South and consider opportunities elsewhere will be a key factor in promoting the digital sector in the North.

As well as an established regional infrastructure and vibrant workforce, the North East can offer qualities that the majority of other regions are unable to. With significant levels of untapped opportunity and success stories yet to be heard, we can certainly help tech and data companies understand and reach their full potential.”

Power of community

The region’s strong communities and regional identities are both a strength and a challenge for the tech sector. On the one hand, stakeholders overwhelmingly agreed that the “community feel” enabled a culture of openness and helpfulness, where informal advice and support is always available with no strings attached.

But on the other hand, the strong territorial identities – not just confined to football rivalry – coupled with the distribution of resources across different regional authorities, have also led to unnecessary divisions and challenges for those trying to access support, funding and partnership opportunities.

Already, initiatives are in the works to unify the region’s tech ecosystems, including a strategic partnership strengthening the innovation offering between four of the region’s universities.

Stakeholders are generally hopeful about the devolution deal which will bring together seven local and city authorities (already organised into two combined authorities) and grant the overarching North East Mayoral Combined Authority greater control over funding, local decisions and infrastructure.

Caroline Churchill,
partner,
Womble Bond Dickinson

“The North East has a unique set of strengths that distinguish it from other regions in the country. We have the five universities (Newcastle, Northumbria, Sunderland, Durham and Teesside) leading at the forefront of technological innovation have created a plethora of talent waiting to be utilised.

The region is also home to a closely-knit business community, with various clusters, networks and partnerships such as CyberNorth, Dynamo and the North East Chamber of Commerce fostering innovation and collaboration. The low startup costs associated with the North East help create a fertile environment for opportunity and growth. The North East is a prime location for tech and data businesses to call home.”

Tech talent

Despite the North East's density of STEM students and graduates, attracting and hiring talent across all levels of seniority is a challenge for tech companies in the region.

The rise of remote working during and since the pandemic has disconnected salary expectations from regional cost of living; a small business in the North East is tapping into the same global talent pool as a tech company in California, so even when North East businesses want to hire locally, there's pressure to offer a data scientist in Newcastle, for example, the kind of salary they'd be offered by a company based in a larger, more expensive city. Many early-stage startups in the North East simply cannot compete.

Jamie Hardesty, director of communications and ecosystem development at Sunderland Software City, says that the talent problem is compounded by the fact that the region is broadly nascent. Where other regions produce greater multiples of established digital tech companies, boast significant exits and serial entrepreneurs, the North East has a volume challenge.

He says: "Without those exits, serial entrepreneurs and tech companies which employ thousands of people, we effectively have a small ecosystem to hire from which makes it hard to access skills across all levels, and creates a leadership challenge for growing companies too. This is something we've been working hard to address, it's a challenge not unique to the North East but we believe our close-knit community can collaborate to offer unique support solutions."

Nonetheless, the ingredients are already in place to ensure the North East can make the most of its workforce, through university initiatives, skills programmes and an increasing number of high-growth startups.

Graham Lowes,
area director,
Newcastle and Northumberland,
Lloyds Bank Business &
Commercial Banking

"As with many regions outside of London and the South East, access to funding and investment remains a challenge for the region and its growth ambitions in the tech space. In addition to London, there is also a risk of the North East falling behind other regions such as the North West when it comes to investment in scaleup tech businesses.

Whilst talent is a true strength across our cities, the post-pandemic remote and hybrid nature of many tech roles means that our firms also face a challenge in retaining this talent locally, competing against businesses based in London and driving up salary costs as a result. Further building the close collaboration and connectivity between our cities will be key for the North East in overcoming these challenges and continuing to grow in the tech sector in a joined-up way."

Views from the region

UKTN commissioned Censuswide to survey 100 senior managers at technology companies in the North East, to explore how the tech community currently views the region's tech sector and represent the experiences of those running tech companies across the North East.

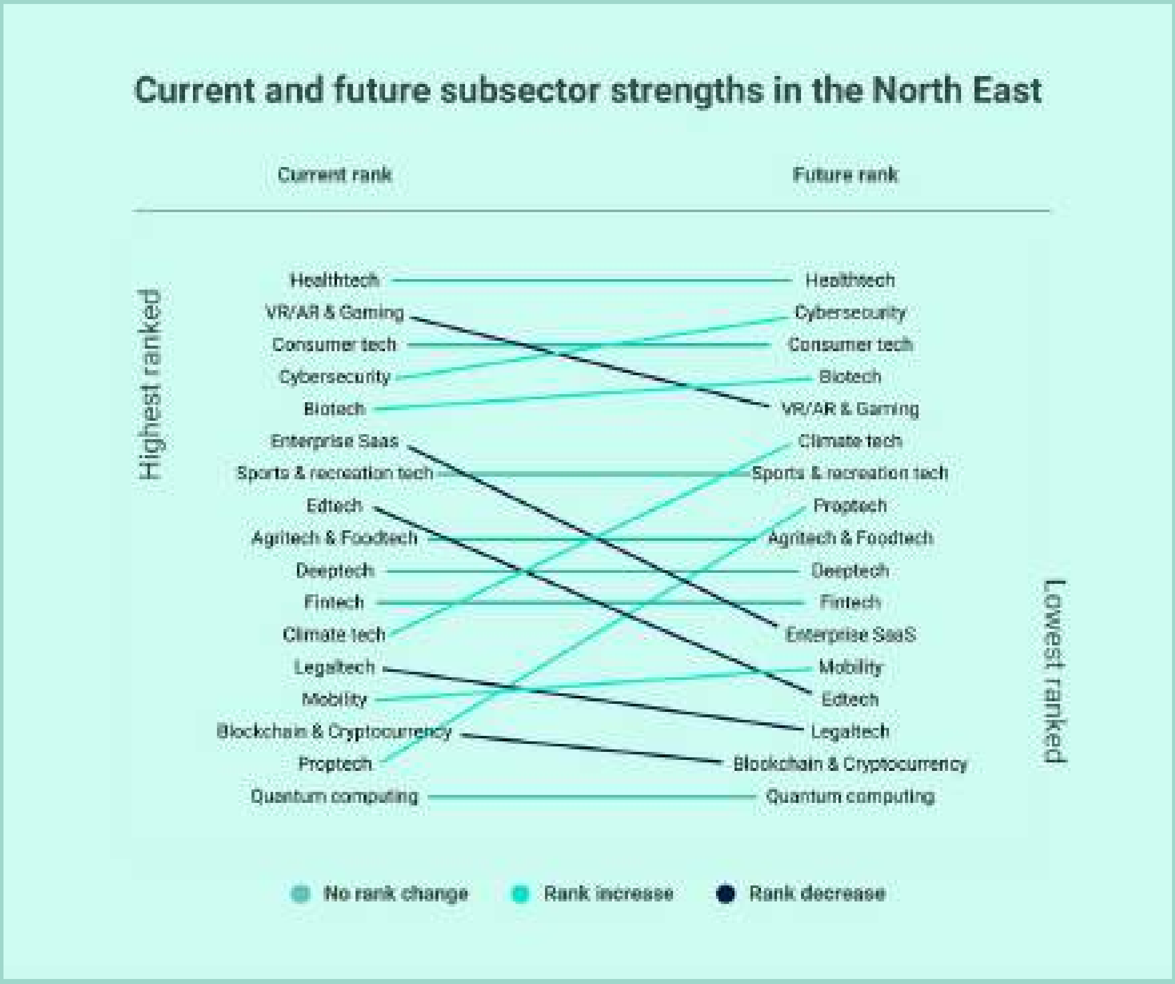
Survey respondents represented a natural spread across specific locations in the North East, gender and age. The majority of respondents (71%) worked at tech companies with at least 100 employees, so the following views are more accurately taken as those of established tech companies rather than early-stage startups.

Subsector strengths

Tech workers in the North East see health tech, VR & gaming, consumer tech and cybersecurity as the most prominent subsectors which the region is currently known for.

A new digital health hub, NorthHFutures, announced in 2023 brings together universities, NHS trusts, tech companies, local authorities and innovation networks to create a world-leading health tech ecosystem in the North East.

Climate tech in particular is seen as a burgeoning strength for the region, with a high proportion of survey respondents believing that the North East will become known for climate tech in the future.



> There are a number of developments making the North East a thriving tech ecosystem. One of the most exciting is the growth of the immersive tech subsector, born out of the region's strength in gaming. As metaverse technology becomes more widely utilised, the North East is well-positioned to capitalise on the opportunity.
>
> Growth opportunities also exist across other subsectors, for example in the fintech space where we are seeing an emergence of a payments specialism across the region.

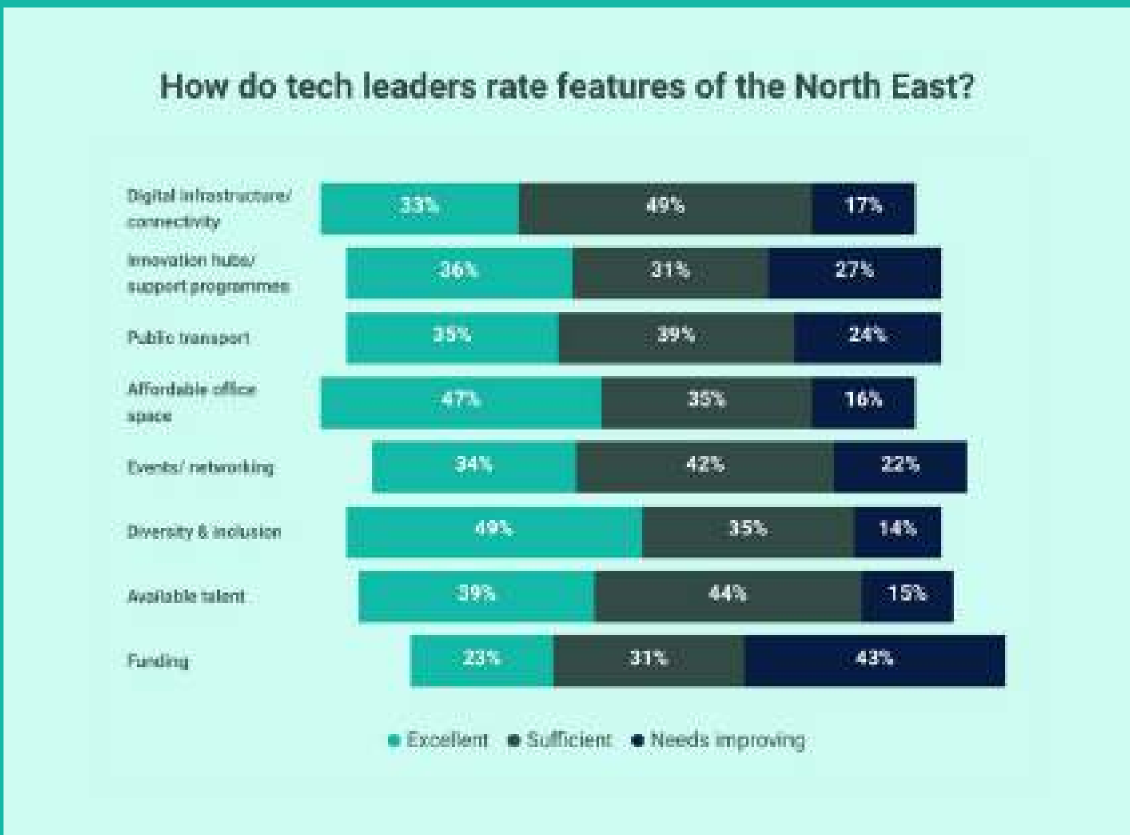
Sam Baldwin,
technology sector director,
Lloyds Bank Business &
Commercial Banking

Infrastructure & support

Out of all features of the North East's ecosystem, funding is the area where tech workers are most likely to want improvements – with less than a quarter of survey respondents rating funding as 'excellent'.

While the provision for events and networking is generally taken to be sufficient, it was rated less favourably than other features. Entrepreneurs interviewed by UKTN explained that there are plenty of event and networking opportunities available, but that the relatively small size of the tech community can disincentivise people from attending, since they are likely to see the same people repeatedly at other networking events.

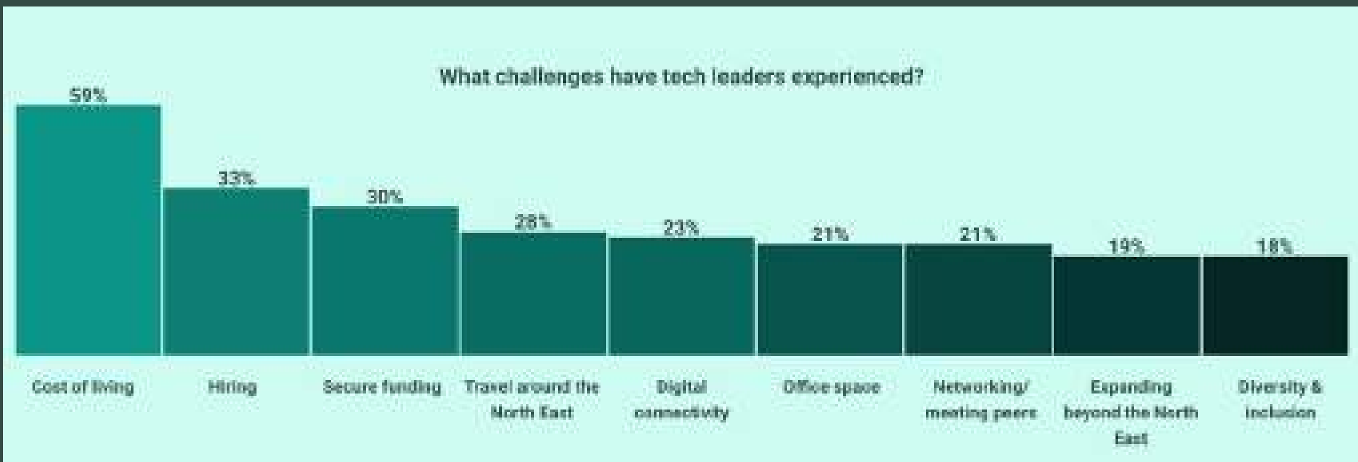
Others, however, noted that the consolidation on the horizon with devolution and cross-regional partnerships would support better uptake of events and opportunities.



The North East faces similar challenges to other parts of the UK in terms of access to talent and funding, but these are being addressed from every angle, from organisations such as ourselves, working to attract foreign direct investment and private capital, to support networks who are equipping local companies with the resource they need to succeed.

Jennifer Hartley,
director,
Invest Newcastle

Business challenges



More than half of survey respondents report that the cost of living has presented business challenges. It's likely that this refers to both the challenge of hiring employees as salary expectations have increased due to remote working, and the impact of increased operating costs.

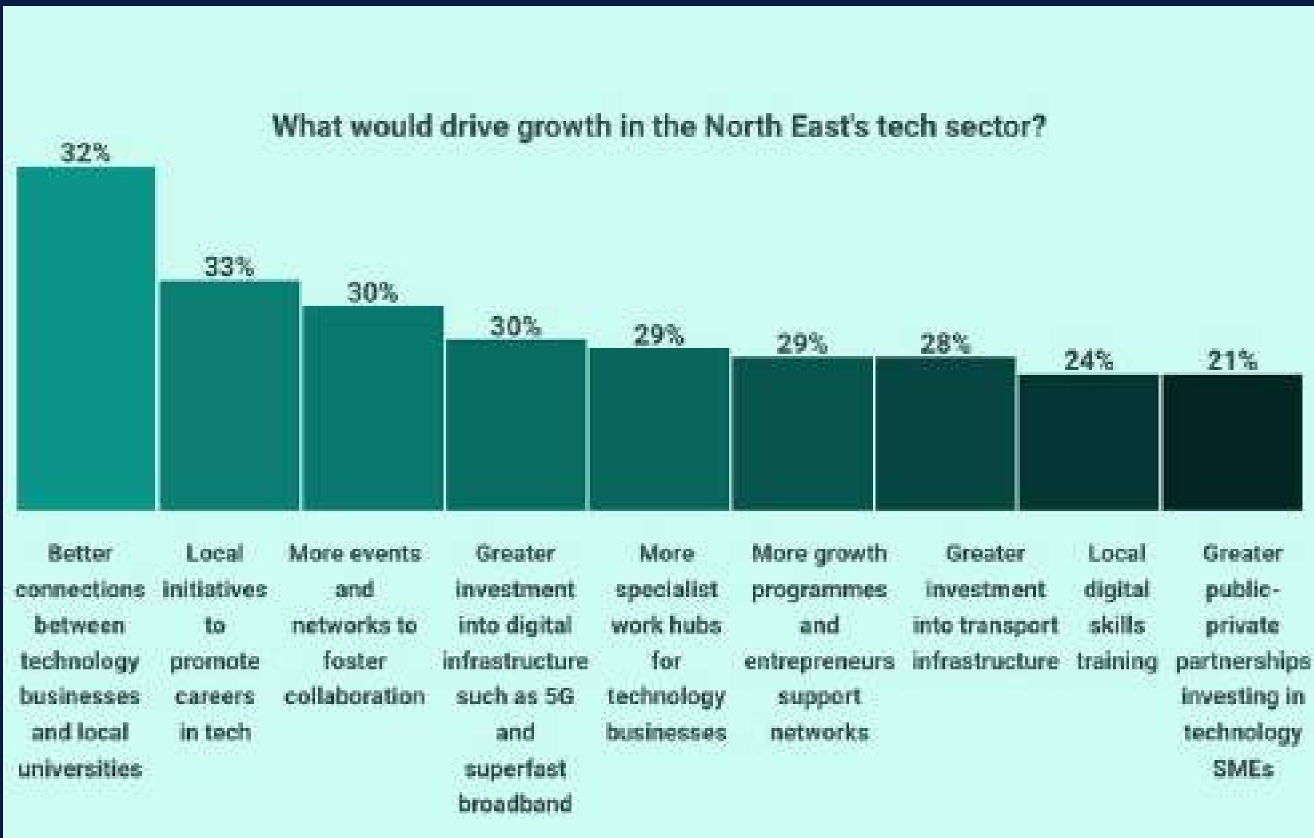
According to North East Evidence Hub, wage growth in the North East has been slightly slower than in the UK generally, with the salary growth rate well below the rate of increase in the price of electricity/gas and transport services in the same period.

A third of tech businesses also report that they have experienced challenges when hiring. Paul Struthers, Sage's managing director for UKI, says that supporting a healthy talent pipeline will have benefits not just for hiring but for the North East's economy and innovation potential.

"Nurturing a pipeline of tech talent will help the North East remain competitive, drive better social mobility and unlock greater innovation," he said. "We need to nurture greater STEM talent, empower the next generation of entrepreneurs and tech innovators to believe a STEM career is within their grasp. To do this, we need to inspire schools with grassroots initiatives that help them provide for STEM learning, coupled with businesses that create early career opportunities for young people to nurture tech skills. These skills are not just nice to have, they support sustainable careers and improve mobility between jobs."

Growth opportunities

Around a third of survey respondents believe that strengthening the connections between tech companies and universities in the North East would drive further growth.

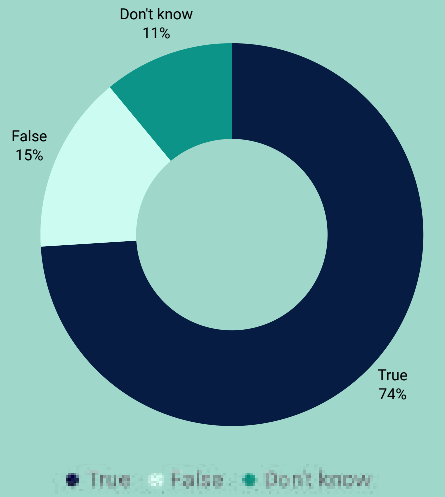


> We are seeing the region emerge as a hub for research and development, with companies locating in the city to exploit the local talent pool to generate IP and build sustainable business models.

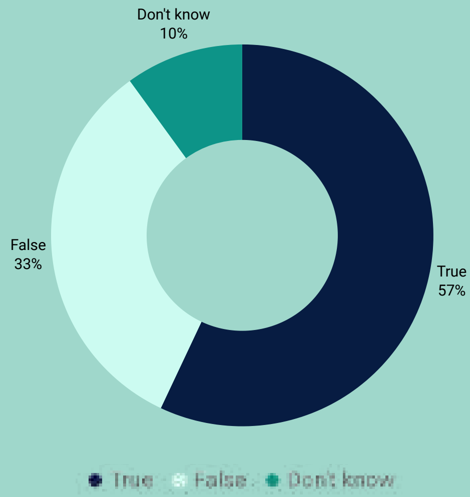
Dawn Dunn,
digital and tech sector lead,
Invest Newcastle

Tech leaders' opinions

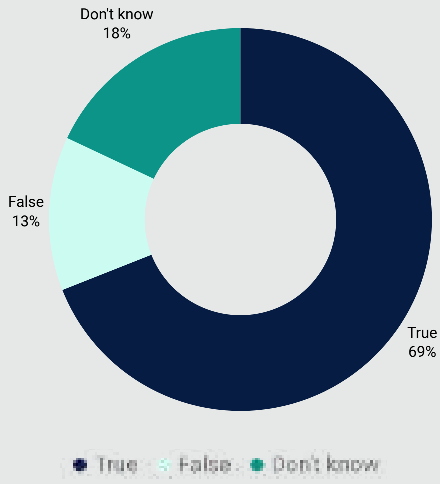
I would recommend North East England to someone considering where to locate a new tech business



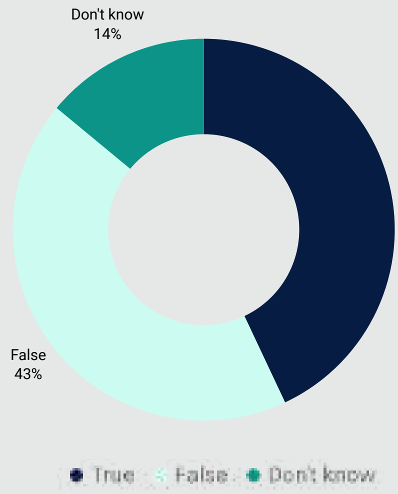
I have experienced specific advantages as a result of basing my business in North East England



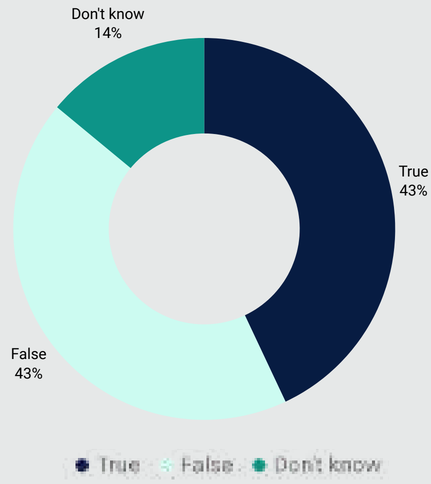
It has become more attractive to start a tech business in North East England over the last five years



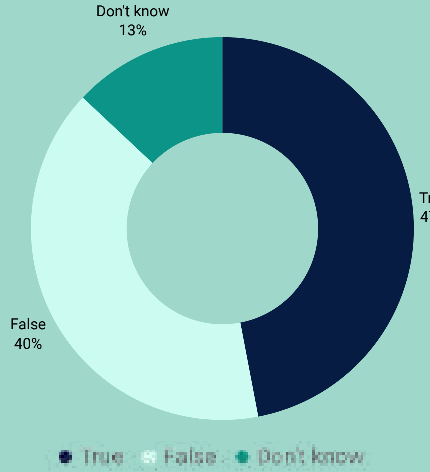
North East England's tech ecosystems get the international recognition they deserve



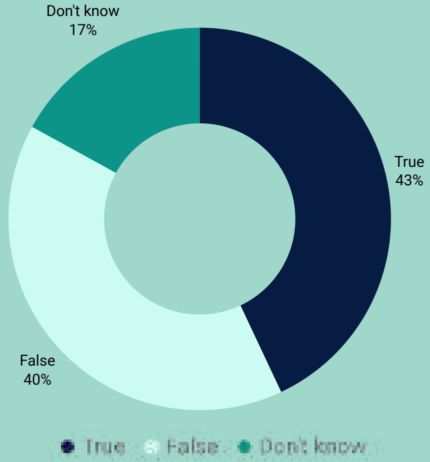
North East England's technology sector will grow rapidly in the next five years



The local government does enough to support tech businesses in North East England



There is sufficient support from central UK government for North East England's tech businesses



Key Players

Startups to watch

The following early-stage startups were named by regional tech stakeholders for their high-growth potential. Selected startups were each nominated by at least two different, independent stakeholders.

County Durham

AI-powered media startup analyses video and audio to do ‘laborious’ video editing work – enabling creators to automatically generate social media clips. Choppity featured in Business Insider’s ‘6 AI tools podcasters use’.

HQ: Durham | Founded: 2022 | Funding: Bootstrapped | Subsector: AI / Media

Low Carbon Materials

Climate tech startup spun out of Durham University develops low-carbon and carbon-negative construction materials, including OSTO, a material used for low-carbon concrete production. The product was a finalist in the Earthshot Prize.

HQ: Seaham | Founded: 2019 | Funding £1.9m | Subsector: Climate tech

Startups to watch

Tees Valley

Dink

Video game development studio that also uses game engine software to craft TV graphics, 3D art and game prototyping. Dink has worked on projects with the BBC and won 'best new creative business' at Tees Tech Awards.

HQ: Middlesbrough | Founded: 2022 | Funding: Bootstrapped | Subsector: Gaming

SeerBI

Climate tech startup spun out of Durham University develops low-carbon and carbon-negative construction materials, including OSTO, a material used for low-carbon concrete production. The product was a finalist in the Earthshot Prize.

HQ: Seaham | Founded: 2019 | Funding £1.9m | Subsector: Climate tech

Sencode Cyber Security

Cybersecurity company tackles emerging security issues with innovative and agile solutions. Sencode was set up by three Teeside University students and has been supported by Tees Valley programs.

HQ: Stockton-on-Tees | Founded: 2019 | Funding: Bootstrapped | Subsector: Cybersecurity

odyssea

Community interest company provides a 'super app' to enable users to curate personal memories and build positive connections with others. It has partnered with Teesside Hospice to promote digital inclusion and virtual legacies among hospice patients.

HQ: Skelton-in-Cleveland | Founded: 2019 | Funding: Not known Bootstrapped | Subsector: Personal app

FIRESIDE

Knowledge marketplace delivering trustworthy expertise to support business growth, set up by North East tech leader David Dixon. Fireside won best tech startup at the 2023 Tees Tech Awards, before going to market.

HQ: Stockton-on-Tees | Founded: 2021 | Funding: Pre-funding | Subsector: Knowledge transfer software

Startups to watch

Newcastle

CetoAI

Maritime startup providing predictive analytics to reduce inefficiencies and risks in the industry. In 2023 it raised £1.5m in a round led by Howden Ventures.

HQ: Newcastle | Founded: 2020 | Funding: £1.75m | Subsector: Maritime

Grid Finder

Gaming company providing a digital operating system for online racing communities, including livery designs, broadcast functionality and virtual commentators. Grid Finder provided community management tools for the Formula E Accelerate esport series.

Grid Finder announced its acquisition by US motorsports group RAFA Racing Club in January 2024

HQ: Newcastle | Founded: 2020 | Funding: Acquired | Subsector: Gaming

PolyBox

Automated reporting for marketing which integrates with other enterprise software and provides financial and analysis support.

HQ: Newcastle | Founded: 2021 | Funding: Not known | Subsector: Marketing tech

Pulmo BioMed

Biotech company develops and commercialises technology for collecting exhaled breath samples as part of its aim to create a platform for disease and environmental diagnostics. It has won several pitching and startup awards.

HQ: Newcastle | Founded: 2020 | Funding: Not known | Subsector: Biotech

SQCDP

Launched a year ago, SQCDP currently works with North East manufacturing companies to replace factory paperwork with a mobile app. The startup participated in Ignite's pre-accelerator and the Royal Academy of Engineering's accelerator, and is currently raising a £500k pre-seed round.

HQ: Newcastle | Founded 2022 | Funding: £190k | Subsector: Manufacturing

Startups to watch

Newcastle

sugarcoat

Self-service ecommerce platform built for social media sales. Sugarcoat has been selected for a number of accelerator programmes and pitching opportunities.

HQ: Newcastle | Founded: 2019 | Funding: £75k | Subsector: Social commerce

virtual memory box

Online tool specifically for young people in care and their guardians to store photos, memories and key information to help them understand their life story and identity. Managing director Christian Brock has stated his aim that as the company grows, more than half of employees will be adults with direct experience of the care system.

HQ: Newcastle | Founded: 2023 | Funding: Bootstrapped | Subsector: Tech for good

Sunderland

CCI

Civil engineering startup specialises in bespoke analytics for remote surveys using drones and underwater remote vehicles to collect data, and AI to analyse. The company has won a transport and research innovation grant and has been shortlisted for awards.

HQ: Sunderland | Founded: 2020 | Funding: Grants | Subsector: Engineering

Company spotlights

Atom Bank

Founded in 2014 by Anthony Thomson and Mark Mullen, the Durham-based challenger bank was the first digital-only bank in the UK to launch without any branches, and the first of its kind to receive a full regulatory licence from the Financial Conduct Authority, in 2015.

Just a year after it was founded, Atom Bank announced it would set up its headquarters in Durham following "a detailed search across North East England to find the best location for the launch and growth of the business". Atom has raised more than £600m across multiple funding rounds, including £100m in November 2023 from existing investors BBVA, Toscafund and Infinity Investment Partners. Mullen, who is CEO, had previously said that an IPO was on the cards in 2024 or 2025.

The fintech has doubled down on its roots in the city of Durham, while offering remote working and a four-day working week. With more than 400 employees based in Durham, the company is reportedly moving offices; its previous base at Rivergreen Centre was sold to the council to develop an innovation centre.

Atom has repeatedly partnered on initiatives to build tech skills in the North East, including funding 'Women in Tech' scholarships at Durham University, developing a new STEM-focused sixth-form college - Durham Maths School - to help address the digital skills gap, and collaborating on a STEM diversity and inclusion initiative, Northern Power Diversity Matters.

Robbie Steel, head of PR and communications at Atom Bank told UKTN: "Atom bank has grown strongly and sustainably, recording its first annual operating profit following a year of enormous growth in 2023.

"Operating with a team of over 500 people, the bank is proudly based in Durham, and strives to champion the North East as a great place to live, learn and work. We are actively connected to the local community, and are passionate about addressing the critical digital skills gap and helping develop young people and other groups that are under-represented within the fintech industry."

Company spotlights

Double Eleven

Games developer Double Eleven has become one of the largest games publishers and developers in the UK since it was set up in 2009.

The studio employs more than 400 people with headquarters in Middlesbrough, Teesside and an office in Kuala Lumpur, Malaysia which opened as the company grew even during the pandemic.

Double Eleven has repeatedly been named as one of the fastest-growing companies in the UK, including by the Sunday Times (ranking 25th out of 100 companies).

In 2022, founder and CEO Leo Hutchinson announced that the company had tripled the number of employees in the previous 18 months, attributing the growth to the scale and complexity of the studio’s gaming projects.

Stakeholders in the North East told UKTN that the company regularly collaborates on its projects with smaller gaming studios in Tees Valley and the wider region, which supports the growth and success of these local startups and studios.

Double Eleven partnered with Teesside University to sponsor Animex Festival 2023 – an international gaming and animation event held in Middlesbrough. It also runs a work experience placement scheme for students at the university.

This year the company leased a new building in Middlesbrough’s tech-focused Boho Zone in its entirety for its head office. Through its parent company, Pneuma Group, Double Eleven’s founders invest in local businesses in Middlesbrough and beyond, including hospitality businesses and commercial property, with aims to develop the area.

Kimberley Turner, Double Eleven CFO, said: "In the past 15 years, we’ve grown from a dozen employees to over 380 employees, partnering with some of the most-renowned game companies in the world: Microsoft-owned studios like Bethesda Game Studios and Mojang Studios, as well as Rockstar Games and many more.

“We are proud of our Teesside roots and there are several advantages to having set up our headquarters there: IT infrastructure is good, renting space is cheaper than in the South and we’re just next door to the great Teesside University, which has over 20,000 students and one of the longest running game development courses in the world. Rail and other transport links mean we can be in London in three hours.

"Our biggest challenge is access to the best talent in the industry. The employment market is extremely competitive with some very big names and IPs for us to compete with. We hope that our long-term view and the great feedback we get from our teams will encourage people to seek us out."

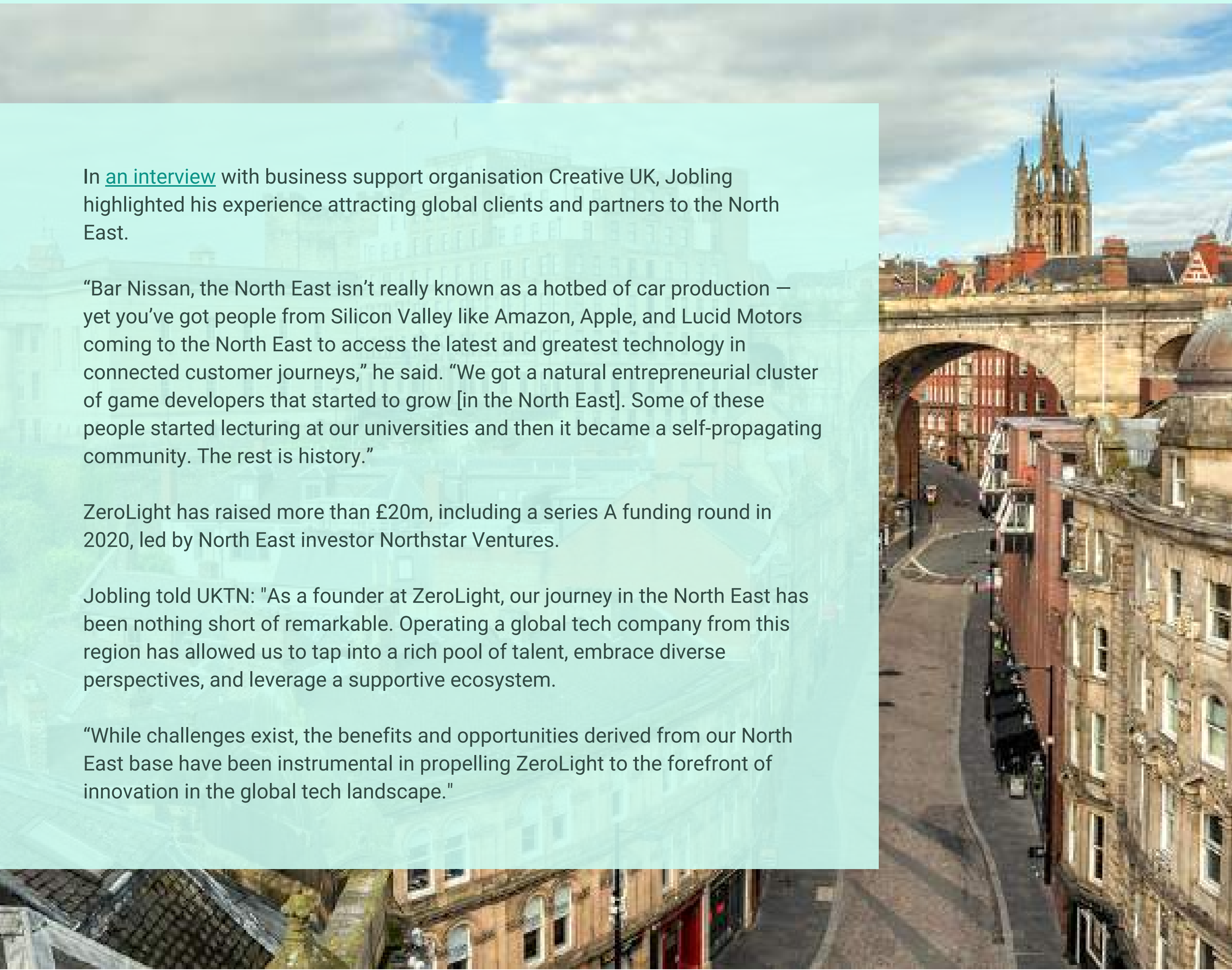
Company spotlights

ZeroLight

Newcastle-based ZeroLight provides an immersive technology platform for the automotive industry, enabling car dealers and other companies to provide digital, gamified and interactive experiences as part of the car-buying process.

ZeroLight was founded in 2014 by serial entrepreneur Darren Jobling, who'd previously run gaming companies including racing game developer Eutechnyx (previously called Zeppelin Games) in Newcastle's early gaming sector in the 1990s.

The company works with some of the world's biggest automotive players, including VW, Mitsubishi, Cadillac and Lucid Motors.



In an interview with business support organisation Creative UK, Jobling highlighted his experience attracting global clients and partners to the North East.

"Bar Nissan, the North East isn't really known as a hotbed of car production — yet you've got people from Silicon Valley like Amazon, Apple, and Lucid Motors coming to the North East to access the latest and greatest technology in connected customer journeys," he said. "We got a natural entrepreneurial cluster of game developers that started to grow [in the North East]. Some of these people started lecturing at our universities and then it became a self-propagating community. The rest is history."

ZeroLight has raised more than £20m, including a series A funding round in 2020, led by North East investor Northstar Ventures.

Jobling told UKTN: "As a founder at ZeroLight, our journey in the North East has been nothing short of remarkable. Operating a global tech company from this region has allowed us to tap into a rich pool of talent, embrace diverse perspectives, and leverage a supportive ecosystem.

"While challenges exist, the benefits and opportunities derived from our North East base have been instrumental in propelling ZeroLight to the forefront of innovation in the global tech landscape."

Company spotlights

Kinewell Energy

Based in North Shields in North Tyneside, Kinewell Energy is a clean tech company using AI to help offshore wind farm developers plan and construct wind farms efficiently.

Kinewell Energy was founded in 2015 and has since been backed by Durham University, Newcastle University and Innovate UK. It also received match-funding through the TIGGOR programme supporting offshore energy supply chains, run by Digital Catapult and the North of Tyne Combined Authority.

Its software has been deployed in more than 30 countries around the world to optimise cable layouts which connect wind farms to substations.

In October 2023, the company launched in Japan and announced a significant partnership with Equinor in the US, which is set to fuel further growth and create new jobs at Kinewell Energy.

Kinewell's founder, Dr. Andrew Jenkins, has been proactive in promoting how the North East can capitalise on the economic opportunity from the net-zero transition.

Dawn Dunn,
digital and tech sector lead,
Invest Newcastle

"The North East region has significant assets and infrastructure related to innovation, with a particular focus around AI, data science and machine learning. This is attracting a growing roster of international companies. They all recognise the value of working alongside research-led institutions to develop IP in emerging markets like clean technology and offshore wind."

Investor focus

Northstar Ventures

North East investor Northstar Ventures backs both high-growth businesses and high-impact social enterprises in the North East.

Working out of Newcastle, the team of nine invests in 'mission-based' founders with a particular focus on healthy ageing, the future of work and learning, the future of place, and climate tech.

Northstar currently runs three funds. The new Northstar EIS Growth Fund invests in late-seed to series A funding rounds, generally committing at least £500k per round with an aim to invest in four to six portfolio companies overall.

The North East Social Investment Fund provides affordable finance for social enterprises working on issues including poverty, unemployment, homelessness, and young offenders. The fund makes investments between £100k and £1m.

In an interview, investment director Rick Charnley told UKTN that Northstar focuses on healthy aging, biotech and clean tech as a way to support social and economic development in the North East.

Northstar has invested in around 60 portfolio companies, including MySalesCoach, a sales coaching platform, which recently raised £700k from the North East Innovation Fund, and LightOx which manufactures a light-activated drug to treat oral cancers.

Northstar Ventures

Company spotlights

Maven Capital Partners

UK-wide investor Maven Capital Partners has offices in both Durham and Newcastle, with a team of four investors across the two offices.

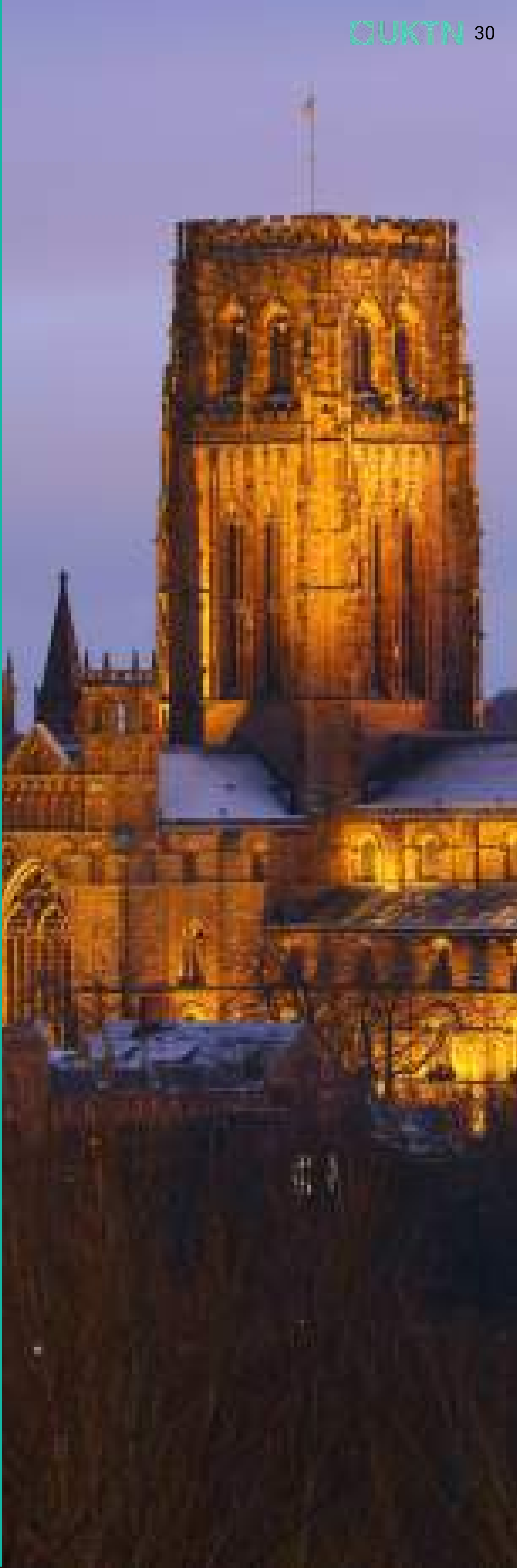
Since setting up in the North East in 2017, Maven has invested more than £30m into the region's high-growth businesses operating across a range of sectors, including technology, manufacturing, engineering and bioscience.

Its portfolio companies include the largest independent engineering business in County Durham, Dyer Engineering, employee engagement Software-as-a-Service (SaaS) platform, Hive HR, and fintech platform, Pockit.

Maven manages the £27m North East Development Capital Fund, supported by the European Regional Fund as part of its £120m investment programme into SMEs in County Durham, Northumberland and Tyne and Wear.

The fund invests between £400k and £2m into established businesses with ambitious growth plans.

MAVEN



Company spotlights

Mercia Asset Management

In 2018, SME investor Mercia Asset Management set up a Newcastle office as its ninth UK office location, following its appointment as fund manager for the North East Venture Fund – a £27m pot under the £120m North East Fund.

The Venture Fund invests up to £1m per deal into early-stage innovative startups in Durham, Northumberland and Tyne and Wear. Not counting two exceptions for smaller investments, Mercia says the average cheque size for Venture Fund deals is just under £500k.

Mercia also invests other funds earmarked for Northern businesses, including two Northern Powerhouse Investment Funds (equity finance and debt finance).

In the first half of 2023, managing director Will Clark announced that Mercia had increased its Northern investments by 65% compared to the same period in 2022. In that period it made 12 investments into North East businesses totalling £5.3m.

Investments included employee wellbeing app Art Health Solutions and cybersecurity specialist Melius Cyber. Mercia also exited its portfolio company, Middlesbrough games developer SockMonkey Studios which was acquired by Canadian gaming company Behaviour Interactive.

Mercia previously exited electric vehicle charging firm Elmtronics, based in County Durham, which was acquired by Norwegian charging company Mer.

mercia
asset management

Looking ahead

What’s next for the North East’s tech scene?

As the North East approaches devolution which takes effect in May 2024, tech players in the region say they expect to see the business community soon benefitting from a unified industrial strategy and support network.

“We need to work far more collectively and devolution could move the needle on this,” said Marek Tokarski, senior enterprise manager at Durham University.

“The funding into the North East as a result of devolution gives people the purpose and intention to work together and contribute to initiatives beyond their own community. Opportunities will be more visible across the region and more coordinated. It removes the pressure to try to replicate initiatives in every location.”

According to the UK government and the North East’s local authorities, the devolution deal is set to create 24,000 new jobs and leverage £5bn of private investment, among other outcomes to ‘level up’ the region.

Jamie Hardesty of Sunderland Software City believes devolution will also contribute to a more coherent infrastructure and tech support strategy.

“There has been some disparity in the North East in terms of where tech activity is happening and disconnected offerings between different authorities have been flagged” he explained. “A single mayoral combined authority will be a strength for the region as it pulls everyone in the same direction.

“In terms of tech sector growth, a unified approach will allow us to take stock of the real assets we have here across the entire region – including some of the best universities in the country, physical innovation hubs and access to expertise – and make strategic decisions which take the entire ecosystem into account. This ensures that people can access the same support, networks and opportunities from anywhere in the region.”

> The North East is becoming an ever-stronger voice in the Northern Powerhouse agenda, and this is only set to increase post-devolution, where we will have a once-in-a-generation opportunity to transform the regional economic landscape.

Jennifer Hartley,
director,
Invest Newcastle

> The North East's tech and data ecosystem is in an excellent position for rapid expansion and investment in the next five years. Emerging technologies such as AI are transforming businesses, driving startups, and becoming a new beacon of growth. The region's digital sector has flourished in recent years, with many emerging firms seeing promise in the industry.
>
> As the region's reputation as a tech and data hub grows, we hope to see a corresponding increase in investment. Recently, Northumbria University was awarded £9m for an AI research and innovation programme, and the presence of organisations such as The National Innovation Centre for Data in the region will only help to continue this pattern

Caroline Churchill,
partner,
Womble Bond Dickinson

In addition to the North East's strengths in fintech, cybersecurity, advanced manufacturing and immersive technology and gaming, recent developments in the region's biotech and climate tech subsectors indicate that these could become important areas of growth.

Last year there was a flurry of biotech activity, including a new lab-grown meat venture created in partnership between listed Newcastle biotech company BSF Enterprise and University of Newcastle spinout CellRev, which itself raised £1.4m in 2023.

Other significant biotech funding rounds included environmentally friendly cosmetics startup Hexis Lab and Aelius Biotech, which provides testing services to pharmaceutical companies.

Stakeholders also see significant business opportunities in the North East from the 'green economy', including Teesside freeport, which has been planned as Europe's 'green super port'. The project is not without controversy – facing charges of corruption and damage to the local marine ecosystem – but it's one of many examples of North East investment which is intended to support the global net zero transition while delivering local growth opportunities.

Liz Gilligan, the founder and CEO of Material Evolution, a Middlesbrough-based low-carbon advanced materials company, said: "One of the distinctive features of the region is decarbonising at an industrial scale and using financial instruments to allow green to become the new economy.

"There is a trend of redeveloping industrial hubs to create the low carbon future. I think it's exciting to see how the green economy can not just save the planet but redevelop areas."

In November 2023, a new investment zone for the North East was announced, focusing both on advanced manufacturing and green industries. The zone is set to make the most of opportunities for clean energy around the Tyne and offshore, and reflects the region's emergence as a significant national cluster for green innovation.

Sam Baldwin,
technology sector director,
Lloyds Bank Business &
Commercial Banking

"Over the coming years we can expect to see growing numbers of tech businesses and increased collective revenues across the region, driven by the levels of digital sector growth and new startups we are seeing today. Infrastructure development will be a key factor in the near future, and the region is well positioned to deliver on this, with both Newcastle and Sunderland recently recognised as leading UK smart cities.

The investment landscape is more challenging to forecast, however growing community activity and events through organisations such as TechNExt and FinTech North are creating exciting opportunities to ensure the region gets the focus and investment it needs."

Growth in the North East's digital and innovation sectors will also involve digital transformation and greater uptake of technology across the region's small and medium businesses (SMBs) which aren't currently focused on tech.

Sage's Paul Struthers says: "As the backbone of the economy, SMBs need to be empowered to seize the transformative opportunities that technology brings. By supporting SMBs to digitalise and decarbonise, the UK can become more productive and sustainable.

"As the government strives to make the UK a tech superpower, there is a real opportunity for the North East to use its rich industrial, engineering and technology heritage to lead the way. By fully digitalising the operating environment of SMBs, it would deliver an extra £232bn to the British economy." Ultimately, stakeholders agree that the North East's growth trajectory significantly depends on how the investment landscape develops.

Ashley Wright, vice president of commercial at ecommerce platform and agency Visualsoft, said: "If we want to have any chance of competing then we need to see more inward investment. It really all comes down to the appetite from the public and private sectors to invest inwardly into the North East.

"If we see more ambitious acquisitions by investors and we see positive moves by government to stimulate the tech economy of the North East then the area is well positioned to deliver the next THG or Just Eat, but if investment continues to be cautious or primarily focused on the South then I expect we will maintain our status quo with a few large players, such as Visualsoft, and many plucky startups vying, but struggling, to overcome their growing pains and hire the talent they need to evolve their product to the next level and achieve the scale that their innovations deserve."

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Womble Bond Dickinson (WBD) is a full-service international law firm sitting amongst the top 25 UK law firms and ranking 109th globally. In the UK, WBD has more than 120 partners and around 450 lawyers based in eight strategic locations, including the UK's biggest cities and legal hotspots.
In the US, WBD boasts 24 offices. The firm's reach also extends to Europe where it has strategic partnerships with law firms in Germany and France, and through the Lex Mundi network, WBD can offer clients access to counsel in more than 120 countries.

Advising businesses across 12 key sectors of expertise, the firm's clients include over 40 FTSE 350 companies, including many of the largest businesses in the country, private clients, charities as well as UK local and central government authorities.

WBD has a strong focus on innovation and has consistently ranked in the top 30 most innovative law firms in Europe by the Financial Times. The firm's dedicated and joined-up team of IT solicitors and data protection solicitors are perfectly situated to help companies adapt and thrive in a digital landscape.

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Supporting British businesses and the UK economy is central to what we do. Whether you are an entrepreneur starting out, or an established business, we can help.

Supporting with day-to-day business needs, offering tailored financial solutions and helping to protect businesses from the growing threat of financial fraud, are just some of the ways where we can support. We understand the unique position of tech businesses when it comes to access to finance.

Our knowledge of the sector allows us to provide banking to manage your money from the get-go. Our local relationship managers across the North East and beyond are experienced in the sector and keen to support further UK tech growth. We have a range of different products and services designed to meet your banking needs so that you can focus on growing your business in this fast-paced industry.

As you begin to scale up, you need a bank that supports your growth needs. Whether it's managing foreign exchange, deposit options or access to third party support, we can connect you to the right people to maintain your trajectory.

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Part of the NewcastleGateshead Initiative, Invest Newcastle is an award-winning investment promotion agency working to drive economic growth, secure capital investment, attract new businesses, and create jobs for residents.

Invest Newcastle helps businesses to locate, expand and thrive through a bespoke range of services and champions the North East region and its strengths on a national and international stage, promoting Newcastle as a city to collaborate, innovate and thrive.

Over the last 10 years, it has supported almost 300 new businesses to relocate or expand, helping to create and safeguard 14,500 jobs.

Invest Newcastle provides support in a number of key strategic sectors, including digital technology, life sciences and energy. It is funded by Newcastle City Council, Gateshead Council and North of Tyne Combined Authority.