

INVEST WEST MIDLANDS

TECH, CREATIVE & DIGITAL



The UK's fastest-growing tech cluster, with a workforce expected to double by 2025, and home to the country's first multi-city 5G testbed, the West Midlands is primed with opportunities to test and develop cross-cutting innovation across high growth industries of the future, such as Industry 4.0; low carbon tech; data-driven healthcare; smart cities; and cybersecurity.

Consequently, the region is recognised as the largest emerging technologies cluster outside London, hosting the largest spread of up-and-coming tech strengths, and the highest number of companies developing new tech of any other UK region – especially in Tech & Creative, where there are more companies across specialisms including digital transformation; gaming; immersive tech; process automation and software development.

This landscape for disruption offers both ambitious startups and established companies with high growth plans a fertile landing ground to access or create new tech-based markets, especially in green and sustainable technologies; Connected & Automated Mobility (CAM); automotive electrification; and professional and financial services, where there is already a clear evidence base of success.

Underpinning this offer is a highly-skilled workforce of 65,000 tech professionals, continually rejuvenated by an 87,000-strong pool of undergraduate talent with a background in science, maths, computing, engineering & technology. World-class, industry-focused collaborative technology hubs and testbeds put the region at the forefront of the technological needs of both today and tomorrow.

Key strengths

UK's fastest growing tech sector

Crowned the UK's fastest-growing tech sector by UK government, the West Midlands is set to create an extra 52,000 jobs and boost the national economy by £2.7bn by 2025, offering a critical mass of expertise.

Scale of emerging tech

The largest emerging tech cluster outside London, and a leader in 10 key specialisms, the region is a breeding ground for cross-cutting innovation and new market opportunities, thanks to the breadth and scale of industries on its doorstep that companies can access.

Breadth of specialist talent

Home to twice the number of computer-related roles than Cambridge, a 65,000-strong tech employment base is accessible within 45 minutes of central Birmingham, boosted by an evergreen pipeline of 87,000 STEM subject students – which includes 8,000 computer science students – the second largest concentration in the UK.

World class innovation

The local tech R&D ecosystem features over 20 accelerators, Catapults, incubators and peer-to-peer networks collaboratively backed by high-profile industry, academic and public sector organisations, offering unique spaces for businesses to trial, test and scale new technologies to market

UK's only large-scale 5G testbed

The UK's only multi-city 5G testbed and the site of the first 5G commercial accelerators, the West Midlands also has the best 5G network coverage of anywhere else in the country, offering industry, business and policymakers the opportunity to pilot, stress-test and evaluate new 5G user cases and applications.

Hotspot for Northshoring / Midshoring of technology

A central location, close proximity to London, cost-effective real estate and a UK-leading graduate tech talent base, combine to form an attractive proposition for businesses looking to relocate away from the costly capital but remain within easy reach.

Key Opportunities

Telecoms and 5G

A track record for developing and deploying a wide range of 5G technologies through the UK's first multi-city 5G testbed combines with an established high-quality telecoms pedigree and skills base to offer investors a wave of new opportunities in mobile, 5G and private network sectors. Commercial players already reaping the region's benefits include Vodafone, BT, Fujitsu, Ericsson, Telent and Telefonica/O2.

Many of these are engaged with regional assets such as 5PRING (the UK's first 5G commercial innovation accelerator), and Aston University's Institute of Photonic Technologies, one of the world's leading centres for optical fibre, 5G/6G and wireless network research – both of which proactively invite companies to collaborate on new telecoms technologies.

The region is also making an impact in the deployment of 5G private networks, which provide resilient, dedicated, and secure networks to improve productivity. In-region, companies can access trial environments at Sci-Tech Innovation Birmingham campus; the Manufacturing Technology Centre in Coventry; and Wolverhampton Science Park. Vendors can also explore Open RAN technologies for mobile networks at these same locations, bringing new competition and innovation to 5G. This is backed by the 5PRING commercial accelerator programme, which has over 40 distinct user cases of innovative companies evaluating solutions for smart cities; health; manufacturing; transport; and events, all dependent on 5G connectivity.

Digital Enterprise Technologies & Cybersecurity

The vast spectrum of industry strengths in the region provides a strong offer for digital enterprise firms to develop and deploy technological solutions across markets, creating significant potential for growth and expansion.

Investments from IT Managed Services Providers (MSPs) such as IBM, Atos, Oracle, SCC and Cap Gemini, as well as Indian-owned global tech business Microland, which has opened a European HQ in Birmingham, confirms this strength.

The West Midlands also has more dedicated AI companies than Cambridge, and more industrial automation businesses (including Schneider Electric, Wolf, Siemens and Oxford Vision) than Liverpool, Leeds and Manchester combined. Systems integration is a particular emerging specialism thanks to the presence of notable firms including Callistor Integration, Cougar Automation and Spica.

Digitalised manufacturing tech is where companies at the cutting-edge of Industry 4.0 can benefit from the region's thriving advanced manufacturing expertise across the automotive, rail and aerospace subsectors, exemplified by TATA's opening of its European HQ & Innovation Centre in Warwick in 2017 (which now employs over 1,000 staff). Local games company Playground have developed an innovative digital manufacturing solution with Tata using gaming technology another cross-cutting example.

The additional presence of operators across Critical Infrastructure (CI), utilities, aerospace, and highly sensitive commercial sectors (such as global finance) has grown an in-demand ecosystem of cybersecurity expertise, with big names like National Grid, Severn Trent Water, Cadent and E.ON actively creating opportunities for new entrants to reduce cyber risk in their operations. This is bolstered by established automotive and transport clusters seeking to integrate more digital and cloud-based processes.

Companies can access exclusive R&D provisions to secure their ambitions, such as Midlands Cyber - a government-backed initiative supported by Midlands Engine and the Department for International Trade – and the HORBIA MIRA Technology Park in Warwickshire, which has a world-class industrial cyber security testing facility, accredited by the Ministry of Defence. The universities of Warwick and Wolverhampton also have notable centres of excellence.

The growing landscape for cybersecurity provisions has created a considerable commercial market for tech-based consultancies in this space, with the region welcoming firms like CyberQ, Nettitude, Omni, JC, Acutec and Risk Evolves. Big-name brands with a major local presence such as PwC, Deutsche Bank, Goldman Sachs, and BT have also heavily invested in cyber security consultancy, while German-owned ZF Automotive has located a major cyber security division at its Solihull-based facility.

Gaming, Serious Games & Esports

Home to 25% of the UK's games market output, the West Midlands is primed to take the industry to the next level. Predominantly clustered around the Warwickshire town of Leamington Spa (aka Silicon Spa), a total 130 games companies employ a workforce of 3,000 games professionals - with well-known developers including Codemasters, Ubisoft, Playground, and Sega Hardlight among those based in the region. As well as affording opportunities for growth in new digital gaming trends – such as mobile gaming, E-Sports, and online gambling – the region's cluster offers a bank of transferable skills across development, AI, VR, AR and UX that companies looking to integrate the intuitive, immersive and user-experience principles of gaming into innovative products, services and systems can access.

This convergence is evident within the region's advanced manufacturing sector, with TATA Motors and Playground Games collaborating on a prototype physical vehicle based on a fictional car from the world-famous Forza computer game, which was made in the West Midlands. Warwick Innovations, the University of Warwick's commercial arm, has since used this prototype to create a scalable automotive design software package.

Other major businesses in the region embracing gamification technologies include BAE Systems, Costain, Jaguar Land Rover.

Low carbon technologies

The home of the Green Industrial Revolution, the West Midlands is a reliable base to develop new carbon-cutting technologies. Its designation as the UK's first Future Mobility Zone recognises the scale and potential of local world-leading expertise in Connected and Automated Mobility; propulsion, batteries and EVs; Very Light Rail, and high-speed rail (HS2) to fuel a new era of travel.

Simultaneously, the region is advancing vital, interconnected infrastructure systems across energy, mobility, manufacturing and housing, to deliver holistic and impactful low carbon solutions.

As the headquarter location for National Grid, Cadent Gas and Western Power Distribution, a net-zero-mission-critical supply chain of opportunities exists in smart grid solutions and UK grid modernisation, intensified by multiple UK-first Energy Innovation Zones, led by regional body Energy Capital, which provide a powerful single point of entry for companies with ambitions to turn new technologies into fully commercially viable energy systems that function at 'city-scale'.

Data-driven healthcare

The West Midlands' Data-Driven-Healthcare sector presents a major opportunity to deliver significant benefits to researchers, the NHS and patients across the UK. Employing over 17,000, the region's multidisciplinary healthcare ecosystem offers businesses a stand-out speed-to-market opportunity. Spearheading the region's Data-Driven Healthcare proposition are three distinct pillars of opportunity: digital, diagnostics and devices. Through unrivalled access to electronic clinical and genomic data of scale from a 5.5 million-strong, non-transient patient population, the opportunities to test and implement new and impactful healthcare interventions in the West Midlands are endless. This is underscored by one of the most advanced electronic patient record systems in the UK, aggregated by University Hospitals Birmingham (UHB).

Centres of Excellence

5SPRING

The UK's first 5G commercial accelerator 5SPRING works with private companies and public sector organisations to harness the power of 5G for enterprise growth and innovation and is located at three regional hubs - Innovation Birmingham; the Manufacturing Technology Centre (MTC) in Coventry; and Wolverhampton Science Park.

HS2 Innovation Centre

Driving innovation in the design and build of High-Speed 2 (HS2) – Europe's largest infrastructure project – the accelerator is dedicated to transforming the UK's rail and transport supply chain, offering business development opportunities; technical support; investment readiness programmes; funding advice; and coaching and mentoring.

Energy Systems Catapult

Supporting digitalisation in energy power networks, smart grids and systems, the Birmingham-based Catapult provides a range of digital and data services, and assets and expertise – such as data science, algorithms and artificial intelligence, alongside a Living Lab made up of real-world digitally connected homes.

Warwick Manufacturing Group (WVG)

Part of the University of Warwick, WVG works directly with industry to drive new technologies to market. In digital technologies, research activities include automated design; process optimisation; computer vision; Industry 4.0; IIoT; data analytics; and lifecycle engineering.

Manufacturing Technology Centre (MTC)

Specialising in digital manufacturing; robotics; and autonomous systems, the MTC works with SMEs to realise new technologies capable of enhancing design and transforming efficiency. Also part of the Smart Factory Innovation Hub, the Centre offers access to a private 5G network for trials and tests.

Mobility Innovation Accelerator

Part of the Silicon Valley-based Plug and Play innovation platform, the Mobility Innovation Hub at the MIRA Technology Park in Warwickshire offers extensive R&D facilities and highly-skilled engineering expertise to accelerate electrification and cyber security technologies.

Investment Association (IA) Engine Innovation Programme

Based in Birmingham, the IA programme helps FinTechs accelerate their immersion in the investment management industry. Its 'Engine Room' co-working hub offers over 5,000 sq. ft. of space for IA FinTech Members to innovate, collaborate and cross-fertilise with other firms.

Innovation Birmingham

With over 170 digital tech companies working across tech, creative and manufacturing, Innovation Birmingham is the UK's largest campus dedicated to digital technology businesses. Part of Bruntwood SciTech's network of innovation districts, it is also home to the 5G 5SPRING accelerator and the HS2 Accelerator. In addition, Innovation Birmingham brings together a network of investors looking to develop or fund digital tech businesses.

The SciTech Innovation Hub

Located at the University of Wolverhampton Science Park, the Innovation Hub is a route to specialist engineering, marketing, design, and business staff from the university's Faculty of Science and Engineering. The Hub supports sole innovators and SMEs through the process of new product development, from idea generation to commercialisation.

STEAMhouse

Based at Birmingham City University, STEAMhouse supports creative and maker businesses to develop products and services with a strong focus on the use of digital technologies. It recently opened a new incubation centre, and is investing £70m in an innovation campus.

Talent

The West Midlands is thriving with talent, offering access to a deep pool of skilled professionals and up-and-coming industry talent. Eight universities produce over 57,000 graduates, over half of which choose to stay and kickstart their careers in the region. A further 127,000 graduates from 20 universities within a one hours' drive boost the region's pipeline.

In disciplines specifically related to technology, the region has 87,480 students studying sciences, mathematical sciences, engineering & technology, and computing. Within computing alone, the region has a far higher proportion than Greater Manchester (+66%) and is considerably higher than other UK city regions.

In terms of skilled labour, the West Midlands has over 65,000 working within digital and technology roles. The largest sub-sector is within computing and related disciplines (32,000) – which is double that of Cambridge and 9,000 more than in Greater Manchester. New employment analysis has also found the region is home to 16,000 professionals with software skills and over 17,000 with SQL skills.

Within gaming, the region has over 2,000 gaming development specialists, which is over 40% more than Greater Manchester.

Contact [InvestWM](#) to speak to our team of sector specialists, who offer a free support service to businesses investing in the West Midlands.