

West Midlands Artificial Intelligence Missions



West Midlands
Combined Authority

Mayoral Foreword

The West Midlands Growth Plan presents our ten year ambitions for our region. As the home of the first industrial revolution we have continued to make significant contributions to national missions, but we now want to go further and faster.

Our headline Growth Plan aspirations are to grow our economy by an additional £17.4bn, add an additional £8,600 in wages to people's pockets, have 93,000 more people in employment, to build 12,200 more homes and to be carbon neutral by 2041. **Technology adoption will act as a catalyst for all of this, driving growth, jobs, innovation across our places, businesses and institutions.**

At the centre of this is Artificial Intelligence (AI) which is transforming the world at a rapid pace, including across our region where our businesses are using AI to become more productive and innovative and where trials are driving the creation of new services to improve people's lives.

In our role as regional convener we have produced the West Midlands AI Missions (WM AIM), a future facing mission driven commitment to put AI at the heart of our regional ambitions, driving and enabling the delivery of our Growth Plan priorities.

To do this we have focused on three missions, jointly created with our strategic regional partners, in addition to the substantial evidence and engagement that enabled the creation of the Growth Plan, these three missions are:

Mission 1:

Become a nationally recognised AI testbed for public service innovation, by overcoming challenges through the use of AI, in addition to growing and promoting our growth clusters¹ through AI application and development. This will be anchored by our universities, leadership across our growth clusters and harnessing the potential of our infrastructure.

Mission 2:

Drive business productivity across our growth clusters and everyday economy, by providing our firms with the guidance and programmes they need to grow. This will be anchored by leadership from business support and tech ecosystem leads and the application of AI through demonstrators.

Mission 3:

We will implement our AI-Academy approach by ensuring all residents and workforces can access high-quality AI training. This includes creating new learning opportunities and signposting existing provision through a wayfinding model. Our goal is to prepare, support and empower people to embrace AI-driven change, anchored in strong collaboration across the skills system, third sector and industry.

The golden thread across these missions are opportunities for all in the region; for business there are opportunities to innovate and scale, for residents there are opportunities to gain the skills to thrive in a digital economy and for our public services, there are opportunities to become early adopters, driving faster, smarter and more responsive services.

WM AIM is a call to action for government, industry, academia and communities to work with us to shape a future which delivers growth, innovation and fairness in equal measure.

This is our moment to act together.

Richard Parker,
Mayor of the West Midlands,
West Midlands Combined Authority

¹ The West Midlands Growth Clusters are: Creative and Digital, Next Gen Professional Services, Advanced Engineering, Clean Tech, Life and Health Sciences





Foreword by Andy Hague



The story of the West Midlands is one of relentless innovation, from the first industrial revolution to today's AI-powered transformation. This is a region of doers, where industry doesn't just imagine the future it builds it. From the steam engine to the first four-wheeled British car and the pioneering medical use of X-rays, our legacy is one of global impact through ingenuity.

That legacy continues. Today, the West Midlands is harnessing cutting-edge technologies to advance manufacturing, revolutionise healthcare and drive environmental progress through carbon reduction. We are a region where technology is not just adopted it's applied with purpose.

During my tenure at TechWM, I've been consistently inspired by the energy, expertise and ambition that spans our ecosystem - from SMEs and enterprise leaders to universities, public services and community organisations. What unites them all is that they are bristling with people with a passion and drive for the West Midlands and a common goal of making the region a truly inclusive digital economy where growth benefits all.

At the heart of this ambition is a clear recognition: technology and AI in particular, is a strategic enabler. It's not the end goal, it's the engine that powers transformation. And the technology sector is not just a contributor it's a partner in shaping the region's future.

Our collaboration with industry has helped position the West Midlands as the fastest-growing tech region in the UK, now home to 2,400 companies and 144,000 skilled professionals. But we're not stopping there. To deepen our impact, Tech WM has convened an AI Special Interest Group, bringing together global leaders like

IBM, SCC, Accenture and Intercity - a firm born right here in the region. The SIG has shaped and endorsed the WM AIM, ensuring that it captures the passion and drive, whilst being grounded in real-world solutions and outcomes that will benefit the region, to unlock investment, drive adoption and empower both our growth clusters and everyday economy businesses.

This marks a strategic shift from ambition to action. We are now working closely with the West Midlands Combined Authority (WMCA) and regional partners to make this vision a reality. For investors and policy makers, this is a moment to engage with a region that's not only ready for AI, it's ready to lead.

Andy Hague,
CEO, TechWM

Executive Summary

The West Midlands Growth Plan set out a ten year vision for growth and prosperity and in doing so recognises the importance of technology in making this happen. WM AIM builds on this by outlining the AI specific activity that is needed to harness the potential of AI for growth, innovation and public service adoption. WM AIM presents a future facing mission focused approach to harnessing AI, in line with the approach to broader regional digital ambitions that are charted in the West Midlands Digital Roadmap. In-depth engagement and evidence gathering, including a review of the strong Growth Plan evidence base has resulted in the creation of three mission areas and measures of success linked to the Growth Plan:

Mission 1:

Become a nationally recognised AI testbed by engineering real-world deployment across our growth clusters: Creative and Digital, Next Gen Professional Services, Advanced Engineering, Clean Tech, Life and Health Sciences, to drive a distinctive, investable, forward facing AI offer building on the youth, diversity and fastest growing tech sector and to support public service innovation. This will be anchored by our universities, leadership across our growth clusters and harnessing the potential of our infrastructure.

Mission 2:

Drive business productivity across our growth clusters and everyday economy, by providing our firms with the guidance and programmes they need to grow. This will be anchored by leadership from business support and tech ecosystem leads and the application of AI through demonstrators.

Mission 3:

We will implement our AI-Academy approach by ensuring all residents and workforces can access high-quality AI training. This includes creating new learning opportunities and signposting existing provision through a wayfinding model. Our goal is to prepare, support and empower people to embrace AI-driven change, anchored in strong collaboration across the skills system, third sector and industry.

Our regional make-up and strengths puts us in a unique position to demonstrate the full impact that AI can have on society. For example, we have the second largest, youngest, most diverse and fastest growing population outside of London and our polycentricity means that we have many societal and economic opportunities and challenges which mirror the national picture. Our identified Growth Clusters also closely mirror the Industrial Strategy sectors, meaning the AI solutions and innovation generated here can have national benefit. In terms of scale, we have a £77bn economy which is larger than both Bulgaria and Croatia in size with their potential to reach more than £90bn if we can meet the national average for GVA output, which emphasises the need for our firms to become more productive. Our region is made up of internationally renowned universities and we have strong education sector which is educating our residents about AI. Coupled with this is the devolved Central Government skills funding that is managed by the WMCA which is bringing agility to the region's skills response, enabling a tailored approach to digital upskilling, including to tackle digital inclusion and AI upskilling.

Underpinning all of this is our connectivity advantage with 90% of the population able to get here in less than four hours, HS2 investment that will connect to London faster and broadband connectivity which sees us now being the best connected Combined Authority area outside London for 5G connectivity, driven by the leadership of West Midlands 5G (WM5G).

Our ten point Action Plan will drive these missions. These headline actions will build on existing activity and also create new programmes of work to be delivered by the regional ecosystem:

Mission 1: Become a nationally recognised AI testbed

1. Create a Data & Knowledge Hub: We aim to broker data sharing agreements, curate and open high-value datasets for priority domains; provide tools, governance and access (a “Data Lab” model) with secure research environments.
2. Drive a Challenge Pipeline to support public service transformation: We will work to broker outcome based procurement, supporting public sector challenges with business, engaging third sector, to keep solutions resident focused; align to national regulatory and assurance standards to support wider adoption and engagement of sector into public service transformation.
3. Global Promotion: We will continue to market the region internationally as the UK’s proving ground for safe, impactful AI, utilising new intelligence and opportunities to promote the region.
4. Unlocking Secure Compute: We will assure access to national compute infrastructure and establish sufficient distributed compute in the region across appropriate strategic sites to

ensure we can deliver on our missions, facilitating fast track planning, dark fibre connectivity and heat reuse such that we provide the right capacity to enable high impact proof of concept demonstrators, using realistic scenarios and operating conditions.

Mission 2: Drive business productivity across our growth clusters and everyday economy

5. Introduce Adoption Programme & Sector Demonstrators: Work to launch exemplar projects across Next-Gen Professional Services, Creative & Digital, Advanced Engineering, Clean Tech, Life & Health Sciences, supporting and elevating supply chains to drive practical user cases, feeding demonstrators and procurement.
6. Create a West Midlands AI Knowledge Hub (business-facing): Drive practical guidance, diagnostics, risk management, vendor-neutral advice co-developed with ecosystem partners and explore the creation of “AI walk-in centres” where organisations of all sizes can explore practical applications of AI for their sector.

Mission 3: Implement our AI-Academy approach

7. Create a region wide AI-Academy.
8. Create an AI Skills Plan to drive our long term strategy for upskilling and reskilling our region.
9. Scaling Talent & Translational Partnerships: We will work to facilitate Industry-anchored fellowships co-run with Universities and anchors, challenge funds and applied labs to move research to market at pace.

Enabling action

10. Our Digital Roadmap Steering Group will provide the leadership and accountability to deliver the ambitions, coordinating activity partners such as the AI Special Interest Group. It will also establish focused working groups where needed to ensure delivery is aligned, accountable and impactful.

The WMCA is using its position as the Economic Development agency for the West Midlands and its convening powers and regional reach to develop and deliver WM AIM. Oversight for this work will come from the WMCA's Digital Roadmap Steering Group which oversees the delivery of the West Midlands Digital Roadmap (2024-27) and works with stakeholders across the region to do so working with key partners to make ambitions a reality.

This includes partners like:

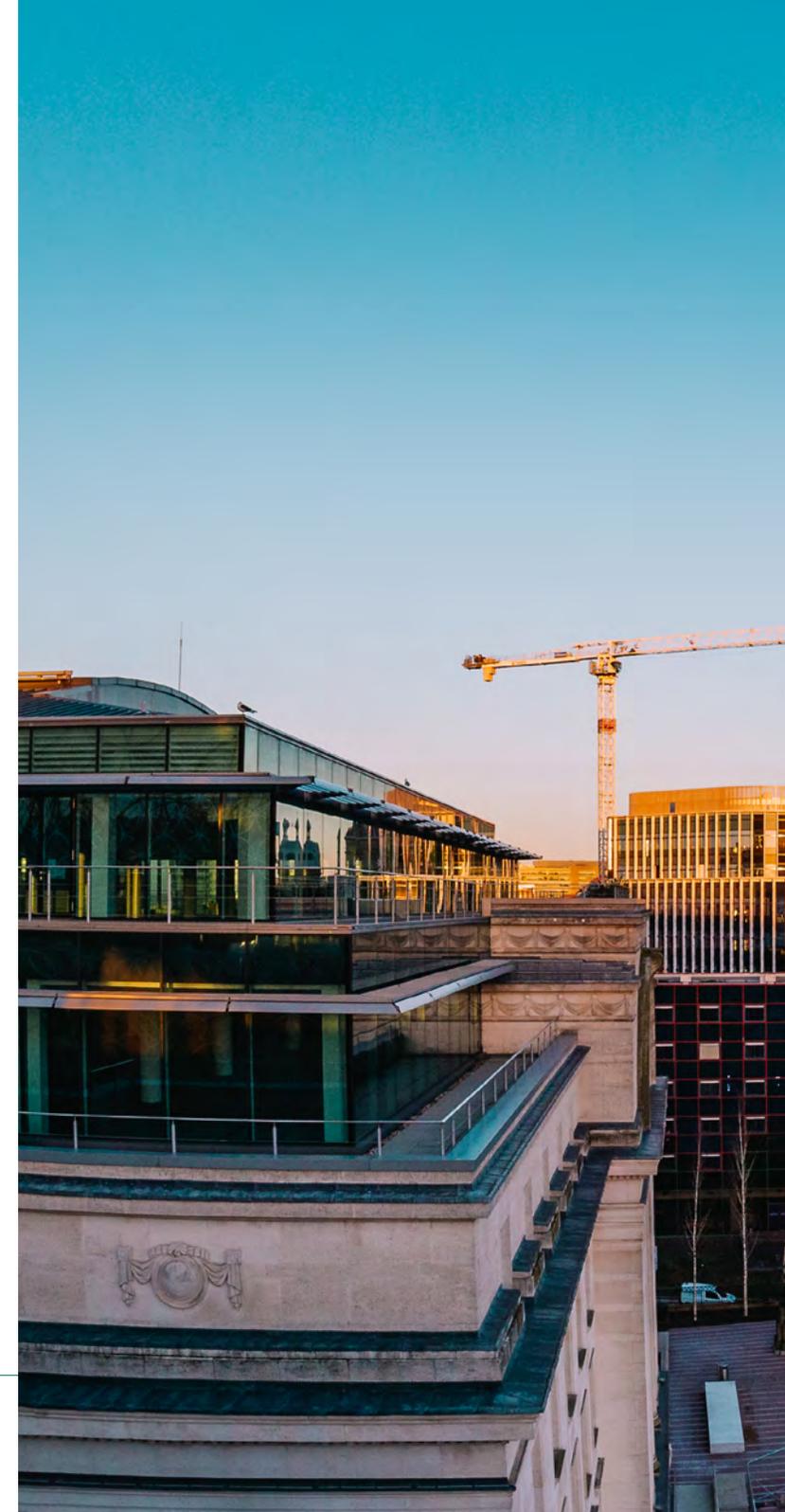
- Government, in particular the Department for Science Innovation and Technology.
- Industry, both our Growth Clusters and Everyday Economy and those from outside the region seeking to invest.
- Education sector, driven by our universities that are producing game changing research and unlocking potential for new products and services.
- West Midlands Growth Company (WMGC), our lead investment promotion and destination management organisation.
- TechWM, a strategic convener of the tech ecosystem, including the IBM sponsored AI Special Interest Group.

For clarity, in defining AI we are using that provided by the AI Regulation White Paper², which frames AI by two traits, rather than a fixed legal definition:

- **Adaptivity** – systems trained to infer patterns, often developing capabilities not explicitly programmed.
- **Autonomy** – systems able to make decisions without ongoing human control.

In the West Midlands our focus is on maximising the transformative role in the economy and society, ensuring that with the right skills infrastructure and governance, we create the forward thinking conditions to drive investment and facilitate our mission for inclusive growth and build on the unique strengths of the region.

² UK Government (2024) – A pro-innovation approach to AI regulation: [A pro-innovation approach to AI regulation - GOV.UK](https://www.gov.uk/government/consultations/a-pro-innovation-approach-to-ai-regulation)





Our Region

The West Midlands is located in the heart of the country and is defined by its polycentricity. The region comprises three major cities of Birmingham, Coventry and Wolverhampton and four thriving towns Sandwell, Solihull, Walsall and Wolverhampton. The region has a strong economic history and was the home to the first industrial revolution and known globally as ‘the workshop of the world’ by the end of the nineteenth century. Today, we have second strongest region for FDI jobs created outside London, one of Europe’s youngest populations:

Connectivity

- **92%** of UK businesses are within four hours travel-time of the West Midlands.
- **40-minute** travel time to Central London will be enabled by the future infrastructure of HS2.
- **126** global destinations are accessible from Birmingham Airport, one of Europe’s fastest-growing airports. Alan Turing Institute partnerships.
- The best 5G digital connectivity of all of England’s city-regions outside London at **97%**, with gigabit-capable broadband available to **97%** of households.

Economy

- **£77 billion** economy, larger than some countries.
- **£31.6 billion** of exports, the highest value outside of London and the South-East.
- **200,000** businesses operating in the region with a workforce of 2.9 million people.
- **£17 billion** manufacturing sector home to advanced and green engineering, transport innovation and motor industries.

People

- **2.9 million** people across the region.
- **1.5 million** residents under 25, making it one of Europe’s youngest regions.
- Home to people from **190** different countries.
- **63,500** graduates annually from across the region’s 9 universities.

Development

- Over **£1 billion** of funding secured to deliver brownfield regeneration.
- Of the **6,285 homes** unlocked by WMCA investments since 2018, a total of 2,045 are affordable (nearly 35%), exceeding expectations.
- **10,000 homes** and **290 hectares** of brownfield land unlocked through devolved funding.
- Housing delivery **doubled** over the last decade.
- A West Midlands Investment Zone with potential to attract **£5.5bn** of new investment and create over **30,000 jobs**.

Development

- **130 million** visitors each year driven by internationally renowned cultural assets.
- Over **55%** of graduates choose to stay in the region to live and work.
- WM2041, a compelling program to be **net-zero by 2041**.
- **15.58%** of Birmingham’s total land is classed as greenspace, one of the highest proportions of any UK city.

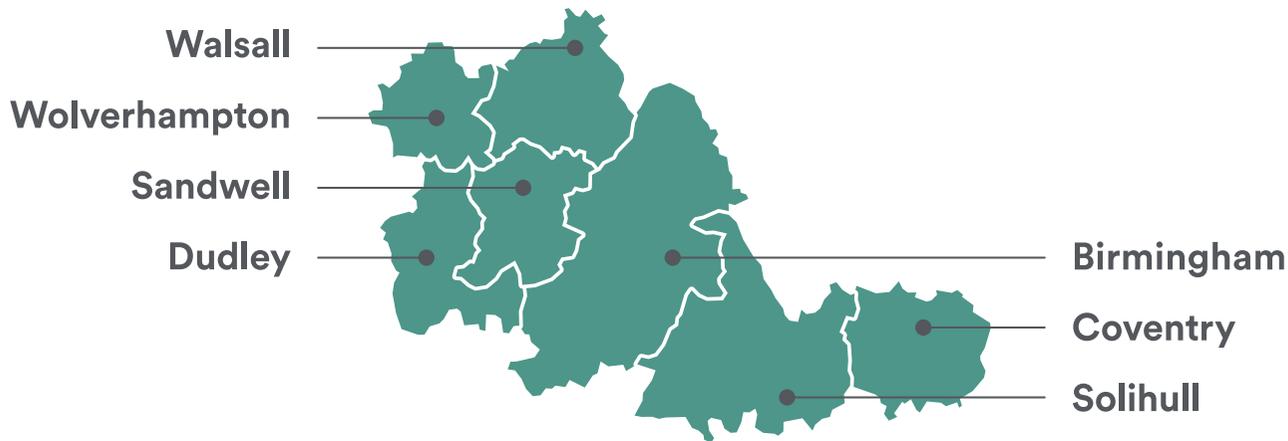
This is a region with a heritage of invention and global influence from the industrial revolution to automotive engineering, from advanced manufacturing to fintech and creative media. Today, those same strengths are being reimagined through AI. The region has a digital economy valued at £16bn, with 144,000 people employed in the sector across more than 2,400 companies³. Our Tech Review 2025 notes the potential of the wider regional conurbation, noting that the Midlands’ combined tech startup ecosystem reached a \$19 billion market valuation, reflecting a 20% growth in value since 2020, driven by sustained investment and startup performance. The region secured \$292 million in venture capital funding in 2024 alone, highlighting investor confidence. With 7 unicorns now calling the region home, the Midlands is increasingly recognised as a serious player in the global innovation landscape.⁴

³ WMCA (2024) – West Midlands Digital Roadmap: <https://www.wmca.org.uk/documents/culture-digital/west-midlands-digital-roadmap-2024-27/>

⁴ Tech WM (2025) – Tech WM (2035) – West Midlands Tech Review: <https://thetechsummit.ai/wp-content/uploads/2025/06/West-Midlands-Tech-Review-2025-TechWM.pdf>

Across the UK, the AI economy now includes almost 6,000 companies, a 58% increase in the past year and 85% over the past two years with £2.9bn secured in private investment and average deal sizes of £5.9m.⁵ Recent regional trends demonstrate the potential for the region to convert national AI momentum into meaningful local growth, innovation and investment:

- AI enablement in the West Midlands' industrials sector alone has the potential to grow the region's economy by £9bn by 2035.⁶
- The number of new technology companies incorporated in the West Midlands jumped by a 25% in the last year.⁷
- 35,600 new companies were registered in the first six months of the year, a 16.9 per cent increase compared to the second half of 2024.⁸



⁵ UK Government (2025) – Artificial Intelligence Study 2024: <https://www.gov.uk/government/publications/artificial-intelligence-sector-study-2024/artificial-intelligence-sector-study-2024>

⁶ Greater Birmingham Chamber (2024) - Region ripe for AI-led growth but more needs to be done to support investment – report: <https://www.greaterbirminghamchambers.com/resource/region-ripe-for-ai-led-growth-but-more-needs-to-be-done-to-support-investment-report.html>

⁷ Greater Birmingham Chamber (2024) – West Midlands tech start-up revealed: <https://www.greaterbirminghamchambers.com/resource/chamber-patron-reveal-west-midlands-tech-start-up-boost-in-latest-report.html>

⁸ Natwest (2025) - <https://www.natwest.com/business/insights/business-management/business-strategy/natwest-startup-index-august-2025.html>



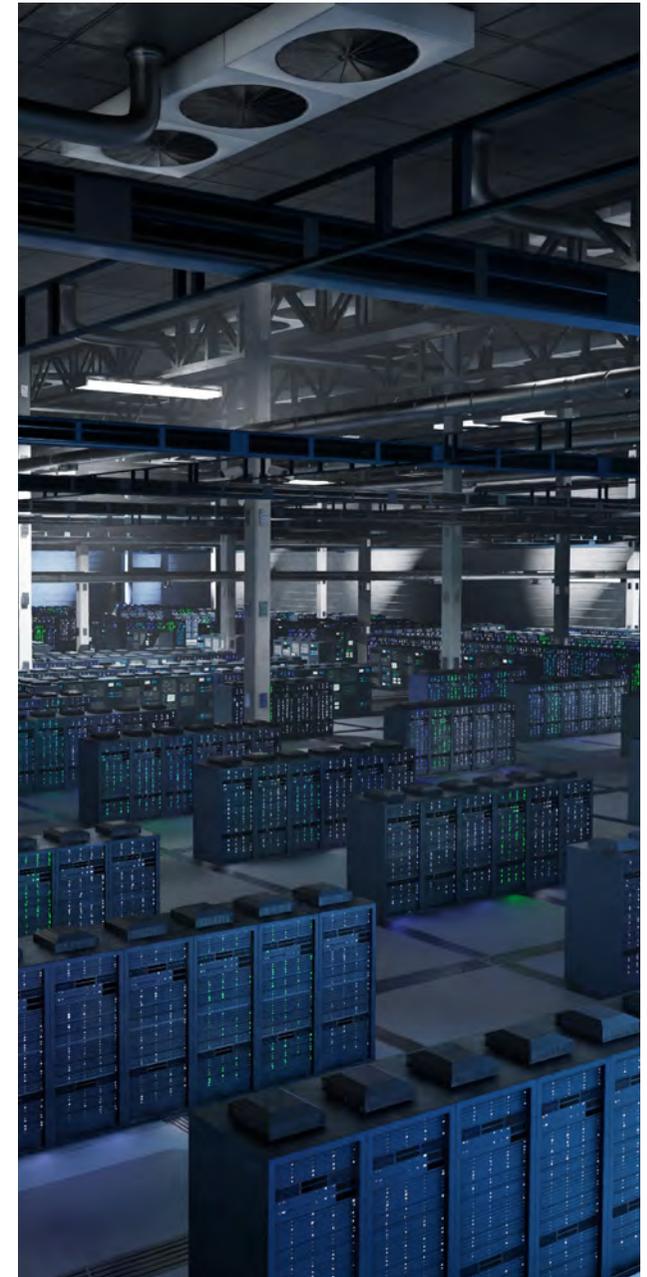
Mission 1:
Be a nationally recognised
AI testbed, driven by
accelerated adoption

Purpose:

Become a nationally recognised AI testbed by engineering real-world deployment across our growth clusters: Creative and Digital, Next Gen Professional Services, Advanced Engineering, Clean Tech, Life and Health Sciences, to drive a distinctive, investable, forward facing AI offer building on the youth, diversity and fastest growing tech sector and to support public service innovation. This will be anchored by our universities, leadership across our growth clusters and harnessing the potential of our infrastructure.

What change will feel like:

- Cement testbed status by increasing the amount of publicly funded **R&D to £1bn per annum, up from £700m**, driven by more AI related R&D funding.
- Maintaining our position as the **UK's second most investable region** by securing more AI and tech investments.
- Create a distributed compute network, **across at least three regional sites**, facilitated by edge computing and colocation opportunities for investors, with a focus on **at least 30% of waste heat being reused**, supporting our **2041 carbon neutral** ambitions.



Opportunity

We want to lead the UK's approach to testing and learning and work with key agencies to do so. This ambition is supported by the region's unique socio-economic makeup, which mirrors the full depth of the UK economy, encompassing large firms, thousands of small and medium enterprises and microbusinesses. This positioning creates a nationally recognised AI pilot testbed, offering opportunities for global-leading applications in sectors such as healthcare, renewable energy, defence and manufacturing.

The region is uniquely positioned to act as both a convener and a contributor to national initiatives, demonstrating its ability to provide expertise and drive forward nationally significant work. In doing so, it highlights its strengths across multiple sectors, including healthcare, defence and manufacturing, while also leveraging its innovation ecosystem to develop solutions with global relevance.

Central to this ambition is the emphasis on a collective, collaborative approach to infrastructure and R&D, shifting the culture away from competition toward one that prioritises the collective regional good. This approach also creates new opportunities for universities to collaborate more closely, pooling expertise and resources to accelerate discovery and impact, with competition reserved for the application stage where it drives excellence.

Case Study: Skin Cancer Treatment

University Hospitals Birmingham has collaborated with Skin Analytics to implement an AI-powered tele dermatology pathway for suspected skin cancer cases.

The initiative uses the Deep Ensemble for the Recognition of Malignancy AI tool to triage referrals within secondary care - resulting in the avoidance of more than 15,000 two-week-wait (2WW) face-to-face appointments and easing pressure on clinical workflows. Under the AI in Health and Care Award, the pathway expanded into primary care via community-based diagnostic hubs. Here, patients complete a questionnaire and have images taken locally, which DERM then analyses for malignancy. If a lesion is suspected to be cancerous, patients are routed directly into UHB's 2WW tele dermatology pathway; benign or pre-cancerous cases are discharged back to GPs with a suggested care plan.

Impact Highlights

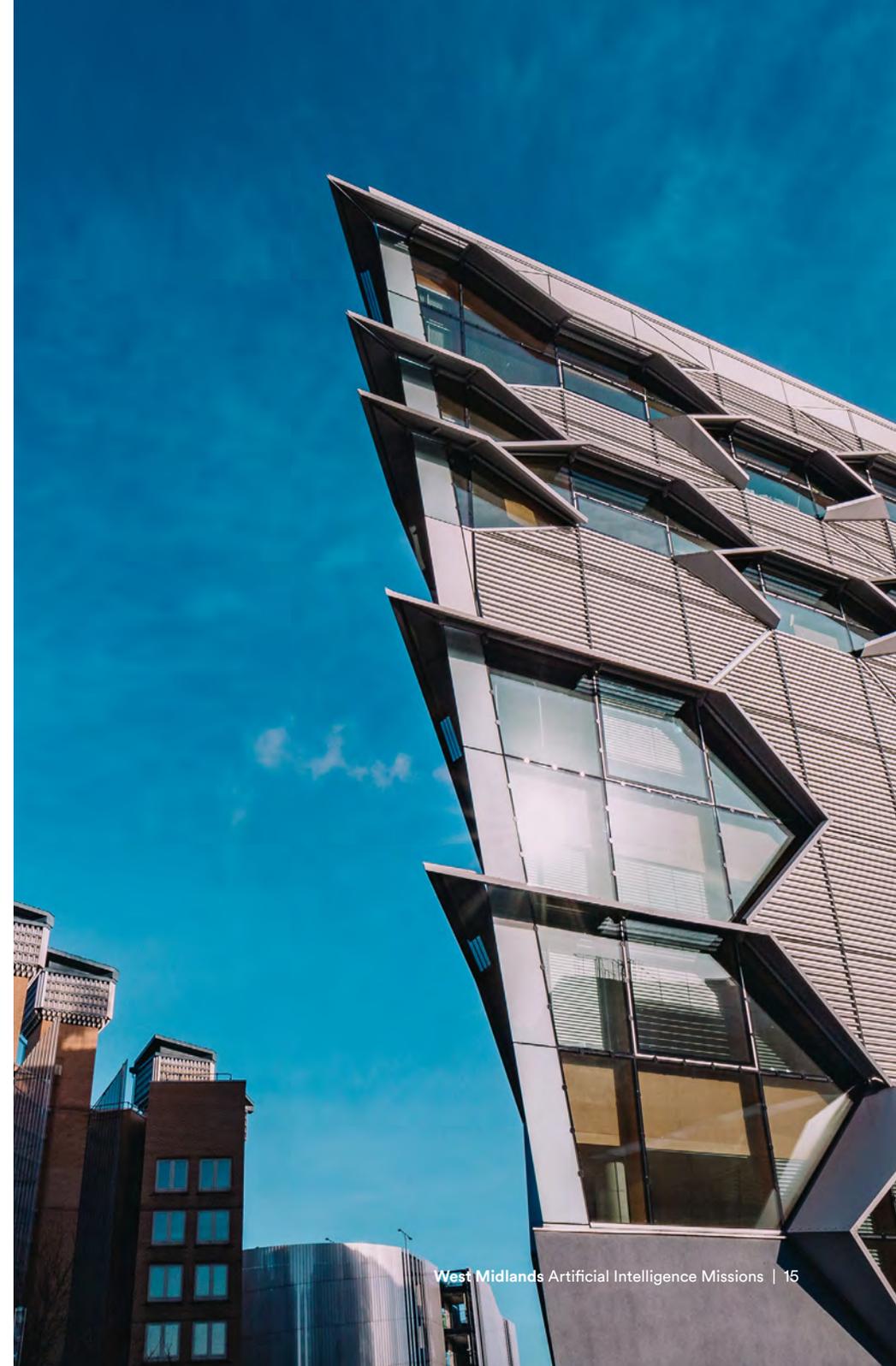
- **299 patients** have been assessed through the pilot pathway
- **206 GP appointments** were avoided
- **57%** of patients avoided a 2WW referral entirely
- **90%** rated their overall experience as "Very Good" - with none reporting poor outcomes

Case Study: CreaTech Frontiers

Birmingham City University, Coventry University, University of Birmingham and the University of Warwick are partnering on CreaTech Frontiers, a £7.2 million, five-year programme funded by the Arts and Humanities Research Council to drive creative technology innovation across the West Midlands.

The programme will power regional growth by offering £1.8 million in innovation grants (ranging from £5,000 - £50,000) to creative SMEs, plus 70 paid internships and 16 fully funded PhD placements - helping to build local skills, diversify the talent pipeline and accelerate product development.

A wide network of industry and cultural collaborators - including Vodafone, Rebellion, ARUP, Hollywood Gaming and the Royal Shakespeare Company - supports the initiative, ensuring outputs are both commercially viable and culturally impactful.



Public Service Innovation

Alongside supporting SMEs, the region's public sector will act as an anchor client for AI adoption creating early demand that accelerates SME growth while transforming services for citizens. We want to use AI to empower residents across the region ensuring that everyone including those with protective characteristics, those living in deprivation and individuals with other vulnerabilities can benefit from it. To maximise this impact we will work through our partnerships with local, regional and national bodies to shape our approach ensuring that inclusivity and ethics remain at the forefront.

We want to build on the strong foundations already in place where early examples of AI innovation are beginning to impact service delivery. For example, Local Authorities are trialling tools such as Magic Notes to support social workers with case recording and decision making; NHS Trusts are applying machine learning to accelerate diagnosis and optimise treatment pathways; and councils are exploring AI enabled planning simplification to improve efficiency and transparency.

Furthermore, there are opportunities to extend AI use across the wider public sector in areas like public safety, where AI can assist with predictive policing and traffic flow optimisation, to social care where it can support demand forecasting, early intervention and workforce planning. In transport, AI is being used for intelligent traffic management, predictive maintenance of infrastructure and route optimisation for public transport. Further potential lies in areas such as environmental monitoring where AI can help manage air quality and flood risk.

Project Proposal: West Midlands AI Impact Lab

One of our key ambitions across this mission is to turn the region into an “AI Impact Lab”, where the ecosystem collaborates to assess the impact of AI across public services. As a start, we have an ambition to co-create a project which assesses the impact of AI tools on public sector productivity, assessing how tools like Large Language Models impact productivity.

The AI Impact Lab will collaboratively assess the real-world impact of AI tools in public sector. This pilot will generate a nationally relevant toolkit for public sector AI adoption, including metrics and case studies and seeks to align its evaluation metrics with national productivity and service benchmarks.

We want to work with Government to align evaluation metrics with national productivity and service benchmarks and to embed the toolkit into central guidance. This pilot would offer a timely opportunity to generate high-quality, actionable evidence on where and how AI can deliver public value supporting better investment decisions, smarter services and measurable outcomes for people and places.

We aim to work with partners such as: Councils, Government Department, NHS trusts, Universities, Innovate Catapults and private sector firms.

Anchors

Our universities, strategic sites and growth clusters anchor this mission, offering the expertise, infrastructure and potential needed to attract investment and foster collaboration.

World Class Universities

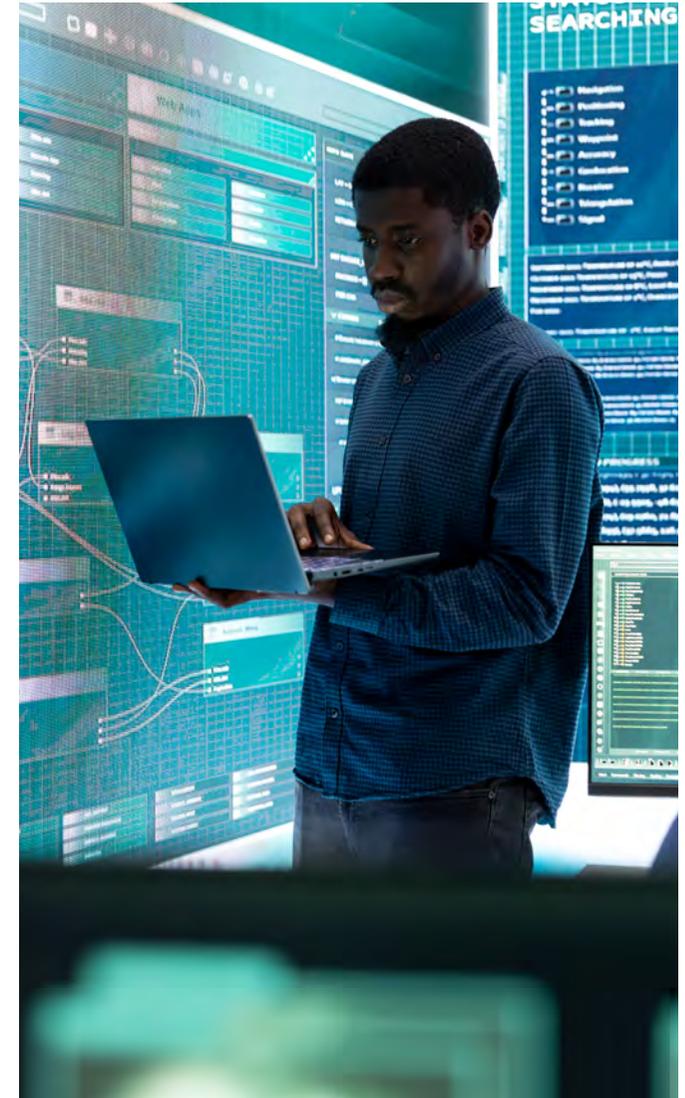
The West Midlands' eight universities represent one of the region's most formidable innovation assets. Together, they educate over 150,000 students and produce more than 66,000 tech graduates annually, with over 5,000 emerging from AI, computer science and data-related disciplines⁹. Their research is deeply embedded across priority sectors health, transport, energy, construction, manufacturing and the creative industries ensuring academic discoveries consistently translate into real-world impact, making them anchors to this ambition.

Research and Development

The region demonstrates one of the UK's most extreme cases of private-led R&D. In 2022 businesses invested £3.8bn, compared to £0.7bn public funding, a 5:1 private-to-public ratio which is the second highest in the UK and among the most unbalanced in Europe. This reflects strong market confidence, though historically concentrated in large automotive and engineering firms. That picture is now shifting. UKRI has redirected investment outside the South East, with the West Midlands securing the second-largest increase nationally (+£171m since 2020/21). Public spend per head has risen to £125 in 2023/24, the fifth-highest in the UK. This new public confidence is catalysing higher-risk research and enabling commercialisation at scale¹⁰. Our universities are leading the way driving groundbreaking research and developing the tools that will shape future discovery. They collaborate through prestigious platforms such as the Turing Institute University Network, contribute scientific expertise as advisors to initiatives like Bridge AI and play a vital role in shaping national skills agendas. Each of these efforts reflects their commitment to advancing innovation, influence and impact across the UK's tech ecosystem.

⁹ WMGC: West Midlands Universities Brochure: <https://www.investwestmidlands.com/wp-content/uploads/2022/04/wm-universities-e-brochure.pdf>

¹⁰ WMCA: West Midlands Theory of Growth: <https://www.wmca.org.uk/media/eniac1hq/the-west-midlands-theory-of-growth.pdf>



Case Study: AI.RDN+

Aston University is leading a £3.4m Research England - backed initiative to put the West Midlands at the forefront of AI-enabled research. Through the Artificial Intelligence Researcher Development Network Plus (AI.RDN+), led at Aston by Professor Phil Mizen, the programme will assess publicly available AI tools for PhD research and co-create practical guidance and training with partners across Midlands Innovation and Yorkshire Universities. Based in Birmingham, the AI.RDN+ portal and training offer will equip doctoral researchers, supervisors, technicians and professional services with the skills and standards needed for responsible AI use - accelerating discovery, improving research quality and shortening the path from idea to impact.

By building capability at scale and clarifying good practice, Aston is strengthening the region's R&D capacity, enabling labs and research groups to work faster, smarter and more ethically. The result: a confident, connected West Midlands research ecosystem ready to translate AI-powered insights into growth for industry, public services and communities.

Case Study: New research hubs to revolutionise the use of AI and robotics in manufacturing

In 2024 UK Research and Innovation (UKRI) confirmed investment to establish the Manufacturing Research Hub in Robotics, Automation and Smart Machine Enabled Sustainable Circular Manufacturing and Materials (RESCu-M2). The Hub unites leading experts from the Universities of Birmingham, Strathclyde, Leeds, Sheffield, Brighton and Loughborough and the Manufacturing Technology Centre (MTC). In 2025 UKRI invested in a second hub to establish the Collaborative AI for Manufacturing Sustainability (Co-AIMS) to pioneer ways for empowering people and organisations with AI to cut waste, boost productivity and increase sustainability. The Hub unites leading experts from the Universities of Birmingham, Bristol, Nottingham, Oxford, Sheffield and Cranfield and the MTC.

Led from the West Midlands by the Birmingham Institute for Robotics, these hubs, a national investment of more than £25m, align with the UK government's industrial strategy "Invest 2035," which focuses on productivity, growth and environmental leadership. They will work with close to 100 industrial, regional and innovation partners to deliver economic growth in the UK, addressing barriers such as technology adoption, data and skills to support AI's potential to make the country's manufacturing more sustainable and help deliver greater productivity and positioning the UK as a world leader in AI-driven manufacturing. These two hubs give the West Midlands a compelling and differentiated case for regional leadership in AI for smart manufacturing.

WM5G has established the West Midlands as a national leader in next-generation connectivity, creating one of the UK's first large-scale 5G testbeds.

Its programmes have accelerated the roll-out of 5G and full-fibre infrastructure across the region, providing the digital backbone essential for AI adoption. Through pioneering testbeds and real-world pilots in health, transport and manufacturing, WM5G has demonstrated how advanced connectivity can unlock innovation, improve services and drive economic growth. WM5G's leadership on connectivity has led to the region having 97% 5G connectivity, the best of any Combined Authority area.

The following case studies show some of the AI-driven innovation being led by WM5G in the region. These are projects that are truly game changing and help to demonstrate the transformative potential of AI.

Case Study: Digital Discharge Service

WM5G's award-winning technology has already proven its value through a care programme delivered with three West Midlands Local Authorities, helping vulnerable people live safely at home while easing pressure on overstretched services. Building on this success, WM5G are now scaling our Digital Discharge Service (DDS) combining digital monitoring, clinical oversight and same-day discharge support to enable faster, safer transitions for patients. The service is fully managed, tech-agnostic and requires no additional infrastructure from NHS providers.

With AI and data at its core, DDS turns real-time monitoring into predictive insights, bridging the gap between health and social care. The result: earlier interventions, fewer complications and more resilient communities. DDS not only frees up hospital capacity but also reduces readmissions, cuts system costs and supports winter resilience and elective recovery a scalable model for the future of care.

Impact at a glance:

- Faster, safer discharges for patients on Pathways 0 & 1 and for anyone needing social care or discharge-to-assess support.
- Thousands of acute bed days saved per 1,000 patients/year.
- Avoided readmissions, ambulance callouts and A&E attendances.

Case Study: AI-Driven Hypertension Management with GPMate

Hypertension is one of the UK's most pressing health challenges, placing a significant burden on the NHS and primary care teams. Clinicians often lose valuable time to administrative tasks, while patients miss out on early interventions. GPMate, developed in collaboration with WM5G and Wolfram and co-designed with General Practitioners, leverages AI and data to transform hypertension care. Wolfram, known for its computational knowledge engine and software tools, provides advanced computation, data analysis and algorithmic problem-solving capabilities to power the platform. GPMate streamlines caseload management, automates patient tracking and delivers proactive insights shifting primary care from reactive, face-to-face consultations to preventative, risk-focused management.

The tool enables fast, effective and efficient remote monitoring for patients on hypertension registers, ensuring clinicians can prioritize high-risk individuals and provide timely interventions. By integrating advanced computation, data analysis and algorithmic problem-solving, GPMate supports GPs in delivering patient-centred, efficient and data-driven care.

Impact at a Glance

- Automates administrative tasks, freeing clinicians to focus on patient care.
- Enables early interventions by identifying high-risk patients and tracking their progress.
- Leverages AI and computational analytics to optimise hypertension management across primary care.

WM5G's leadership and expertise will be vital in achieving the ambitions across the three mission areas in the coming years.

University of Wolverhampton

- Centre for Cyber Resilience and AI - enhancing digital security through AI research.
- Digital Innovation and Solutions Centre - exploring AI applications for 6G technologies.
- Research Institute of Health Science - conducting AI-based clinical research.
- Construction Futures Research Centre - leading innovation in digital construction.

University of Birmingham

- Centre for Excellence in AI and Digital Health Regulation - shaping policy and practice in AI health applications.
- Institute for Data and AI - driving interdisciplinary AI research.
- Collaborative AI for Manufacturing Sustainability - (Co-AIMS Hub - pioneering AI for sustainable manufacturing and productivity.

Birmingham City University

- AI & Computer Science Programmes (Millennium Point, STEAMhouse) - delivering AI education and applied skills through cutting-edge facilities.
- AI Research Centre drives £30m+ impact-led research with 40+ experts, offering cutting-edge labs, HPC and a 5G testbed, while upskilling industry through specialist AI and Big Data programmes.

University of Coventry

- Research Centre for Computational Science & Mathematical Modelling - applying AI and modelling to solve real-world industry challenges.
- Research Centre for Intelligent Healthcare - pioneering AI for diagnostics, assisted living and population health.
- AI Adoption and Innovation Labs - supporting responsible AI integration.
- AI Expert-in-Residence Programme - offering strategic partnerships for AI expertise.
- Human-Centred AI Interdisciplinary Network - uniting 100+ researchers and 60 PhD students to address key AI challenges.
- BRAID Programme - exploring responsible AI in the creation and conservation of artworks.

University of Warwick

- Warwick Manufacturing Group & High Value Manufacturing Catapult - global leader in applied AI for manufacturing and mobility, including autonomous vehicles.
- Alan Turing Institute Partner - contributing to national AI and data science research.
- Gilmore Centre for Financial Technology - advancing fintech innovation.
- Warwick Innovation District Creative Futures Programme - supporting CreaTech, Fintech and Deep Tech.
- Academic Centre of Excellence in Cyber Security.
- Tissue Image Analytics Centre and Interdisciplinary Collaboration in Systems Medicine.
- The Feuer International Scholarships in Artificial Intelligence.

Aston University

- Capgemini Centre of Excellence for Enterprise AI - applying AI technologies to drive enterprise transformation.
- Sir Peter Rigby Digital Futures Institute - focused on AI in health, data science, bioinformatics, gamification and digital society.
- Centre for AI Research and Application - advancing ethical AI solutions through stakeholder collaboration.
- UK Multidisciplinary Centre for Neuromorphic Computing - hosted within the Aston Institute for Photonic Technologies.



Growth Clusters

Our universities and wider innovation ecosystem are actively driving sector growth by serving as critical enablers of applied research and development. Acting as innovation assets, these institutions play a pivotal role in accelerating the testing and deployment of AI applications across priority clusters. Central to this effort is targeted support for five emerging regional growth clusters, which together represent approximately 20% of the West Midlands economy. These clusters offer fertile ground for scaling innovation, commercialising research and attracting investment.

The Government's Modern Industrial Strategy recognises the strategic importance of these clusters, aligning with the ambitions of Industrial Strategy 8 to harness place-based strengths and unlock growth potential. This alignment signals a clear opportunity to amplify sector development and position our regional capabilities on the global stage.

By leveraging academic excellence, industry partnerships and place-based innovation, we are building a compelling proposition for international investors and government stakeholders alike.

A review of our regional Growth Clusters reveals significant opportunities to strengthen both the demand and supply of AI products and services. The Growth Cluster snapshots illustrate how our firms are applying AI to solve real world challenges and create export ready products and services. These examples show that AI solutions can be developed and tested locally before scaling nationally and globally. We will work with partners to unlock and operationalise these opportunities driving innovation, economic growth and global competitiveness.

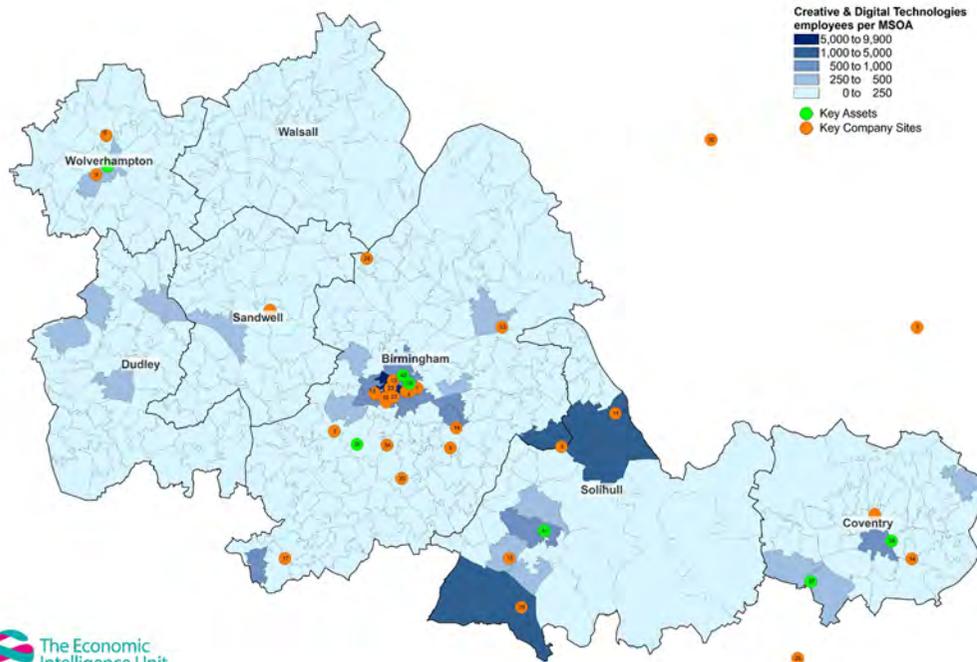


Creative and Digital Technology

The West Midlands is a creative and digital cutting-edge region with game development, immersive technologies and media strengths. Regional specialisms such as Createch Frontiers, Coventry University Media, Warwick Digital Lab and the NEC's forays into esports and immersive experiences provide a strong foundation for growth Cluster leadership comes from Creative Central and TechWM.

Key Opportunities:

- The use of AI to develop novel formats of interaction that blend virtual production, gaming and performance to reach wider audiences and export creative IP across the globe.
- AI is helping creative companies personalise digital experiences at scale with SMEs using AI to analyse audience behaviour, tailor content and optimise digital platforms, enabling more targeted marketing, improved customer retention and faster product development growth in e-commerce, media and design businesses.



1	Digbeth Loc. Studios
2	Hollywood Gaming
3	Cornerstone VR
4	Second Home Studios
5	Fujitsu
6	Telnet
7	Creative Black Country
8	Specialist Computer Centres
9	Technology Management Limited
10	One Advanced
11	Atos IT Services
12	Intercity Technology
13	BT
14	Ericsson
15	McCann
16	Goldilock
17	Microland
18	Ikon Gallery
19	Vodafone
20	Holosphere
21	BBC
22	Elemental Compute
23	Covatic
24	Highly Sprung
25	Mercurial Dance
26	Surfing Lightbeams
27	IBM
28	Pulsant
29	Wavenet
30	Capture Virtual Production Studio
31	Codemasters
32	Reach
33	ITG Capture
34	Midlands Arts Centre

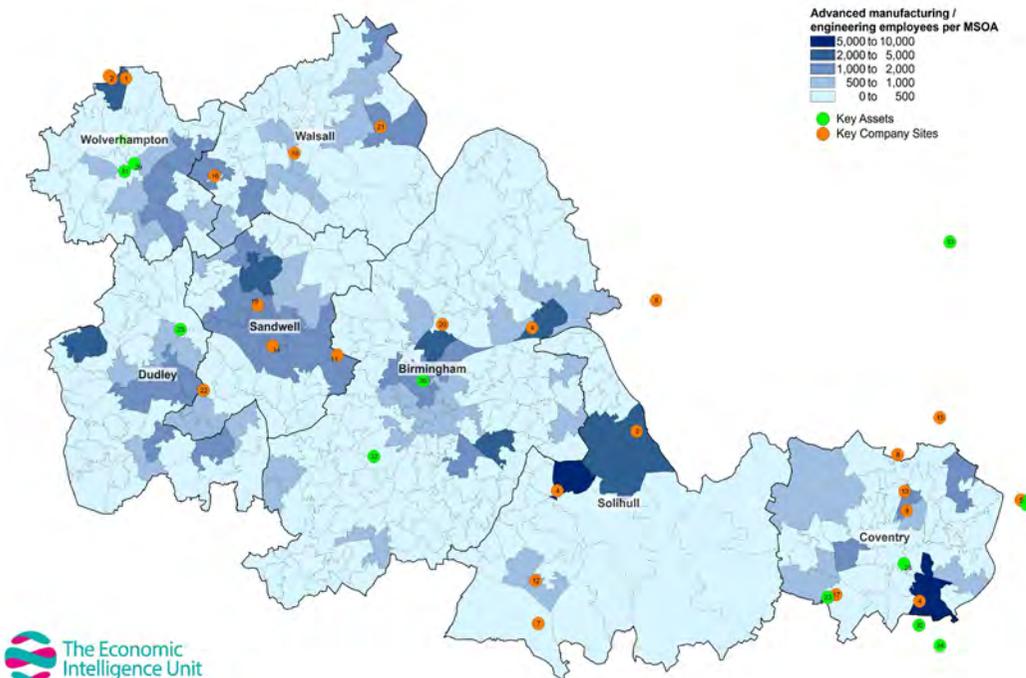
35	University of Wolverhampton (AI and Data Science Research Laboratory; Research Institute of Information and Language Processing; and the Centre for Cyber Resilience & AI at the University of Wolverhampton)
36	University of Birmingham (Birmingham Centre for Cybersecurity and Privacy; Institute for Interdisciplinary Data Science and AI; Institute of Robotics Lab; and Birmingham Institute for Quantum Technologies)
37	University of Warwick (Centre for Applied AI; Centre of Excellence in Cyber Security Research; and Data Science Lab)
38	Coventry University (Centre for Data Science; and Disruptive Media Learning Lab)
39	Birmingham City University (Computational Modelling Research Group; Intelligent Systems and Networks Research; Online Simulation and Immersive Education R&D Group; Cyber Physical Systems Group; and Digital Media Technology Lab)
40	Aston University (Cyber Security Innovation Research Centre; Systems Analytics Research Institute; Institute of Photonic Technologies; and The Sir Peter Rigby Digital Futures Institute)
41	UK Telecoms Lab (National Physical Laboratory)

Advanced Manufacturing / Engineering

The region is leading the UK in advanced manufacturing, EVs and materials innovation. There is a pipeline of AI-ready skills and applied research capacity provided by Coventry University and the WMG Academy for Young Engineers with the cluster anchored by the likes of Jaguar Land Rover, UKBIC and Birmingham Institute for Robotics. Cluster leadership comes from Cast Consulting; BBI Services; CE Midlands; Black Country Industrial Cluster; Warwick Manufacturing Group; Midlands Aerospace Alliance and the Connected Places Catapult.

Key Opportunities

- AI is accelerating the low-carbon production and transport transition, for instance, in developing and testing next-generation batteries, supporting optimized electric vehicle performance, reducing emissions along supply chains, to support our net zero targets.
- Firms are leveraging AI to monitor equipment, predict failures and automate audits reducing downtime and improving productivity. Such technologies are helping businesses return faster from disruptions and maintain high-performing operations.
- Neuromorphic computing and robotics are being designed to enable energy-efficient automation of manufacturing. Such technologies offer scalable solutions that reduce energy usage, increase flexibility and enable long-term sustainability objectives.



1	Safran
2	Moog Aerospace
3	Rolls-Royce
4	Jaguar Land Rover
5	London Electric Vehicle Company
6	BMW
7	ZF Group
8	Changan
9	NP Aerospace
10	Babcock
11	Hadley Industries
12	Norton
13	Hyperbat
14	Metsec
15	Brose
16	Wedge Group Galvanising
17	AVL Powertrain
18	Parker-Meggitt
19	Robinson Brothers
20	MWW
21	Ibstock
22	Westley Group

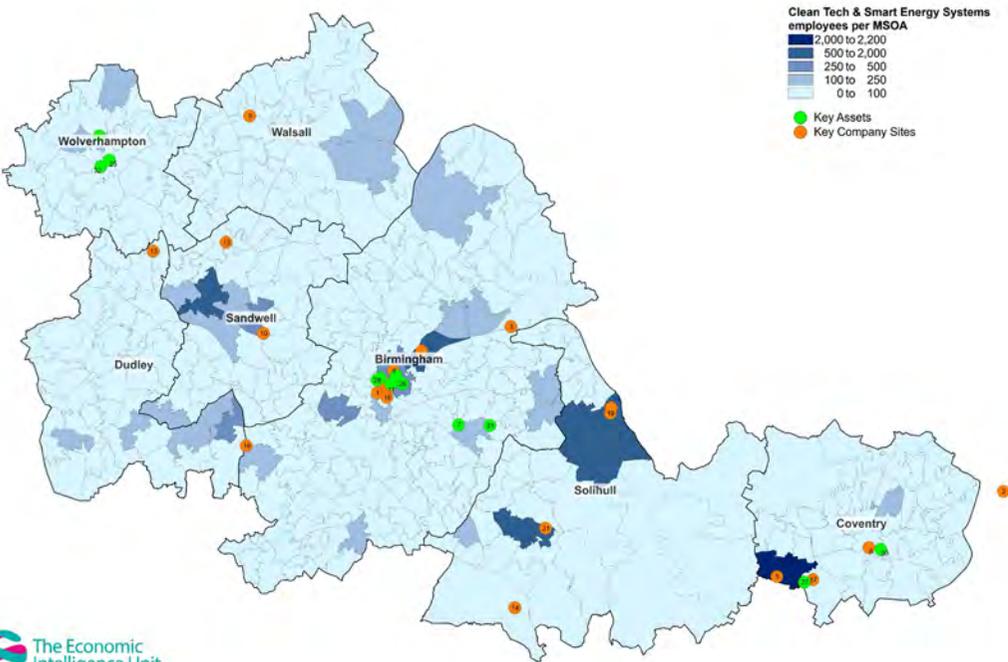
23	Warwick Manufacturing Group (National Automotive Innovation Centre; Advanced Materials Manufacturing Centre; Centre for Imaging, Metrology and Additive Technologies)
24	Manufacturing Technology Centre
25	Black Country Innovative Manufacturing Organisation
26	Advanced Propulsion Centre
27	High Temperature Research Centre
28	Coventry University (Centre for Advanced Low Carbon Propulsion Systems; National Transport Design Centre)
29	Elite Centre for Manufacturing Skills
30	UK Battery Industrialisation Centre
31	University of Wolverhampton Centre of Engineering Innovation and Research
32	Birmingham Centre for Fuel Cell and Hydrogen Research
33	Horiba Mira
34	Warwick & Coventry Gigapark (WM Investment Zone)
35	Wolverhampton Green Innovation Corridor (WM Investment Zone)

Clean Tech & Smart Energy System

Home to Tyseley Energy Park and household names like E.ON, Mitsubishi and Daikin and cluster leadership from the Smart Energy Systems Catapult, the region is at the forefront of the UK's path to net zero. Universities and SMEs are pioneering AI-driven developments in energy, retrofit and circular economy solutions.

Key Opportunities:

- Digital twins and AI-based models are being used to simulate energy networks, match supply and demand from renewables and support infrastructure planning and enabling smarter, more resilient energy systems and local decarbonisation.
- AI-powered retrofitting solutions are helping homes reduce energy, increase comfort and lower bills. The technologies are facilitating mass deployment of energy efficiency interventions and helping combat fuel poverty.
- AI technologies are being used to track material flows, predict waste and optimize reuse across industrial systems. In the West Midlands, this is supporting circular business and helping businesses reduce environmental footprints while improving profitability.



1	Hitachi Energy
2	Cadent
3	SSE
4	National Grid
5	E.ON Energy Solutions
6	Octopus
7	Voltempo
8	Petalite
9	Encyclis
10	Enfinium
11	Grid Edge
12	Kew Technology
13	Gen 2 Carbon
14	Enzen
15	Bryt Energy
16	Elemental Power
17	Schneider Electric
18	Johnson Controls
19	Mitsubishi Electric
20	Daikin
21	Correla

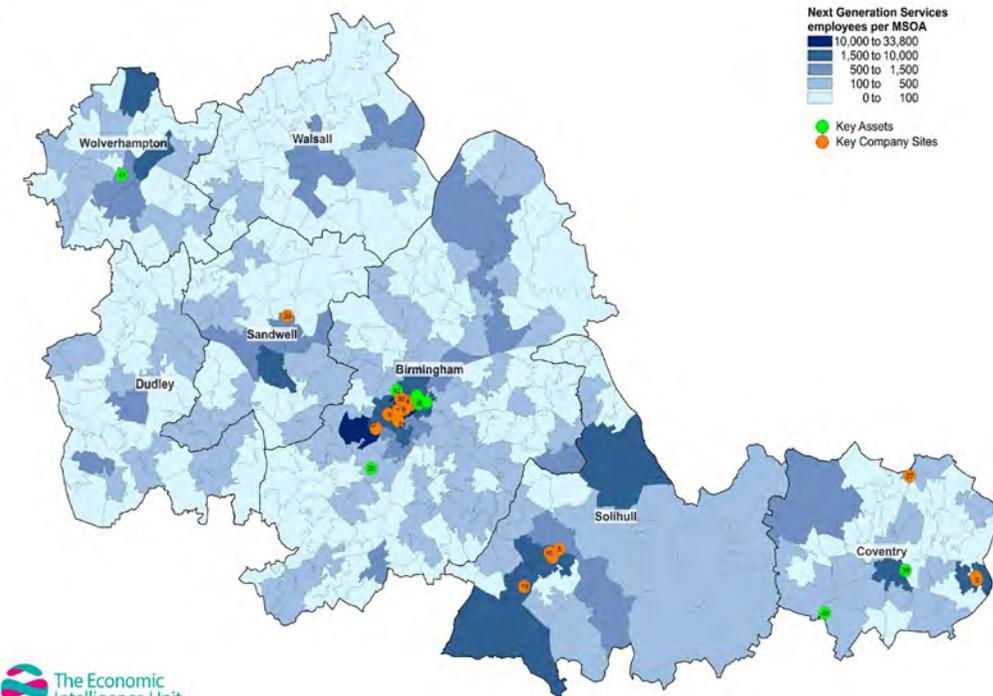
22	Tyseley Energy Park
23	Energy Systems Catapult
24	Energy and Bioproducts Institute, Aston University
25	National Brownfield Institute, University of Wolverhampton
26	Centre for Future Homes, Birmingham City University
27	Warwick Energy Innovation Centre, University of Warwick
28	Sustainability West Midlands
29	Sustainable Energy Association
30	Centre for E-Mobility and Clean Growth, Coventry University
31	University of Birmingham (Birmingham Energy Innovation Centre; the National Centre for Decarbonisation of Heat)
32	Wolverhampton Centre for Engineering Innovation and Research, University of Wolverhampton
33	Wolverhampton Green Innovation Corridor (WM Investment Zone)

Next Gen Services

Anchored by HSBC UK, PwC, with cluster leadership from SuperTechWM and innovation support from Warwick and Aston Business Schools, the West Midlands is transforming financial, legal and professional services. Fintech innovation programmes have been funded by BCU's STEAMhouse, with LawTech and PropTech pilots across the region.

Key Opportunities:

- Fraud detection, automate regulation and improve risk modelling to make financial services safer, more efficient and responsive, allowing firms to meet regulation while improving customer outcomes.
- SMEs are integrating AI into legal, accounting and consulting functions, supporting to businesses in building capacity, managing risk and driving productivity.



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1	Goldman Sachs
2	HSBC
3	Avison Young
4	BDO
5	BNP Paribas Personal Finance
6	Coventry Building Society
7	Deloitte
8	Deutsche Bank
9	Eversheds Sutherland
10	EY
11	Gateley
12	Gowling WLG
13	Grant Thornton
14	KPMG
15	Knight Frank
16	Paragon Banking Group
17	PWC
18	Savills
19	Secure Trust Bank
20	West Bromwich Building Society
21	WSP
22	AECOM
23	Pinsent Masons
24	Hogan Lovells
25	DLA Piper
26	Arup
27	ParentPay
28	Nimbus
29	NFU Mutual
30	Bueno
31	Moneyinfo
32	CrowdProperty
33	Offa
34	Fastcheck
35	Arcadis
36	CBRE
37	Shoosmiths

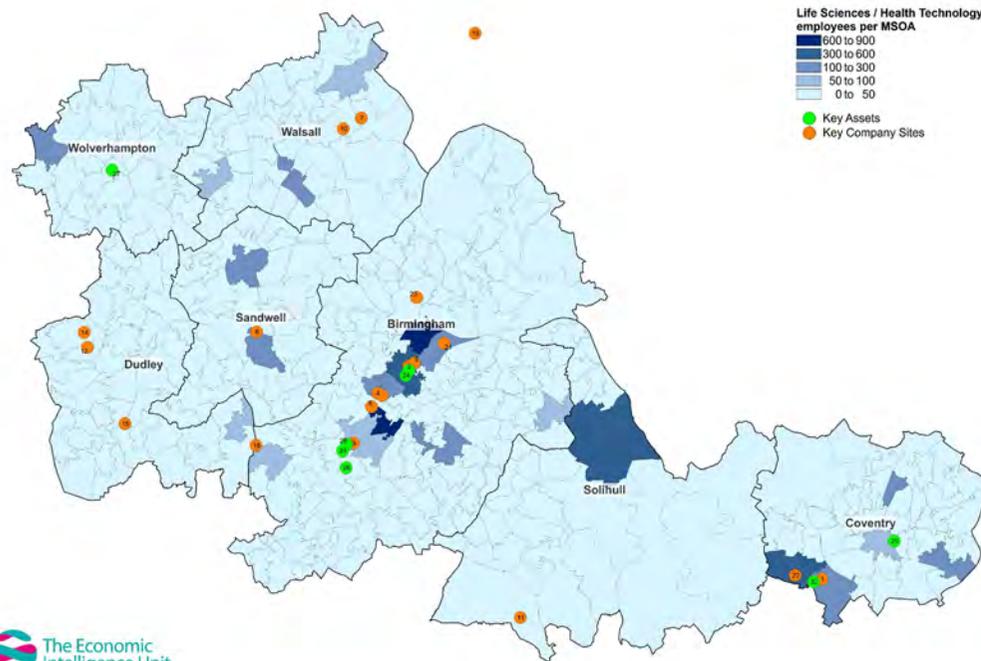
35	University of Birmingham (incl. Law School, Business School and Sustainable Financial Innovation Centre)
36	Greater Birmingham Professional Services Academy (BMet College)
37	Aston University Law School (incl. Aston Business School & Aston Law School)
38	Birmingham City University (incl. Law School and School of Architecture)
39	Coventry University (incl. Law School) / Centre for Resilient Business and Society
40	University of Warwick (incl. Law School and Gillmore Centre for Financial Technology)
41	University of Wolverhampton (incl. Law School and School of Architecture & Built Environment)
42	University of Law

Life Sciences / Health Technology

Home to major NHS Trusts like University Hospitals Birmingham and innovation assets such as the Birmingham Life Sciences Park and Warwick Medical School and cluster leadership from Medilink Midlands the region is a leader in healthcare innovation.

Key Opportunities:

- AI-enabled diagnostics for earlier and more accurate detection.
- Trial design and patient stratification powered by machine learning.
- Personalised health insights from large-scale health data.



1	Nanosyrinx
2	Eyoto Group
3	Linear Diagnostics
4	Black Space Technology
5	Cytecom
6	Cuxson Gerrard & co
7	Mackwell Health
8	Thermo Fisher
9	Salts Healthcare
10	C.S.T Pharma
11	Abbott Medical
12	Clamason Industries
13	AAH Pharmaceuticals
14	Handicare
15	SunriseMedical
16	The Binding Site
17	Kimal
18	Informed Genomics
19	Ascom (UK)
20	Bruker
21	Quest Healthcare
22	Carl Zeiss Vision
23	Meditelle
24	WM5G

25	Aston University (Medical School; Aston Brain Centre; and Aston Institute for Membrane Excellence)
26	Birmingham Knowledge Quarter (WM Investment Zone)
27	University of Birmingham (Medical School; Birmingham Health Innovation Campus; bioHub; Precision Health Technologies Accelerator; and the Healthcare Technologies Institute)
28	University of Wolverhampton (Centre for Applied and Inclusive Health Research)
29	Health Innovation West Midlands
30	Centre for Computational Science and Mathematical Modelling
31	Institute for Translational Medicine & Medical Devices Testing & Evaluation Centre (MD-Tec)
32	Royal Centre for Defence Medicine
33	University of Warwick (Medical School; Arden Cross Health Tech Campus; Warwick Integrative Synthetic Biology; Warwick Centre for Industrial Biotechnology & Biorefining; and Warwick Antimicrobial Interdisciplinary Centre)

Case Study: Cisco at STEAMhouse

STEAMhouse, part of Birmingham City University, is a £70 million innovation centre in Birmingham's Knowledge Quarter, situated within the West Midlands Investment Zone. It offers space, programmes and resources for entrepreneurs, students, businesses and organisations to collaborate in STEM, digital and creative technologies.

In mid-2025, Cisco announced it will establish a new working environment at STEAMhouse. The facility will accommodate up to 60 employees and act as a regional hub serving Cisco's teams, its customers and partners and to embed more deeply within the innovation ecosystem of the West Midlands.

Cisco's decision reflects confidence in the West Midlands as a growing tech and innovation cluster, especially in STEM talent, R&D infrastructure and growth potential. It also reinforces the role of STEAMhouse and the Birmingham Knowledge Quarter as a focal point for innovation, collaboration and investment at regional level.

Case Study: Plug and Play at the National Automotive Innovation Centre

The National Automotive Innovation Centre (NAIC) at the University of Warwick is a hub for mobility research and collaboration. To accelerate innovation in technology adoption, Plug and Play partnered with NAIC to launch its UK Mobility Programme, linking startups with corporates, academics and investors.

The programme addressed a clear challenge: startups in mobility often struggle to access resources and networks, while industry leaders and universities need faster routes to commercialise new ideas. The initiative is creating a space where entrepreneurs could access facilities, mentorship and investment and where corporates such as Jaguar Land Rover could explore new solutions through pilot projects.

The results have strengthened the West Midlands' position as a centre for future mobility. Startups gained credibility and pathways to scale, while corporates benefited from exposure to emerging technologies in electrification, digitalisation and sustainability. The collaboration also highlighted the importance of place and the value of bridging different innovation cultures.

Plug and Play at NAIC demonstrates how structured partnerships can move ideas from research to market, positioning the region and the UK at the forefront of the shift to sustainable transport.

Compute Supply

Transforming the West Midlands into a national testbed will require efficient and sustainable compute supply. For us, this means piloting energy-efficient approaches in data centres, deploying distributed compute across the region. Our aim is to make the West Midlands a leading “green compute” authority, proving that increased capacity can go hand-in-hand with net zero delivery.

Case Study: Tyseley Energy Park

Located at the heart of Birmingham Green Energy Innovation District in the east of the city, Tyseley Energy Park’s mission is to transform clean energy innovation in Birmingham and the West Midlands.

Tyseley Energy Park is a 16-acre hub for clean energy and low-carbon innovation, providing power, infrastructure and facilities to drive the region’s net-zero ambitions:

- Clean energy generation and refuelling ecosystem (energy-from-waste, solar/BESS, hydrogen and EV), decarbonising transport and industry.
- Private-wire low-carbon power, grid services and shared utilities delivering reliable, competitively priced energy to on-site and neighbouring businesses.

- Innovation, testbeds and incubation with University of Birmingham and industry partners supporting pilots, demonstrations and scale-up of low-carbon products and services.
- The facility is stimulating and demonstrating new technologies, turning them into fully commercially viable energy systems to contribute to the region’s net zero carbon economy plans. Within the park is the University of Birmingham’s Energy Innovation Centre, a biomass power station, a hydrogen electrolyser and the National Centre for the Decarbonisation of Heat which is due to be completed in 2026.



Case Study: Driving Efficiency in Infrastructure

Professor Andrew Ellis - Professor of Optical Communications and Deputy Director of the Institute of Photonic Technologies and Dr Steven Daniels at Aston University are exploring breakthrough fibre-optic innovations that can materially cut data-centre energy use while boosting throughput. Ellis's team has repeatedly advanced record optical transmission using commercially available fibre, demonstrating step-changes in capacity that translate directly to lower cost-per-bit and higher productivity for AI workloads. These advances align with a wider industry shift to photonic interconnects between GPUs and racks, which independent analyses suggest can deliver order-of-magnitude energy efficiency gains and 10 - 50x bandwidth improvements over electrical links - critical for training and serving large language models. Aston's applied programme supported by researchers including Dr Daniels positions the UK to offer investors and LLM builders a compelling route to greener, higher-performance AI data centres.

Making it Happen

The West Midlands will take forward these missions with clear actions, creative governance capability to facilitate alignment and propel progress. Delivery will be enabled through the critical partnerships with government, business, educators, investors and civic partners who play a central role alongside WMCA.

Data as a Foundation for AI

In order to achieve AI take-up and inward investment, we will create a robust database for the West Midlands, by exploring the creation of a data and knowledge hub, based on three core pillars:

- 1. Streamlined Data Governance:** Joint efforts with local government and public authorities in streamlining agreements and expediting access to anonymized, permissioned data.
- 2. Ethics, Bias and Assurance:** A regional support mechanism to steer the public sector and businesses through the ethical AI, bias testing and assurance models, aligned with the national AI Safety Institute.
- 3. Cyber Security for AI:** Incorporating regional expertise in cyber and AI risk management into the testbed, enabling organisations to adopt AI securely.

Our Action Plan

1. Create a Data & Knowledge Hub:

We aim to broker data sharing agreements, curate and open high-value datasets for priority domains; provide tools, governance and access (a “Data Lab” model) with secure research environments.

2. Drive a Challenge Pipeline to support public service transformation:

We will work to broker outcome based procurement, supporting public sector challenges with business, engaging third sector, to keep solutions resident focused; align to national regulatory and assurance standards to support wider adoption and engagement of sector into public service transformation.

3. Global Promotion:

Market the region internationally as the UK’s proving ground for safe, impactful AI.

4. Unlocking Secure Compute & Data Access:

We will assure access to national compute infrastructure and establish sufficient distributed compute in the region across appropriate strategic sites to ensure we can deliver on our missions, facilitating fast track planning, dark fibre connectivity and heat reuse such that we provide the right capacity to enable high impact proof of concept demonstrators, using realistic scenarios and operating conditions.

Our Asks

Government

- Devolve innovation/adoption funding for the Data Hub, Challenge Pipeline and Cluster Demonstrators.
- Endorse regional sites as part of the UK sovereign compute plan and embed AI Impact Lab findings into national policy.
- Facilitate regional allocations on National GPU for SMEs and translational R&D.
- DESNZ to support for connection queue acceleration, flexible connection agreements and eligibility for PPA pilots to support AI activity with heat-network reuse.
- Align programmes and policy with Health Dept/ Energy Dept/ MCHLG to support cross domain data sharing templates.
- DBT support for an AI proving ground campaign to be included in missions trade shows, investor roadshows.
- Facilitate accelerated development in R&D through co-ordinated research funding aligned to goals

Businesses / Investors

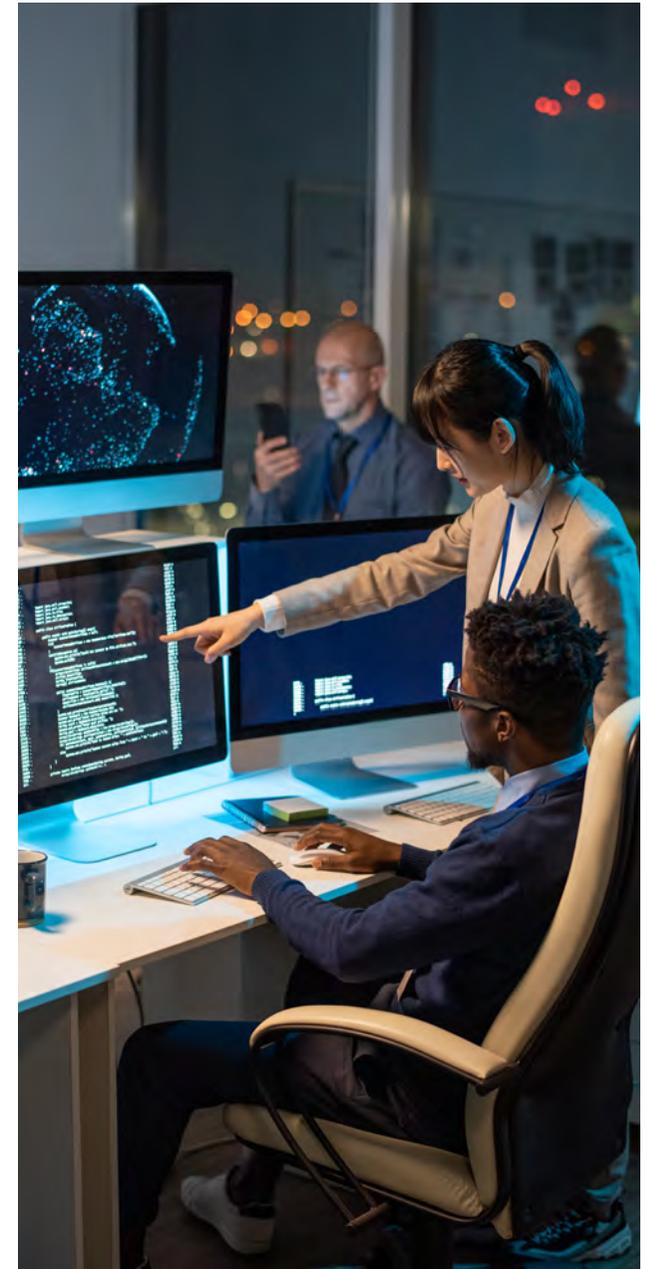
- Share data and co-invest in AI pilots, cluster demonstrators and secure data environments.
- Sponsor adoption toolkits, sector demonstrators and graduate fellowships to accelerate scale-up and retain talent.

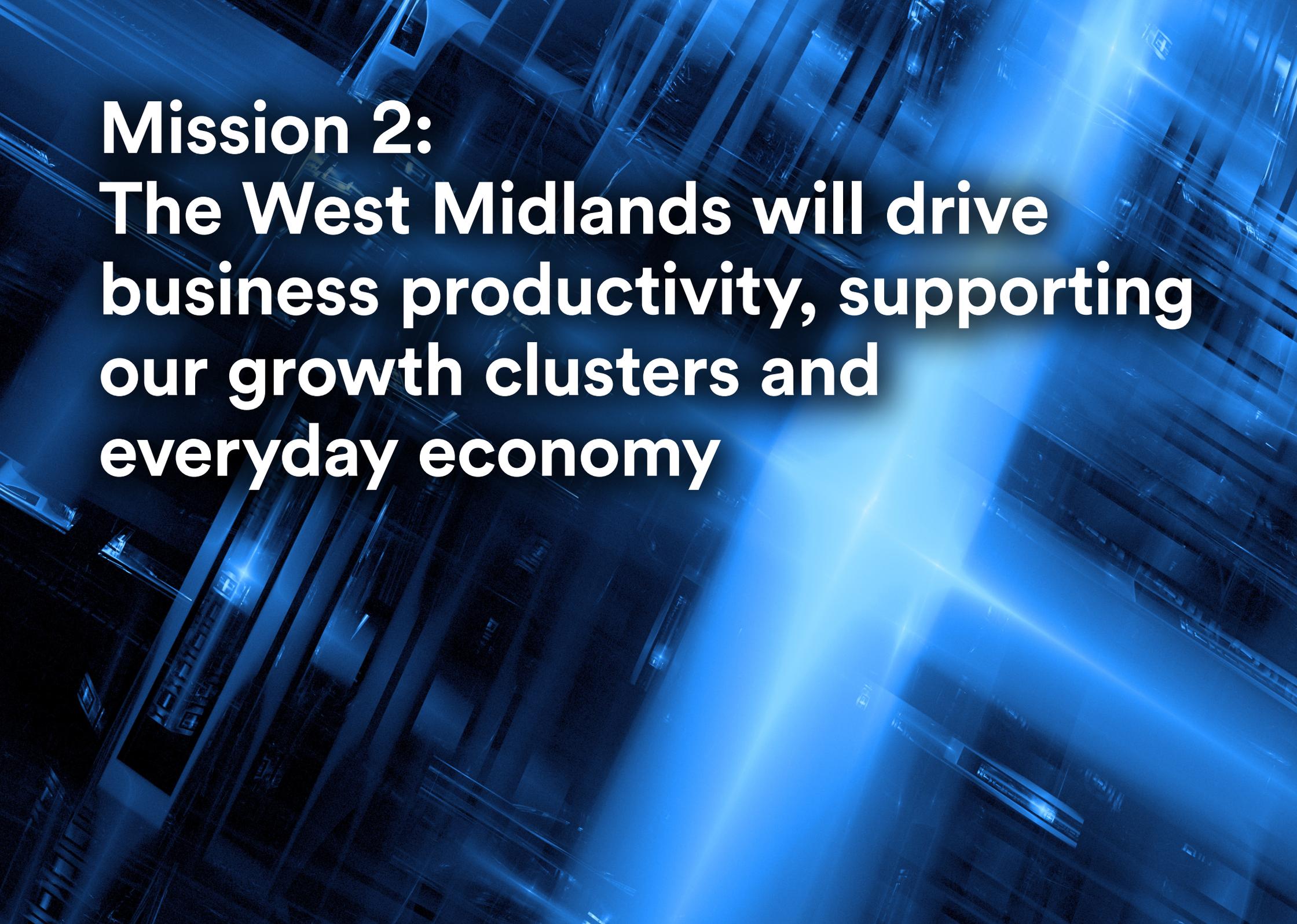
Universities / Education

- Translate research into use cases via testbeds, secure data labs and translational fellowships.
- Work collectively to facilitate a joint spin out studio (shared engineers) to build on collaborative models of practice for joint research.
- Lead on green computing research to support energy efficiency.

Wider Region (Landowners, Local Authorities, Civic Partners):

- Provide sites/infrastructure for compute and demonstrators.
- Sponsor challenge statements, provide data/ problem owners and host paid pilots with adoption budgets.
- Support regional data-sharing frameworks and deliver community-led AI inclusion programmes
- Contribute anonymised/ permissioned datasets to support sector demonstrators.





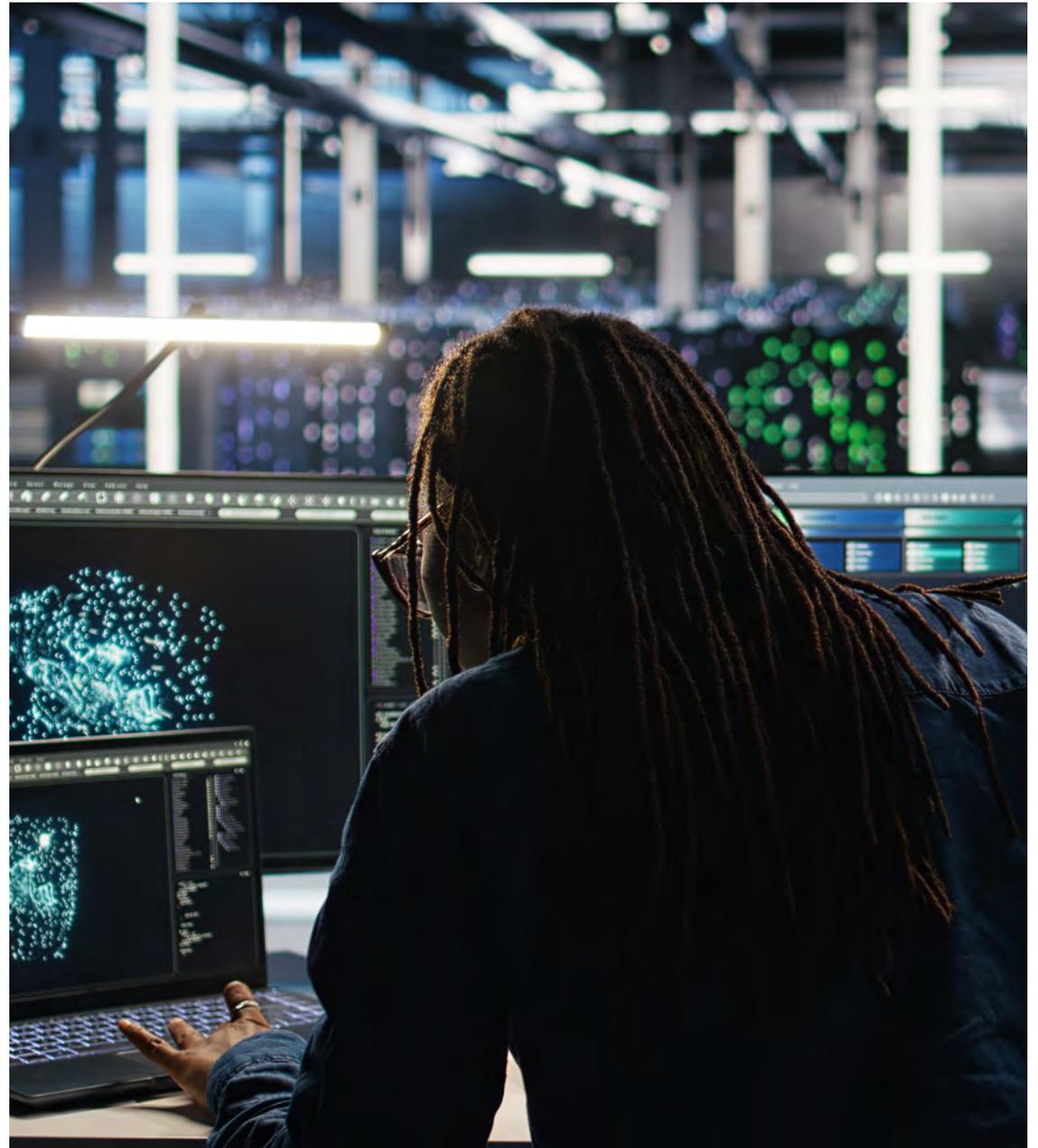
**Mission 2:
The West Midlands will drive
business productivity, supporting
our growth clusters and
everyday economy**

Purpose:

Drive business productivity across our growth clusters and everyday economy, by providing our firms with the guidance and programmes they need to grow. This will be anchored by leadership from business support and tech ecosystem leads and the application of AI through demonstrators.

What change will feel like:

- Ensure that **at least 60% of firms are adopting AI technologies, up from 48%**.
- The application of AI to support an increase in the proportion of innovative businesses in the region **from 32% to 36%** to meet the national average, supporting the ambition of achieving **£17.4bn of growth**.



Anchors

We will ensure that AI Adoption supports the businesses in our everyday economy as well as our growth clusters and our Business Growth West Midlands business support service will spearhead our efforts to do this.

For this mission we are focused on integrating key knowledge assets into a knowledge hub to guide our SMEs to adopt AI and programmes to apply this knowledge. In doing so, we will support sectors like care with tasks such as demand forecasting and logistics with inventory management, supporting people and businesses that make up the bulk of our economy.

Opportunity

Our region is committed to creating a globally recognised business support ecosystem to help all types of firms adopt AI, from cutting-edge tech companies to local businesses. The appetite for this is evident with KPMG finding that 83% of West Midlands private firms are planning AI investments well above the national average of 73%¹¹.

Case Study: AI Accelerator Programme

The West Midlands is home to a vast number of small and medium-sized manufacturers, many of whom face barriers in adopting AI due to cost, lack of expertise, or uncertainty around where to begin. To address this, TechWM partnered with AND Digital to launch the AI Adoption Accelerator, designed to give SMEs structured, hands-on support in experimenting with AI technologies.

Over 12 weeks, participating firms worked with mentors, took part in hackathons and tested practical AI use cases directly linked to their business operations. They also received guidance on data readiness, legal and ethical considerations and building the leadership culture needed to drive AI change.

The programme delivered impressive results:

- 100% completion rate across the cohort.
- Estimated £208,000 per year savings among participants through reduced production and administrative costs.
- An average of 50 hours saved per week across business operations.

This case study shows that with targeted mentoring and practical tools, SMEs can adopt AI rapidly and see measurable returns. It also highlights the potential for scaling such accelerator models across the wider manufacturing sector.

¹¹ KPMG (2024): Private Enterprise Barometer: <https://kpmg.com/uk/en/insights/strategy/kpmg-private-enterprise-barometer.html>

Case Study: Developing Insurance for AI Risks – WMG and AON Partnership

WMG at the University of Warwick is part of a £2 million UKRI Prosperity Partnership titled AI²: Assurance and Insurance for Artificial Intelligence, led by the University of Edinburgh in collaboration with AXA, the University of Oxford and AON. This academic-industry initiative aims to develop novel methods for understanding, measuring and insuring against risks associated with AI systems.

The partnership combines WMG's technical expertise with AON's risk management capabilities to establish robust frameworks for assessing and underwriting AI-related risks - ultimately enabling safer innovation and broader adoption of AI technologies across sectors such as transport, manufacturing and energy.

AI knowledge Hub

The WMCA will establish an AI Knowledge Hub that is a national asset bringing together open-source tools, data and case studies to drive artificial intelligence adoption throughout the UK. Based on assets such as Business Growth West Midlands, Plan for Growth Cluster Leadership and AI Adoption Blueprint, the Hub will provide businesses with hands on help to bring AI into their businesses, turbocharging productivity and competitiveness.

Blending business-facing advice with sector-wide case studies and shared resources, the AI Knowledge Hub will be both a regional innovation accelerator and a national base for scaling best practice.

SME Demonstrators

The West Midlands has the scale, diversity and sectoral strengths to be the UK's proving ground for AI adoption. Our economy mirrors the national picture, combining large anchor firms with thousands of SMEs across manufacturing, clean energy, health, services and creative industries. Yet adoption remains uneven: while 48% of businesses currently use AI, we need to accelerate this to 60% and beyond to secure productivity growth and competitiveness. An Adoption Programme, underpinned by exemplar sector demonstrators, will bridge the gap between research and real-world application. These demonstrators will show how AI can solve practical challenges in priority sectors:

Creative & Digital: AI for immersive experiences, content generation and consumer insights, positioning the West Midlands as a global hub for digital creativity.

Next-Gen Professional Services: Using AI for legal contract review, compliance and financial risk modelling to boost efficiency and reduce costs.

Advanced Engineering: Predictive maintenance, fleet optimisation and AI-enabled battery design to

accelerate the EV and low-carbon transport transition.

Clean Tech: Grid optimisation, retrofit efficiency and waste reduction through AI-enabled energy systems, driving progress towards net zero.

Life & Health Sciences: AI-enabled diagnostics, patient stratification and personalised healthcare solutions tested with our NHS Trusts and Life Sciences Park.

AI Adoption Blueprint

Our AI Knowledge Hub ambition is being spearheaded by the AI Adoption blueprint, developed in partnership with AND Digital. The Blueprint is a practical, action-focused blueprint to position the region as a UK leader in AI adoption. Rather than a rigid strategy, it offers a flexible toolkit including AI adoption roadmaps to guide businesses, clusters and institutions through responsible, scalable AI integration. The AI Adoption Blueprint and a series of cluster-specific roadmaps are helping businesses navigate technology transitions, particularly in advanced manufacturing, health, transport and creative industries.

The blueprint is a call to act now, embedding AI into the West Midlands' economic fabric to secure long-term growth, jobs and competitiveness. Through bold leadership, regional collaboration and strategic delivery, the West Midlands can lead the UK in inclusive, transformational AI adoption.

Case Study: Manufacturing Technology Centre

Manufacturing Technology Centre (MTC) developed an AI driven sorting system for separating intermediate and low level nuclear decommissioning waste for Atkins, in collaboration with Cyan Tec Systems and Pajarito Scientific Corporation.

The challenge

The aim of the project was to develop intelligent automated solutions for the sorting and segregation of nuclear waste. Currently waste from the decommissioning of nuclear facilities has to be sorted manually with the hazards associated and inefficient sorting can result in costly storage solutions with inefficiently packaged waste.

The aim was to develop a prototype system for autonomously sorting radioactive waste with a robot handling system using AI vision systems to identify waste objects and a measurement and sorting system to stream the objects to a set of output waste containers. This will enable the sorting of waste more safely with no/minimal human intervention and create a more efficient packaging process, reducing waste storage capacity requirements.

MTC's solution

- MTC developed an AI based multi-camera computer vision software package with a custom user interface.
- Grasp planning algorithms for vacuum and parallel gripper types were developed and integrated with the robot to pick the detected waste items.
- Object measurement was also performed through the vision system, generating important information for the waste sorting decision model.
- A bin packing algorithm was developed for optimising use of output bin space, reducing the number of container swaps required.

Making it happen

We want to build on the progress we have made so far across adoption and accelerator programmes such as Made Smarter which is, our AI Accelerator Programme pilot and the Supply Chain Transition Programme, funded through the West Midlands Investment Zone which is helping SMEs in the West Midlands to diversify their customer base by winning new orders in growing areas of the economy.

Our Action Plan

1. **Introduce Adoption Programme & Sector Demonstrators:** Work to launch exemplar projects across Next-Gen Professional Services, Creative & Digital, Advanced Engineering, Clean Tech, Life & Health Sciences, supporting and elevating supply chains to drive practical user cases, feeding demonstrators and procurement.
2. **Create a West Midlands AI Knowledge Hub (business-facing):** Drive practical guidance, diagnostics, risk management, vendor-neutral advice co-developed with ecosystem partners and explore the creation of “AI walk-in centres” where organisations of all sizes can explore practical applications of AI for their sector.

Our asks

Government

- Endorse the Hub’s outputs (toolkits, roadmaps, datasets) as part of national adoption guidance for SMEs and public services.
- Create co-joined objectives with Innovate UK’s Bridge AI programme and facilitate integration and co-ordination
- Support for partnership with the AI safety Institute to support sandboxes that map national standards.
- Collaborate with us to use the data generated through our initiatives in the National Data Library.

Businesses / Investors

- Sponsor vendor-neutral adoption toolkits, diagnostics and roadmaps for SMEs.
- Co-invest in exemplar demonstrators (e.g. healthtech, clean tech, creative digital), support and shape challenges and mentor SMEs on adoption.

Academia

- Co-design sector use case pilots with SMEs, providing technical validation and evaluation.
- Contribute expertise and assets and know how to support collisions and elevate triple helix approaches to innovation adoption
- Align demonstrators with translational research programmes, ensuring findings feed into national blue prints and frameworks.
- Provide access to secure data environments and testing facilities to validate Hub use cases.

Mission 3:

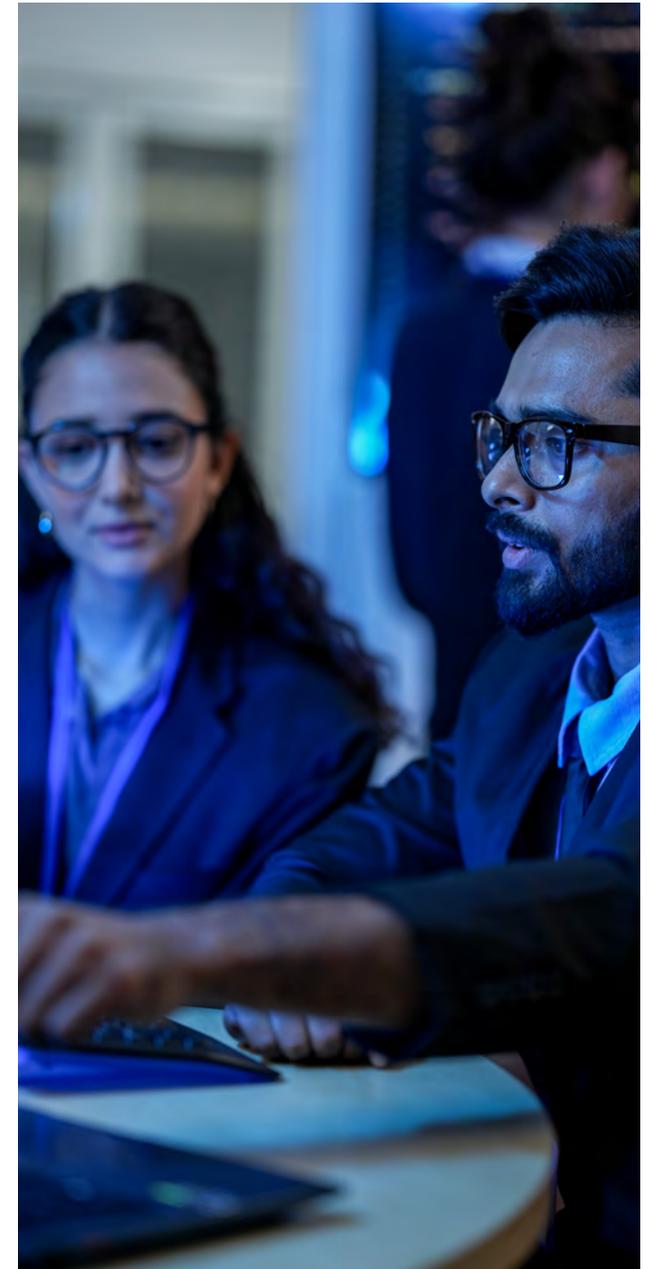
The West Midlands will lead the nation in AI education, equipping people with tech skills and businesses with top talent

Purpose:

We will implement our AI-Academy approach by ensuring all residents and workforces can access high-quality AI training. This includes creating new learning opportunities and signposting existing provision through a wayfinding model. Our goal is to prepare, support and empower people to embrace AI-driven change, anchored in strong collaboration across the skills system, third sector and industry.

What change will feel like:

- Create provision to enable **100% of residents to access free AI skills training**.
- Use AI provision to upskill **unemployed residents and those with lower level qualifications** to support our ambition of having another **93,000 people in work and an increase in average income by an additional £8,600**.
- Support unemployed residents and those with lower level qualifications will be **upskilled** to support them, driving another **93,000 people in work** and **an extra £8,600 in average wages**.



Anchors

For this mission we are focused on creating a cross section of AI educational programmes that will support residents, businesses and the public sector, providing the knowledge that will drive our other two missions.

Opportunity

The West Midlands is emerging as one of the UK's fastest-growing tech hubs, with notable strengths in AI, quantum, cyber, robotics and advanced communications. With over 140 AI companies the area is well placed to shape and deliver an impactful 'AI for All' initiative. By building on these existing assets, the region has a clear opportunity to advance inclusive innovation and ensure that the benefits of AI are accessible to all sectors and communities.

These strengths and opportunities have shaped a series of (emerging) ambition statements which we are developing and testing with key stakeholders across a range of sectors:

- Make the West Midlands the UK's number one place for AI skills training.
- Provide every adult with the opportunity to access free AI training for use in everyday life - at home, work and in the community.
- Create clear career routes into AI, digital and data jobs through a pioneering, regionwide WM AI Academy.
- Upskill existing workers to drive economic growth and higher productivity.
- Avoid an AI skills divide by making AI a core skill as essential as English or maths.
- Support 100,000 good jobs in fast-growing industries including AI, digital tech, advanced manufacturing and health innovation as part of growth plan.
- Invest £10m in inclusive AI innovation as part of a wider £30m Skills Innovation Challenge Fund package.
- Empower communities to use AI to start businesses, improve services and modernise industries.

Case Study: Fahad Syed – Advancing at JLR with Althaus' AI Bootcamp

- **Challenge:** As a Project Automation Lead Engineer at JLR, Fahad saw that rapid digital transformation in automotive meant he needed stronger AI and product delivery skills to progress into more strategic roles.
- **Solution:** He completed a 12-week AI Bootcamp with Althaus (funded by WMCA), gaining practical training in generative AI, predictive analytics, automation tools, Python and ethical AI, alongside 1-1 coaching and applied projects.
- **Impact:** Fahad is now a Product Owner at JLR, applying AI to streamline engineering workflows, enhance decision-making and embed responsible AI practices. The bootcamp gave him the technical confidence and strategic mindset to thrive in a senior role.

Case Study: D'Antoni McNeil – Elevating a Marketing Career with AI Skills

- **Challenge:** Working in digital marketing since 2019, D'Antoni recognised that AI was rapidly reshaping SEO and content strategy and he needed to upskill to stay competitive.
- **Solution:** He joined Althaus' AI Bootcamp (WMCA funded), where he developed expertise in prompt engineering, AI-powered SEO, automation, data storytelling and ethical AI in marketing.
- **Impact:** D'Antoni secured a new role as SEO Content Manager at Vape Supplier Ltd, using AI to optimise content creation, improve rankings and drive traffic growth. The bootcamp future-proofed his career in a fast-moving field.

Case Study: Zara Patel – Transforming Customer Support with Generative AI

- **Challenge:** As a customer service professional in finance, Zara faced rising customer expectations and inefficiencies in first-line support. She wanted to use AI to improve service delivery.
- **Solution:** She joined Althaus' Generative AI Bootcamp (WMCA funded), gaining hands-on skills in AI chatbots, automation pipelines, sentiment analysis and responsible AI practices.
- **Impact:** Zara was promoted to AI-Enabled Customer Support Coordinator, leading chatbot deployment that cut response times by 35% and introducing sentiment dashboards that improved case prioritisation. The bootcamp gave her practical AI skills with immediate business impact.

Case Study: Samina Jahangir – Growing a Beauty Business with AI

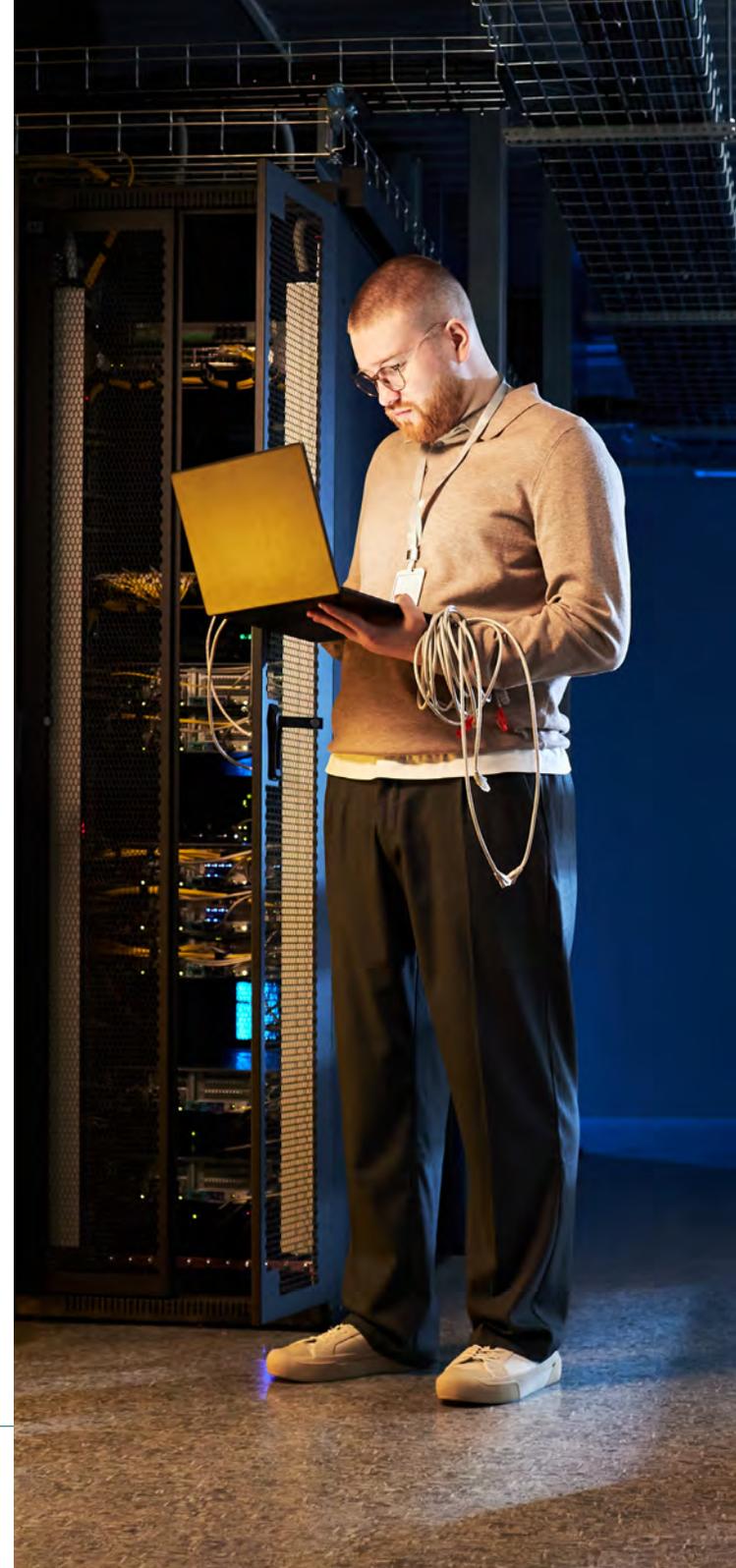
- **Challenge:** Running her own beauty business, Samina struggled with time-intensive content creation, inconsistent online presence and limited marketing reach.
- **Solution:** She joined BritAsia Academy's AI-Powered Content Creation Bootcamp (WMCA funded), learning to use AI for content generation, brand development, website creation and automated booking systems.
- **Impact:** Samina launched a website, automated client bookings and built a stronger brand identity. She has grown her online following, attracted new clients and is expanding her product line - transforming her business with AI-driven marketing skills.

Case Study: Construction Innovation

Hadley Group is a major producer of advanced cold rolled steel. The company operates globally, manufacturing cold rollformed profiles in three UK sites, as well as the Netherlands, Thailand, Dubai and the USA. Hadley is recognised as an innovative market leader in cold rollforming technologies, building its own production lines and tooling to achieve load-bearing profiles for the construction sector or custom projects for automotive, retail and industrial markets. As a forward thinking and R&D driven business, Hadley seeks opportunities to disrupt the market with sustainable, efficient solutions. Working with BCU, they developed their own product construction configurator platform suitable for a new market, helping build customer experience and leading to a new £100 million housing project win. BCU provided the AI and system integration expertise for the project.

Case Study: AI in Cyber Security

METCLOUD, a Birmingham based, award winning Cloud Security Provider helps businesses adopt next generation, cybersecurity and cloud computing technologies to ensure that they remain secure, effective and efficient in today's economy. They have collaborated with BCU on two KTP projects, to develop and launch AISOC - A world leading AI capability that is transforming the cybersecurity sector. And developing ground breaking capability harnessing Generative AI. The new platform will provide access to technical knowledge bases for level 2 and level 3 technical IT and cybersecurity professionals. BCU has supported the development of the AI capabilities.



West Midlands AI Academy

To drive this vision, we will launch a groundbreaking regionwide AI Academy, an ambitious collaboration between the WMCA, top tech firms, educational institutions, specialist trainers and community organizations. Alongside this, an AI Skills Plan will identify regional needs and opportunities, ensuring our investment in artificial intelligence support delivers practical, transformative solutions where they can most effectively contribute to growth:

- **AI for All** - the West Midlands will ensure every resident has the opportunity to gain free, practical AI awareness training. This approach focuses on everyday digital skills that people can use at home, in the workplace, or within their communities. Training will be delivered through trusted community organisations, colleges and online platforms, giving residents the confidence to use AI tools responsibly in their daily lives. The benefits are clear: reducing digital exclusion, helping people adapt to AI enabled public services and creating opportunities for individuals to apply AI in tasks as varied as job seeking, household management, or running a micro business.
- **AI for Business** - for businesses, the region will provide vendor-neutral advice, toolkits and sector-specific adoption roadmaps through the AI Knowledge Hub. The focus will be on the skills element of adoption, offering practical support that helps SMEs and enterprises adopt AI responsibly and with confidence. This programme will demonstrate how AI can boost productivity, reduce costs and open new market opportunities with key focus on supporting leadership in AI implementation.
- **AI for Work** - the AI for Work strand will focus on equipping the current workforce with the skills they need to thrive in an AI enabled economy. This will involve creating a skills ladder that ranges from entry-level awareness training to advanced technical courses, delivered through the AI Skills Academy in partnership with universities and employers. The approach will combine practical training in areas such as data analysis, automation, generative AI and ethical frameworks, ensuring workers have both technical competence and the confidence to apply AI responsibly in their day to day roles. The benefit of this model is that it creates clear progression pathways, supporting reskilling and career development while also enabling firms to increase productivity by embedding AI skills into everyday business processes.
- **AI for Public Sector Transformation** - public sector organisations across the West Midlands will also benefit from tailored AI training and support, designed to transform services while maintaining public trust and ethical standards. This strand of the programme will give councils, NHS trusts and community organisations the tools, skills and governance frameworks they need to embed AI responsibly into service delivery. Aligned with the region's AI Impact Lab and challenge pipeline, the training will enable staff to test practical applications of AI from health diagnostics and social care planning to digital case management and resident engagement. The benefits of this work will include more efficient services, measurable productivity gains and improved outcomes for residents, all underpinned by ethical use of data and technology.

The WMCA's AI-Academy will complement other provision. For example, Birmingham Knowledge Quarter supported work that will focus on stimulating innovation of hardware technologies to enable continued development of AI, providing training in techniques for concept development, prototype evolution, achieving impact through trials, start up and scale up funding. The benefit of this will be the development of innovations which drive AI exports from the West Midlands towards a trade balance in AI hardware.

Wayfinding

Our ambition is for AI skills to be rooted throughout the skills and education system from schools all the way through to the workplace. We will work through the WMCA Careers Hub to bring AI into early careers education so that young people can see AI as part of their future. This includes curriculum improvement at Key Stage 2 and above, delivering CPD on AI in the classroom and AI-based tools to support careers guidance.

We will also leverage proven good practice and training provision, such as being provided in schools that we will enhance wayfinding to enable residents, professionals and businesses to move along AI career paths and locate high-quality, best-practice training. This requires mapping progression routes and curating trusted learning options by sectors. Our approach will include partnerships to further embed AI in existing provision of training, particularly in jobs in the day-to-day economy such as social care and front-line services, working with FE colleges and training providers to integrate AI as a mainstream competence in education and workforce development.

The following case studies highlight existing provision and initiatives through which institutions are equipping residents and businesses to harness the benefits of AI, demonstrating our strong foundations.

Case Study: School of Coding

The Wolverhampton-headquartered School of Coding & AI (SOC) has rapidly become one of the UK's leading suppliers of digital skills training. In continuation of its success, SOC has launched a state-of-the-art 12,000 sq ft campus on Livery Street in city-centre Birmingham, after securing six-figure investment from the Midlands Engine Investment Fund. The next-generation facility has the UK's first dedicated AI learning lab, gaming area, podcasting suite and research centre.

It is geared towards filling West Midlands' digital skills gap and making tech learning more accessible. Hundreds of pupils will be enrolled at the Birmingham campus with pathways from coding and AI workshop projects to degree-level higher education through SOC's partnership with the University of Wolverhampton. It also offers new pathways for adults wishing to upskill, to accommodate learners that may be coming back to learning after some years.

Opening in Birmingham, SOC is fulfilling the region's vision of growing its digital economy and talent pool. The new campus will facilitate the generation of over 100 new roles, putting the city at the centre of innovation for AI and EdTech. It is a demonstration of how strategic investment and partnership can deliver educational and economic growth for the region.

Case Study: Coventry University supporting workforces and business

Coventry University's AI Skills Academy was set up in direct response to growing demand from industry and the public sector for accessible, impactful AI learning. Designed to support professionals across sectors such as energy, health, automotive and government, the Academy offers hybrid, modular courses and bootcamps aligned with the Turing Institute's AI Skills for Business Competency Framework. Delivery is supported by virtual sandboxes and cloud platforms, with funding options ranging from government support to industry co-investment. Courses are co-designed with regional employers to ensure job relevance and progression, while insights from this work will also enhance the AI education we provide to our undergraduate and postgraduate.

The Electric Revolution Skills Hub (ERS Hub), designed and built by Coventry University in partnership with UKRI and the Driving the Electric Revolution (DER) programme, is a national digital platform that supports workforce development in the UK's fast-growing electrification sector. By connecting education providers, industry leaders and individuals, the Hub facilitates access to specialist knowledge, builds professional networks and fosters a vibrant community of practice. This strategic initiative gives Coventry University direct access to a sector undergoing rapid transformation through AI, particularly in automotive and advanced manufacturing, enabling us to stay at the forefront of emerging technologies and workforce needs.



University Courses

Courses and skills activities West Midlands Universities supporting talent development:

Birmingham

Aston University

- **MSc AI (Aston, London)** - expertise in planning, designing and implementing AI solutions.
- **MSc Data Science (Online, London)** - skills for analysis, design and delivery of AI-driven solutions.
- **MSc Data Science & AI (Aston)** - covers the full data lifecycle.
- **MSc AI with Business Strategy (Aston)** – applying AI solutions to business challenges.
- **MSc AI for Health (Aston)** – AI and data science in healthcare; focus on digital health and modern approaches to clinical data.
- **MSc/MRes Bioinformatics & Genomic Medicine** - prepares for careers in bioinformatics, precision medicine and healthcare data.
- **MSc Digital and Business Transformation** - in development with BAIS and Centre for Enterprise AI, supported by Capgemini.
- **BSc AI and Robotics (Aston)** - foundations in AI and robotics principles, theory and practice.
- **Clinical Skills Training** - AI tools (e.g., Simconverse) for realistic patient conversations, used in MPharm, OSPAP, MBChB, Nursing and MOptom.

Birmingham City University

- **MSc - AI Course** is a nationally recognised flagship programme with over £1m OfS funding. It attracts AI students with highly diverse and industrial backgrounds, driving industry adoption of AI/ML, having produced several hundred graduates to date.
- **AI for Business CPD** - offer has already trained over 60 businesses on how to adopt AI in energy saving and sustainability.
- **Professional Certificate Centre** - offer a training and capacity building platform for individuals and the public to upskill with the latest technologies for Data and AI.

University of Birmingham

- **MSc AI** - advanced AI skills for designing and evaluating intelligent systems, includes a substantial supervised project.
- **MSc AI and Machine Learning** - AI and ML with a mathematical focus, includes a substantial supervised project.
- **MSc AI and Government** - for social scientists to master AI and ethical governance.

- **MSc AI and Sustainable Development** - computer science skills with policy context, to drive ethical tech solutions and impactful change.
- **MSc Economics, AI and Data Science** - advanced training in economic reasoning and causal analysis with data science tools.
- **MSc Sport Data Science and AI** - unlock elite performance through AI and data-driven decision-making.
- **MSc AI Implementation in Healthcare** - skills for responsible and impactful AI innovations across global healthcare systems.
- **BSc AI and Computer Science** - covers key concepts and includes industry placement option.
- **BSc AI in Public Policy** - how AI and data transform policy, ethics and governance.



Coventry and Warwick

Coventry University

- **UK and International Law Around AI and Data** - explores AI-related laws, regulations and ethical considerations globally.
- **Social and Ethical Aspects of AI and Data** - examines ethical concerns and societal impacts of AI technologies.
- **Data Literacy** - introduces fundamentals of data management, visualization and security.
- **Analytical and Generative AI Concepts** - covers core AI concepts, analytical methods and generative AI models.
- **AI Adoption and Use** - focuses on integrating AI into business operations responsibly.
- **AI Integration and Development** - provides insights into AI integration, development and infrastructure.
- **Uses of AI** - explores practical applications of analytical and generative AI across industries.

University of Warwick

- **MSc Business** - Analytics & Artificial Intelligence.
- **MSC** - in applied AI technical proficiency but also ethical considerations and societal impact.
- **MSc Computer Sciences** - offers a tailored route in Artificial Intelligence & Machine Learning.
- **AI Leadership Programme.**
- **BSc Cyber Security.**

- **Degree Apprenticeship** - leading to a BSc Computer Science and Technology Solutions, include AI and Human Centred Computing.
- **Undergraduate** - Artificial Intelligence and Machine Learning modules.
- **Institute for Advances** - learning module on The AI Revolution: Ethics, Technology and Society that is open to all students.
- **Warwick Manufacturing Group** - skills centre offering AI short courses for industry.



Wolverhampton

University of Wolverhampton

- **MRes Artificial Intelligence** - Research-focused programme exploring advanced AI topics such as generative AI, agentic AI and AI ethics.
- **MSc Artificial Intelligence (Conversion)** - foundational AI knowledge for graduates from non-computing backgrounds.
- **MSc Data Science (Conversion)** - develops skills in data analysis, programming and cloud-based data environments with real-world case studies and industry internships.

- **MSc Computer Science** - Offers pathways in AI, machine learning and data analytics; combines theoretical computing with applied research and software development skills.
- **MSc Computer Science with Professional Practice** - MSc Computer Science modules plus a professional placement to gain hands-on experience in real-world computing and AI applications.
- **PhD Computing & Mathematics** - cutting-edge research in areas such as generative AI, artificial intelligence, computer vision and data science to address technical and societal challenges.
- **BSc (Hons) Computer Science** - introduces AI and data science concepts through modules on artificial intelligence, data mining and intelligent systems.
- **BSc (Hons) Computer Science with Sandwich Placement** - expands AI and data science learning through an industrial placement year.
- **BSc (Hons) Computer Science with Foundation Year** - establishes an early grounding in AI, data handling and programming.

Wolverhampton



Making it happen

Our goal is to give every adult in the region free training in how to use AI in their everyday lives at home, work or in the community, with further opportunities for thousands more to develop the technical skills needed to land jobs in an increasingly technology dominated workplace. To drive this vision, we will launch a groundbreaking regionwide AI Academy, an ambitious collaboration between the WMCA, top tech firms, educational institutions, specialist trainers and community organizations. Alongside this, an AI Skills Plan will identify regional needs and opportunities, ensuring our investment in artificial intelligence support delivers practical, transformative solutions where they can most effectively contribute to growth.

Our Action Plan

1. Create a region wide AI-Academy:

- **AI for All:** Create free, entry-level AI literacy for residents and employees (inclusive access).
- **AI for Business:** Provide SME adoption support focused on productivity, competitiveness and safe deployment.
- **AI for Work:** In role upskilling and reskilling pathways, creation of modular micro credentials tied to live user cases. Partnering with industry, HE and FE to broker, enhance and realise the benefits of talent available through fellowships, placements and bridging business with academies.
- **AI for the Public Sector:** Provide ethical, resident-facing innovation and AI-powered service transformation.

2. Create an AI Skills Plan: to drive our long term strategy for upskilling and reskilling our region.

Our Asks

Government

- Endorse the West Midlands model as a national blueprint for inclusive AI adoption and skills, ensuring outputs from the regional approach feed into national policy.

Businesses & Industry

- Open up supply chains and provide placements, apprenticeships and live project opportunities to embed AI skills into real work settings

Universities & Training Providers

- Co-design and deliver the AI Skills Academy, aligning curricula with industry demand and embedding research into adoption pathways.

Residents

- Engage with the AI for All training offer to build confidence in using AI at home, in work and in the community.

Public Sector Partners

- Share outcomes, data and lessons learned across councils, NHS Trusts and civic organisations to scale successful innovations across the region.

Partnerships and delivery

Our ecosystem will collaborate across the mission areas to deliver the AIM, taking a Team West Midlands approach to delivery, building on our approach to delivering the West Midlands Growth Plan.

Regional leadership

The WMCA works in partnership with the region's key stakeholders to grow the digital economy and coordinate innovation. Key to this are the seven metropolitan local authorities of: Birmingham, Coventry, Dudley, Sandwell, Solihull, Walsall and Wolverhampton who work with the WMCA to deliver at scale across the region.

Case Study: Connect Services Programme

Through collaboration with the seven constituent local authorities the WMCA and LAs secured £4m through trailblazing devolution deal to purchase over 17,000 devices to support over 50,000 residents to get online and further embrace technology.

Targeting those at the highest risk of digital exclusion, the WMCA will work with local authorities and community partners to help residents improve their access to public services, increase their employment chances by learning digital skills and reduce isolation among vulnerable members of society.

The WMCA and LAs are continuing to collaborate on digital inclusion and further exploring joint programmes that can help combat the digital divide.





The WMCA convenes a Digital Roadmap Steering Group that will oversee the development and delivery of the WM AIM priorities. The Steering Group is focused on agility, responding shifts and opportunities to ensure regional delivery is jointly coordinated and delivered in the region. In recent years the Steering Group endorsed the creation of the AI Special Interest Group, one of the Roadmap strategic working groups which is shaping delivery:

AI Special Interest Group

The AI Special Interest Group and Future Tech Forum, in partnership with IBM, brings together AI experts from across the ecosystem to discuss how the region can best take advantage of the opportunity AI and future technologies presents.

The Group acts as an advisory body to the Digital Roadmap Steering Group and is made up of accredited technology experts; including professors, leading industry figures and technology executives who share unique and innovative thought leadership and are on-hand to help start-ups and scale-ups think about how they can incorporate innovative technologies into their businesses. It is complemented by an AI Strategy Working Group who will encourage collaboration, partnerships and opportunities across the ecosystem.

Leadership in our ecosystem also comes from the West Midlands Growth Company (WMGC), which drives investment and business growth and TechWM, which connects and unites the tech community. Together, these organisations ensure the region not only generates innovation but also translates it into commercial success.

TechWM

TechWM plays a pivotal role in accelerating the region's technology ecosystem. As a regional convenor and delivery partner, Tech WM supports the adoption of emerging technologies such as AI, advanced data analytics and digital infrastructure across both startups and established industries. By connecting businesses to innovation assets, talent pipelines and specialist support, TechWM ensures that the benefits of technological transformation are accessible to firms across all sectors and places. It also champions the region's tech strengths nationally and globally, helping to attract investment, foster new collaborations and raise the West Midlands' profile as a hub for applied innovation.



WMGC

WMGC is the region's lead agency for inward investment, place marketing and business growth. Working on behalf of the WMCA and local partners, WMGC promotes the West Midlands as a world-class location for investment in AI and digital technologies, highlighting its distinctive strengths from advanced manufacturing and healthcare innovation to creative industries and data infrastructure.

The company supports investors throughout their journey, from initial enquiry to long term success in the region. WMGC also plays a key role in promoting the West Midlands' global offer, leveraging major events, trade missions and international partnerships to attract talent, capital and new business opportunities.

Facilitated by the WMGC, inward investors to the region will benefit from; the research partnerships that convert today's innovations into tomorrow's commercial growth; from the AI skills that underpin the next generation of talent; and from the coordinated triple helix collaboration with industry and growth sectors across West Midlands academia and public sector that drive the AI value chain.



Action Plan

Below are the headline actions that the Digital Roadmap Steering Group will oversee in the next 12 months and beyond and the linked measures of success that will be used to track progress:

Mission 1: Be a nationally recognised AI testbed, driven by accelerated adoption			
Ambition	12 Months Actions	12+ Months Actions	Measures of Success
<p>Create a Data & Knowledge Hub: We aim to broker data sharing agreements, curate and open high-value datasets for priority domains; provide tools, governance and access (a “Data Lab” model) with secure research environments.</p>	<ul style="list-style-type: none"> Establish regional data working groups to oversee the development of data and knowledge hub, the group will have key deliverables such as; mapping datasets, driving the creation of data sharing agreement, crafting data sharing pilots. 	<ul style="list-style-type: none"> Secure relevant agreements to launch pilot data lab/projects, for a limited amount of early adopters to shape the creation of fully functioning lab. 	<p>Cement testbed status by increasing the amount of publicly funded R&D to £1bn per annum, up from £700m, driven by more AI related R&D funding.</p>
<p>Drive a Challenge Pipeline to support public service transformation: We will work to broker outcome based procurement, supporting public sector challenges with business, engaging third sector, to keep solutions resident focused; align to national regulatory and assurance standards to support wider adoption and engagement of sector into public service transformation.</p>	<ul style="list-style-type: none"> Work with partners to co-design a challenge pipeline programme for the region, garnering agreement on the structure of the programme and potential challenge areas and funding. 	<ul style="list-style-type: none"> Deliver initial challenges with measurable outcomes before securing funding to create a full challenge pipeline programme. Develop marketplace for challenges to attract co-investment. 	

<p>Global Promotion: We will continue to market the region internationally as the UK's proving ground for safe, impactful AI, utilising new intelligence and opportunities to promote the region.</p>	<ul style="list-style-type: none"> • Host events to showcase the regions offerings. • Work with partners to launch targeted AI engagement campaigns. 	<ul style="list-style-type: none"> • Launch targeted marketing campaign to secure AI investments and partnerships. 	<p>Maintaining our position as the UK's second most investable region by securing more AI and tech investments.</p>
<p>Unlocking Secure Compute: We will assure access to national compute infrastructure and establish sufficient distributed compute in the region across appropriate strategic sites to ensure we can deliver on our missions, facilitating fast track planning, dark fibre connectivity and heat reuse such that we provide the right capacity to enable high impact proof of concept demonstrators, using realistic scenarios and operating conditions.</p>	<ul style="list-style-type: none"> • Commission a study to support the development of distributed network model, focusing on how the region can lead on green compute and maximize regional sites. 	<ul style="list-style-type: none"> • Establish distributed network across the region, attracting FDI and supporting local ecosystem, in addition to collaborating with other regions. 	<p>Create a distributed compute network, across at least three regional sites, facilitated by edge computing and colocation opportunities for investors, with a focus on at least 30% of waste heat being reused, supporting our 2041 carbon neutral ambitions.</p>



Mission 2: The West Midlands will drive SME productivity, supporting our growth clusters and everyday economy

Ambition	12 Months Actions	12+ Months Actions	Measures of Success
<p>Introduce Adoption Programme & Sector Demonstrators: Work to launch exemplar projects across Next-Gen Professional Services, Creative & Digital, Advanced Engineering, Clean Tech, Life & Health Sciences, supporting and elevating supply chains to drive practical user cases, feeding demonstrators and procurement.</p>	<ul style="list-style-type: none"> • Launch pilot demonstrator projects across our five clusters. • Host regional event to engage SMEs and across growth sectors. 	<ul style="list-style-type: none"> • Scale demonstrators to have multiple projects per cluster and integrating findings into local policy development. • Work to secure longer term funding the adoption programme. 	<p>Ensure that at least 60% of firms are adopting AI technologies, up from 48%.</p> <p>The application of AI to support an increase in the proportion of innovative businesses in the region from 32% to 36% to meet the national average, supporting the ambition of achieving £17.4bn of growth.</p>
<p>Create a West Midlands AI Knowledge Hub (business-facing): Drive practical guidance, diagnostics, risk management, vendor-neutral advice co-developed with ecosystem partners and explore the creation of “AI walk-in centres” where organisations of all sizes can explore practical applications of AI for their sector.</p>	<ul style="list-style-type: none"> • Create online portal for businesses, use existing and new roadmaps and blueprints to support businesses. • Work to develop the concept of an “AI Walk-in Centre” for SMEs. 	<ul style="list-style-type: none"> • Create walk-in centre pilot in the region. • Explore the creation of “AI-ready” SMEs, as part of AI-Academy approach. 	

Mission 3: The West Midlands will lead the nation in AI education, equipping people with tech skills and businesses with top talent

Ambition	12 Months Actions	12+ Months Actions	Measures of Success
<p>Create a region wide AI-Academy:</p> <p>AI for All: Create free, entry-level AI literacy for residents and employees (inclusive access).</p> <p>AI for Business: Provide SME adoption support focused on productivity, competitiveness and safe deployment.</p> <p>AI for Work: In role upskilling and reskilling pathways, creation of modular micro credentials tied to live user cases. Partnering with industry, HE and FE to broker, enhance and realise the benefits of talent available through fellowships, placements and bridging business with academies.</p> <p>AI for the Public Sector: Provide ethical, resident-facing innovation and AI-powered service transformation.</p>	<ul style="list-style-type: none"> Consult key stakeholders, including SMEs, tech industry, VCSEs and other partners to shape the delivery of the AI-Academy. 	<ul style="list-style-type: none"> Launch regional AI-Academy, ensuring all residents, workforce and businesses benefit from this approach. 	<p>Support all residents in the region to access to free AI skills training.</p> <p>Support unemployed residents and those with lower level qualifications will be upskilled to support them, driving another 93,000 people in work and an extra £8,600 in average wages.</p>
<p>Create an AI Skills Plan: to drive our long term strategy for upskilling and reskilling our region.</p>	<ul style="list-style-type: none"> Map provision, opportunities and skills needs of residents and industry to future proof the region. 	<ul style="list-style-type: none"> Launch regional AI Skills Plan. Conduct periodic reviews to monitor trends and provision needs to refine the regional approach to AI skills delivery. 	
<p>Scaling Talent & Translational Partnerships: We will work to facilitate Industry-anchored fellowships co-run with Universities and anchors, challenge funds and applied labs to move research to market at pace.</p>	<ul style="list-style-type: none"> Engage universities and industry to explore the creation of AI fellowships. 	<ul style="list-style-type: none"> Work to pilot and then scale fellowships in the region, ensuring local residents and business benefit. 	

**Mayor of the
West Midlands**



**West Midlands
Combined Authority**