Leading with AI

A practical blueprint for the West Midlands
June 2025

West Midlands Combined Authority

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Foreword from the TechWM CEO

The West Midlands has always been a region that leads through reinvention. From the birthplace of the industrial revolution to our role in shaping the UK's digital economy, we have a proud tradition of transforming challenges into opportunities. Today, artificial intelligence presents us with the next great wave of change—and this blueprint sets out how our region can not only respond but lead.

At TechWM, our mission is to act as a catalyst at the heart of the region's tech ecosystem—connecting, convening, and championing the people and ideas that will drive our future. This blueprint reflects exactly the kind of bold, coordinated, and practical thinking needed to ensure AI becomes a driver of inclusive growth across the West Midlands.

We know that AI can help our businesses become more productive, our public services more efficient, and our economy more resilient. But making that a reality means more than just awareness—it means action. This work provides a clear route forward, with real tools for organisations of all sizes to explore, experiment, and adopt AI in a way that is responsible and meaningful.

As a region, we are ready. We have the industrial strength, research excellence, entrepreneurial talent, and collaborative mindset to be a national leader in AI adoption. I encourage every business, institution, and policymaker in the West Midlands to embrace this blueprint and be part of what comes next.

This is our moment to lead again—together—and to show that the West Midlands does not wait for the future. We help build it.

Andy Hague CEO TechWM

Note on the use of this report and its components
This report has been commissioned by the West Midlands Combined Authority (WMCA) and independently prepared by the authors. The views, findings, interpretations, and conclusions expressed in this report are those of the authors and do not necessarily reflect the official policies or positions of the WMCA.

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1. How to use this AI adoption blueprint?

This blueprint is designed as a practical guide to enable the West Midlands to become a leader in artificial intelligence adoption. It is not intended to be read as a rigid strategy document but as a flexible toolkit—offering clear actions, modular frameworks, and adaptable recommendations that clusters, businesses, universities, and public sector organisations can use immediately.

The document first outlines why the region must act swiftly to secure a national leadership position in AI. It then clearly sets out strategic recommendations, including vital leadership roles, governance structures, partnerships, funding, and essential infrastructure.

In addition to this blueprint, there are two interconnected practical resources:

AI adoption roadmaps: A flexible toolkit that allows businesses and clusters to start their AI journey at any stage, using the components in whatever order best fits their sector, goals, and level of readiness.

AI proposals: Structured investments and strategic initiatives (e.g., accelerators, skills programmes, ethical frameworks, startup support) providing the tools needed for broader adoption and deeper regional transformation.

This blueprint also explains how regional efforts directly align with national AI priorities, enhancing credibility and attracting investment. Finally, it emphasises the importance of embedding AI within wider business and organisational transformation—recognising that successful AI adoption is fundamentally about people, culture, and strategic vision.

Use this document as both a compass and a toolkit: choose your starting point based on current readiness, and move through the material flexibly and iteratively, adapting as your organisation or cluster evolves.

01	WMCA AI Adoption Blueprint document	Outlines the West Midlands' AI opportunity, identifies key strengths and barriers, recommends actions on leadership, funding, governance and investment, and provides a foundation for stakeholder alignment and regional coordination. **Use this to inform strategy, policy, funding bids, and engagement**
02	AI Adoption Roadmaps for Clusters	A practical framework for AI adoption with detailed roadmaps for key clusters, an adaptable blueprint for others, and guiding principles for region-wide good practice. **Use these to guide your organisation's AI journey based on where you are now.**
03	Five AI proposals	Targeted proposals addressing key gaps in the West Midlands' AI ecosystem—built to fast-track funding bids, strengthen delivery, and demonstrate a clear plan for AI-driven economic transformation. **Use these to kick-start real-world programmes and unlock external investment.**

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2. Context and rationale for regional AI leadership

The West Midlands is at a pivotal moment. It stands to gain significantly from the opportunities presented by artificial intelligence, and achieve this by acting swiftly, strategically, and in a way that sets it apart from competing regions. The UK government has made AI a national priority, directing investment and policy towards scalable, responsible adoption. Regions that are organised, visible, and delivery-ready will be best positioned to benefit.

The West Midlands has several natural advantages that provide a strong foundation for AI leadership. It has a well-established industrial base, a long-standing reputation for innovation, world-class academic institutions, and a collaborative approach to economic development through cluster models. The presence of major sectors such as advanced manufacturing, health technology, logistics, creative industries, and financial services provides a diverse and rich landscape in which AI can thrive. But this potential will only be realised through coordinated action.

Businesses—especially SMEs—face common barriers: limited AI literacy, cost concerns, uncertainty around tools, and a lack of accessible support. These cannot be solved by technical guidance alone. They require bold leadership, investment in shared infrastructure, and a visible regional commitment to AI-led growth.

AI Productivity & Investment In The West Midlands

GVA per AI employee is lower than the national average - £23,595 vs £39,730

AI sector is growing across the UK at 9.0% per year, yet **growth in the WMCA comes in at 3.5%**.

Boosting AI adoption and closing the productivity gap will require strategic action — including greater R&D investment, stronger skills pipelines, and improved access to funding.

Report on AI Adoption in the WMCA (March 2025) by The Economic Intelligence Unit

This strategy builds on the West Midlands Combined Authority's Plan for Growth and aligns to its 2025 Regional Growth Plan, offering a practical blueprint to embed AI across strategic clusters. It is not about adopting technology for its own sake, but driving economic and social transformation.

To lead, the West Midlands must present a clear, confident AI proposition—anchored in delivery, aligned to national priorities, and backed by a model that supports businesses where they are and helps them scale. The time for mobilisation is now.

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3. Core recommendations for enabling an AI driven growth

The West Midlands must act decisively to become a recognised national leader in artificial intelligence. Achieving this requires reshaping both external perceptions and internal structures to rapidly support and scale AI adoption.

The region must define a clear and credible identity as a leading hub for AI-driven innovation and growth, highlighting industrial strengths, investing in critical infrastructure, and providing affordable access to shared tools, data, and computing resources. A strategic partnership with a global technology firm will create credibility and attract further investment.

Reducing cost and risk through shared sandboxes and subsidised AI toolkits is vital to drive sector-wide adoption. The West Midlands Combined Authority must also lead by example, embedding practical AI use across its own operations to demonstrate responsible adoption.

To secure national attention and funding aligned with the government's AI Opportunities Action Plan, the region needs to move swiftly from planning to visible delivery—supported by strong leadership, tangible progress, and measurable results.

3.1 Strategic recommendations that help achieve the vision

1 Provide Visible Leadership And Governance

Appoint a high-profile regional AI leader from the private sector with clear authority, budget control, and accountability for delivery.

Establish a robust regional governance body (and an operating model) within WMCA or as a public-private consortium to coordinate alignment, avoid duplication, and represent the region nationally.

Develop a clear KPI framework at the outset to measure and demonstrate progress, justify investment, and ensure regional accountability.

2 Secure Investment And Strategic Partnerships

Deploy targeted stimulus funding to accelerate AI adoption via roadmaps, sandboxes, skills programmes, and ethics frameworks.

Prioritise and secure a strategic partnership with an AI hyperscaler (Google, Amazon, Microsoft) to strengthen the region's AI ambitions and attract inward investment.

Identify and strategically highlight prominent AI companies already thriving in the West Midlands, leveraging their successes as part of a coordinated regional PR and marketing strategy to boost national and international visibility.

3 Build Essential Infrastructure And Shared Environments

Establish the region as a leading hub for AI-driven innovation and growth featuring critical digital infrastructure, secure computing, connectivity, and resilience to act as a national AI hub.

Develop region-wide shared AI sandboxes, technology hubs, and curated data environments that offer businesses affordable and low-risk experimentation opportunities, supported by subsidised access to trusted vendors and expert resources.

4 Accelerate Practical Adoption And Skills Development

Actively deliver the structured AI adoption roadmap and accelerator programme, starting with high-potential clusters to support scalable adoption across SMEs.

Launch a region-wide, inclusive AI skills and talent programme in partnership with universities, colleges, and training providers.

Demonstrate commitment and build credibility by leading from the front through public sector AI adoption , positioning it as a model for innovation, productivity, and responsible use across the region inspiring wider business and community adoption.

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3.2 Leverage universities and research institutes as strategic AI partners

The West Midlands' world-class universities—including the University of Birmingham, University of Warwick, Aston University, and Birmingham City University—are critical strategic partners in the region's AI ambitions.

Their applied research expertise, practical industry collaborations, and sector-specific innovations provide the foundational knowledge and infrastructure essential for the successful deployment of the AI Roadmap and Proposals.

These institutions will play a central role by offering advanced AI training programmes, targeted skills initiatives, and accessible testbeds or innovation sandboxes. Their existing strengths in ethical governance, sector-focused AI applications, and industry-academic partnerships will significantly enhance regional credibility, innovation capacity, and workforce readiness.

By fully integrating academia into regional AI leadership structures and leveraging their facilities and expertise, the West Midlands can accelerate its transformation into a nationally recognised centre of AI-driven innovation, investment, and sustainable economic growth.

4. Implementation of the regional roadmap and AI proposals

4.1 AI adoption roadmap: Flexible, practical and member-centric

The AI adoption roadmap is a flexible and adaptable framework designed to meet organisations where they are on their AI journey. Recognising that adoption is not a linear process, the roadmap serves as both a guide and a toolkit—allowing businesses to enter at any point, progress at their own pace, and revisit earlier stages as their needs evolve.

It begins with a cluster-wide AI maturity assessment to identify current capabilities, constraints, and funding readiness. From there, organisations can follow tailored pathways based on their sector, size, and ambition. The roadmap is modular by design, offering standalone tools, guidance, templates, case studies and curated directories that can be used individually or in combination.

This structure encourages experimentation, continuous learning and iteration. It supports early adopters looking to move quickly and provides more advanced organisations with the tools to scale. For regional stakeholders, it serves as a practical delivery mechanism and a unifying framework—enabling coordinated progress across clusters while respecting organisational autonomy and allowing each entity to move at a pace that suits its context.

Above all, it is a living document—designed to evolve with the region's AI maturity. As adoption deepens and real-world feedback is gathered, the roadmap will continue to adapt, supporting dynamic, inclusive and practical progress at every stage of the West Midlands' AI journey.

Three-tiered structure of the AI adoption roadmaps

The AI adoption roadmap is a structured, adaptable framework designed to accelerate AI integration across the West Midlands. It supports organisations at different stages of readiness through a three-tier model, ranging from detailed guidance for early adopters to high-level strategic principles for long-term alignment.

Tier 1 targets early adopters with practical, step-by-step roadmaps. These help organisations identify immediate AI opportunities, build foundational capabilities, and launch pilot projects—lowering barriers to entry and encouraging experimentation.

Tier 2 builds on those early lessons to create a flexible, scalable framework for wider adoption. It offers a refined template that clusters can customise through initial member assessments. This tier enables a consistent, proven approach across industries and business sizes, driving regional momentum.

Tier 3 provides strategic guidance for organisations not yet ready to implement AI but aiming to align with best practices. It outlines shared principles, ethical standards, and governance models to ensure AI adoption is responsible, inclusive, and trusted across the region.

Together, these three tiers offer a dynamic toolkit for embedding AI into the West Midlands' economic fabric—supporting immediate action, sector-wide scalability, and long-term transformation.

Tier 1

Detailed, step-by-step roadmaps for early adopters

HealthTech, Aerospace/Manufacturing and Creative Industries

Helping organisations pilot and apply AI quickly

Tier 2

A flexible, general roadmap that clusters can adapt for their own sector

Designed to be adapted for subsequent clusters

Clusters can create Tier 1-style roadmaps by conducting interviews and assessments

Tier 3
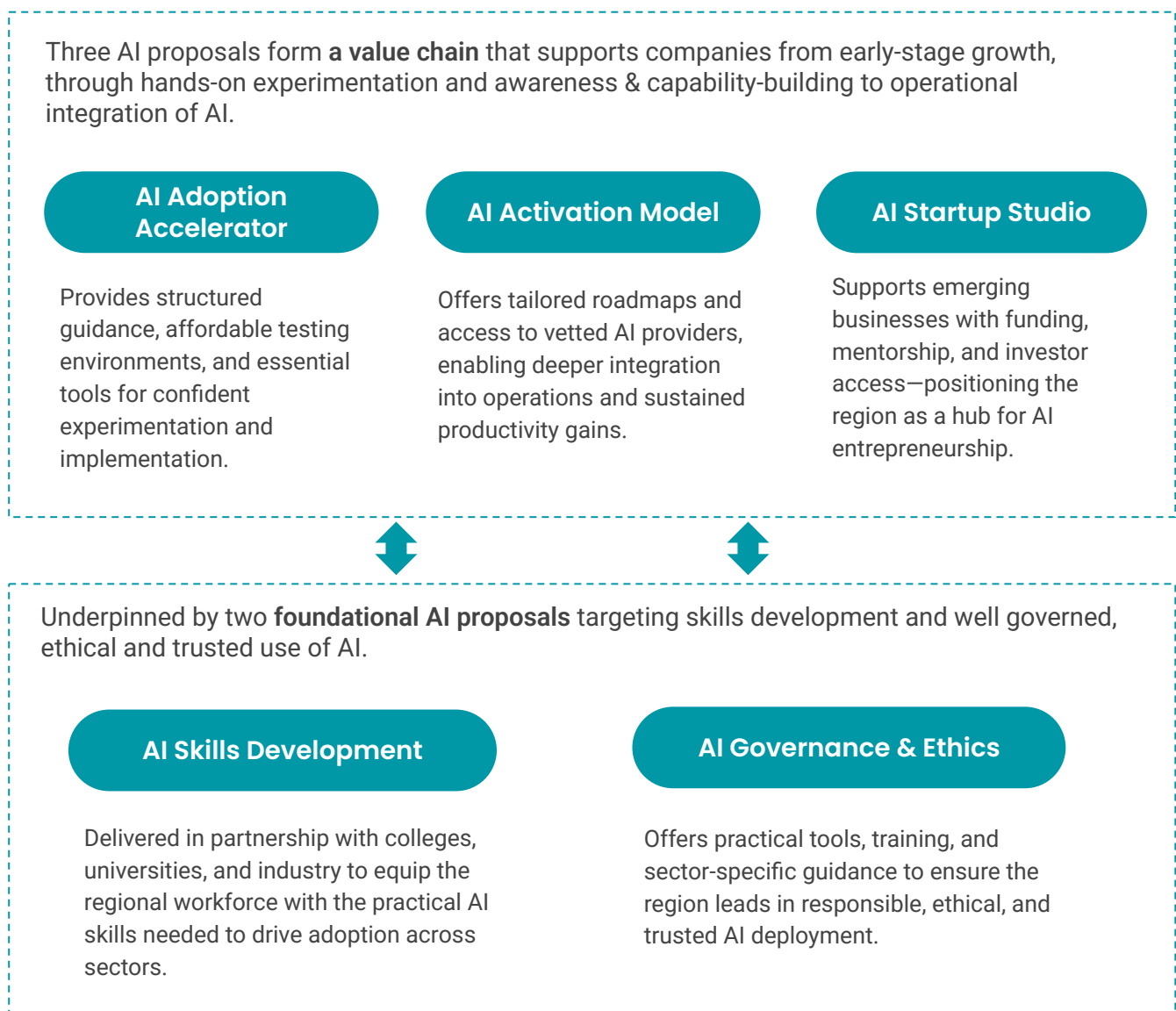
High-level principles and good practice for AI adoption

A guide for clusters planning long-term AI adoption

Outlines core principles, strategic value, and scalable support models

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4.2 AI Proposals

Alongside the roadmap, this commission has developed five foundational AI proposals designed to accelerate practical AI adoption across the West Midlands. These proposals establish critical infrastructure, build workforce skills, and directly address common barriers to AI deployment such as funding constraints, ethical compliance, and the complexities faced by SMEs and startups.

Crafted at a general level, each proposal is flexible enough to adapt to the specific needs of organisations, clusters, or funding opportunities. This enables businesses to quickly move from initial AI concepts to funded projects and tangible results.

Three AI proposals form **a value chain** that supports companies from early-stage growth, through hands-on experimentation and awareness & capability-building to operational integration of AI.

AI Adoption Accelerator

Provides structured guidance, affordable testing environments, and essential tools for confident experimentation and implementation.

AI Activation Model

Offers tailored roadmaps and access to vetted AI providers, enabling deeper integration into operations and sustained productivity gains.

AI Startup Studio

Supports emerging businesses with funding, mentorship, and investor access—positioning the region as a hub for AI entrepreneurship.

Underpinned by two **foundational AI proposals** targeting skills development and well governed, ethical and trusted use of AI.

AI Skills Development

Delivered in partnership with colleges, universities, and industry to equip the regional workforce with the practical AI skills needed to drive adoption across sectors.

AI Governance & Ethics

Offers practical tools, training, and sector-specific guidance to ensure the region leads in responsible, ethical, and trusted AI deployment.

Each proposal is modular, adaptable, and ready to be tailored to specific opportunities or funding calls. Used together or individually, they provide a flexible platform to drive both near-term progress and long-term transformation across the region.

4.3 How do roadmaps and AI proposals work together?

The AI adoption roadmaps and proposals are interconnected, designed to reinforce and build on each other. While the roadmaps offer practical guidance for immediate action—tailored to different clusters and levels of AI maturity—the proposals provide strategic enablers for ambitious, long-term impact.

The roadmaps offer organisations a clear starting point, helping them navigate sector-specific challenges and practical barriers. In parallel, the proposals offer a more transformative set of tools and investments, addressing larger-scale issues such as shared infrastructure, skills development, ethical governance, and targeted startup support. Crucially, these proposals are modular and adaptable, meaning they can be combined or tailored to suit evolving funding opportunities and regional priorities.

The proposals recognise that achieving transformative AI adoption demands substantial funding, infrastructure, and sustained effort—often beyond individual SMEs or clusters. The roadmaps therefore prioritise practical and affordable early steps, allowing organisations to begin their AI journey immediately and cost-effectively. These initial actions help build connections towards larger-scale initiatives such as data centres, shared infrastructure, and regional AI driven growth. This phased approach clearly signposts a strategic progression, demonstrating how early successes create a credible pathway to long-term regional transformation.

Together, the roadmaps and proposals provide a coherent framework that meets immediate business needs, while creating a credible platform for sustained, region-wide transformation and national leadership in AI adoption.

4.4 Alignment to national strategies and initiatives

The AI adoption roadmaps and proposals explicitly align with and support the UK's national AI priorities, notably the Government's AI Opportunities Action Plan and the UK's Modern Industrial Strategy. By translating national objectives into practical, region-specific interventions, the West Midlands positions itself as a good example of how regional initiatives can directly contribute to broader national ambitions.

This alignment includes coordinated regional governance that mirrors national calls for clear leadership and accountability, targeted sector-specific skills programmes that directly address the national AI skills gap, and ethical frameworks that support responsible, trusted AI deployment. In addition, the West Midlands' structured approach to commercialising AI innovations and developing sustainable investment models echoes national strategic priorities, ensuring regional projects are aligned with government funding streams and policies.

Through this clear strategic alignment, the West Midlands not only increases its credibility and visibility with national policymakers and funders but also establishes itself as a frontrunner region capable of delivering meaningful, scalable, and nationally significant AI outcomes.

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4.5 Recognising AI as part of a wider transformation

Successful AI adoption in the West Midlands is not solely about technology. Rather, AI should be seen as an integral component of a broader transformation across the region's economy, businesses, and workforce. It demands organisations to rethink their core business models, break down operational silos, and adopt new, agile approaches to value creation. For the West Midlands, AI represents more than incremental efficiency gains—it is a catalyst for reinvention and sustainable economic progress.

Also, the human dimension must remain central. Businesses will only unlock AI's full potential by fostering AI literacy across all organisational levels, investing in workforce skills, and nurturing collaborative cultures that encourage continuous learning and innovation. Employees must become confident and informed partners in AI-driven workflows, rather than mere users of new tools.

For regional leadership and businesses alike, embracing AI means aligning initiatives explicitly to strategic outcomes: enhanced customer experiences, improved productivity, new market opportunities, and stronger competitiveness. The West Midlands' diverse industrial base, strong clusters, and legacy of innovation uniquely position it to demonstrate what responsible, inclusive, and transformational AI adoption can achieve at scale.

By placing AI at the heart of a comprehensive economic, organisational, and cultural shift, the region can set the benchmark for responsible AI adoption nationally—securing lasting productivity, future-proofed skills, and long-term economic resilience.

5. Conclusion: from Ambition to Action

The West Midlands stands at a transformative crossroads. Artificial intelligence represents more than a technology—it offers a powerful pathway to regional economic reinvention, sustained growth, and long-term competitiveness.

The blueprint presented here provides clear, practical tools and strategic guidance. However, its success depends entirely on swift, coordinated action—backed by visible leadership, committed investment, and collaborative execution across sectors and clusters.

AI adoption is ultimately a strategic choice, requiring vision, bold decisions, and human-centred leadership. By embedding AI deeply into the region's economic fabric, the West Midlands can set a lasting benchmark for responsible, inclusive innovation—securing sustained economic growth and delivering transformative change that benefits communities and businesses across the entire region.