The business value of data & AI: metrics that matter

wanstor

Contents

Artificial Intelligence (AI) and data analytics have evolved from experimental novelties into essential pillars of business strategy. The UK AI market alone is currently valued at over £21 billion, with projections to exceed £1 trillion by 2035. This rapid expansion reflects the growing recognition that data and AI are not just technological tools, but catalysts for competitive advantage and enterprise-wide transformation.

For CIOs and CXOs, the critical challenge is no longer "Should we invest in AI?" but "How do we measure and communicate its true business value?" Traditional ROI frameworks often fail to capture the broader impact of AI initiatives, which range from operational efficiency and innovation acceleration to enhanced customer experiences and strategic agility.

This eBook provides a pragmatic framework to understand and articulate the ROI of data and AI investments. Through a combination of current data, real-world examples, and actionable insights, you'll learn how to define success, overcome barriers, and embed AI-led transformation at the heart of your organisation.

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The Strategic Imperative of Data & AI

! 79% of UK professionals used generative AI at work in 2024.

AI is no longer confined to pilot projects or niche applications, it's now deeply embedded in everyday business processes. In fact, it's hard to imagine going back to a workday without it; recent research shows that nearly eight in ten UK professionals actively use generative AI tools such as ChatGPT in their work. This rapid adoption signals a fundamental shift: AI is becoming a core driver of productivity, creativity, and decision-making across industries

Yet embracing AI is about much more than technology adoption. It represents a strategic imperative to rethink how your business operates and competes. AI can unlock new levels of agility, speed up decision cycles, and create innovative products and services that differentiate your organisation in a crowded marketplace.

Consider the UK government's trials with AI-powered assistants like Microsoft Copilot, which found employees could save up to two weeks per year on routine administrative tasks alone. These productivity gains free up teams to focus on higher-value activities, directly impacting operational efficiency and employee satisfaction.

However, success requires more than simply deploying AI tools, instead demanding clear alignment with business goals, realistic expectations, and measurement frameworks that capture the multifaceted value AI delivers. As you embark on or deepen your AI journey, this eBook will guide you through the metrics that matter and the organisational mindset needed to turn AI into a transformative force.

To understand the strategic imperative of Data & AI:

Explore Early

AI is now mainstream; leaders must move beyond curiosity.

Start Small

Identify quick wins to build momentum

Equip Teams

Provide training & clear use cases.

Think Growth

Embed AI for agility and faster decisions.

How to Measure the True ROI of Data & AI

Measuring the true return on investment (ROI) for data and AI projects remains one of the most significant challenges facing organisations today. Unlike traditional IT initiatives, the value AI delivers often extends beyond direct cost savings or revenue increases. It touches innovation, customer experience, operational efficiency, and the organisation's overall agility and adaptability.

Traditional ROI frameworks usually focus on immediate financial returns, like reducing headcount, lowering expenses, or boosting sales. Whilst these are important, they fail to capture the strategic advantages AI can deliver over time, such as faster decision-making, the creation of new products or services, or the ability to pivot quickly when markets change.

! Up to 85% of AI projects fail due to unclear KPIs, poor data quality, and inadequate change management.

One reason less than 20% of AI projects succeed is the absence of clear, aligned KPIs from the outset. Without well-defined success criteria tied to business outcomes, initiatives struggle to prove their value or justify further investment. This disconnect can lead to stalled projects and frustrated leadership.

To measure AI's ROI effectively, CIOs and CXOs must broaden their perspective:

Broaden Your View

Look beyond cost savings to innovation & customer experience.

Define Clear KPIs

Avoid vague goals; connect metrics to business outcomes.

Track Long Term

Consider adaptability and responsiveness, not just immediate returns.

Use Mixed Metrics

Embed AI for agility and faster decisions.

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Unlocking Value With the Right Metrics

Selecting the right metrics to evaluate AI initiatives is crucial, yet it's often overlooked or simplified. The truth is, the metrics that matter differ vastly depending on the use case, the technology deployed, and the organisational context. A one-size-fits-all approach can undermine efforts and obscure real value, but with the right metrics in place, teams can demonstrate AI's tangible benefits and build the confidence needed for broader adoption.

To choose meaningful metrics, CIOs and CXOs must first understand what success looks like for each AI use case.

For example, consider these scenarios:

- Customer Service Chatbots: Metrics might include average handling time, customer satisfaction scores, first contact resolution, and chatbot deflection rates. These focus on improving experience and operational efficiency simultaneously.

- Predictive Maintenance in Manufacturing: Here, the key metrics are uptime improvements, reduction in unplanned downtime, maintenance cost savings, and improved asset lifespan. The value is directly measurable through operational impact.

- Fraud Detection Systems in Finance: Precision, recall, false positive rates, and time to detection are critical metrics, reflecting the system's ability to protect revenue and minimise disruption to legitimate transactions.

While specific metrics vary, here are some overarching principles guide effective measurement:

Focus on Impact

Prioritise operational, customer, revenue, and risk metrics that matter.

Tailor Metrics

Align KPIs specifically to the AI application and its goals.

Measure Risk Reduction

Include compliance, security, and governance benefits.

Use Leading Indicators

Track early signals of success to enable timely adjustments.

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How to Overcome Barriers to Realising Data & AI Value

Despite growing interest and investment in AI, many organisations struggle to convert AI ambitions into operational success. The barriers are often less about technology and more about people, process, and culture.

! 67% of CIOs cite cultural resistance as their top challenge.

One of the most persistent challenges is cultural resistance. Employees may fear AI threatens their jobs or distrust its outputs. Without addressing these concerns, adoption stalls, and projects fail to deliver promised benefits.

Tackling cultural resistance starts with transparent communication and engagement. Leaders must articulate how AI will augment roles, not replace people, highlighting opportunities for upskilling and career growth. Including end users in pilot projects fosters ownership and trust.
Skill shortages also pose a real challenge. The rapid pace of AI advancement has created a global demand–supply gap in data scientists, AI engineers, and data engineers. Organisations must invest in continuous learning programs, partnerships with universities, and diverse talent pipelines to build sustainable capabilities.

Data quality and integration challenges also loom large. AI's effectiveness hinges on clean, well-structured data. Legacy systems, data silos, and inconsistent governance can frustrate AI deployments. Strong data stewardship frameworks, automation of data cleansing, and modular architectures help mitigate these issues.

Finally, securing executive sponsorship and cross-functional collaboration ensures AI initiatives align with strategic priorities and have the resources needed to succeed.

By proactively addressing these barriers, organisations position themselves to unlock real, measurable AI value:

Address Skill Gaps

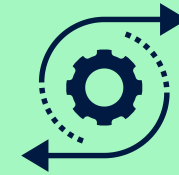Invest in ongoing training and hiring strategies.

Simplify Integration

Use flexible, modular platforms to reduce complexity.

Clean Your Data

Prioritise data hygiene to ensure reliable AI outcomes.

Manage Change

Communicate benefits clearly and involve stakeholders early.

5

Integrating AI Observability into Your Measurement Framework

! AI adoption is highest in IT (29.5%) and legal (29.2%), showing maturity in data-rich sectors.

A measurement framework is more than just a set of KPIs; it's the foundation for accountability, learning, and continuous improvement. For AI initiatives to deliver sustainable value, measurement must be embedded into governance structures and processes.

Building a scalable framework begins with strategic alignment. KPIs and metrics must cascade from corporate goals down to individual projects, ensuring every AI effort supports the bigger picture and delivers meaningful results to all stakeholders.

Regular review cycles are critical. The AI landscape evolves rapidly, as do business priorities. Quarterly or monthly performance reviews enable timely course corrections, resource reallocation, and agile responses to new opportunities or emerging challenges.

Cross-functional collaboration is essential. Data scientists, business leaders, IT, and compliance teams must co-create measurement frameworks. This diversity of perspective prevents tunnel vision and enhances credibility.


Benchmarking against industry peers and internal historical data provides valuable context and motivates continuous improvement. For example, comparing AI-driven customer churn reduction metrics against competitors offers insight into relative performance.

An often overlooked but vital element of a robust measurement framework is AI observability — the continuous monitoring and analysis of AI models to ensure they perform reliably and without bias over time. Without observability, AI models risk becoming "black boxes" whose behaviour can drift undetected, potentially undermining business outcomes and stakeholder trust. Embedding AI observability into your governance and KPI processes enables early detection of issues, regulatory compliance, and sustained AI ROI.

Finally, the framework should encourage transparency and storytelling. Presenting data through dashboards, narratives, and real-world examples builds stakeholder confidence and fosters organisation-wide buy-in.

When done well, a scalable measurement framework transforms AI from a technical experiment into a strategic business capability, capable of driving ongoing transformation.
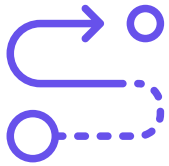
Align KPIs with Strategy

Connect metrics directly to business priorities.

Set Review Cycles

Regularly update measurement approaches based on results.

Bridge Teams & Boards

Translate technical data into clear business language.

Benchmark Progress

Compare performance internally and against industry peers.

How to Prepare for AI-Led Business Transformation

It has now become apparent that AI is not just a tool; it's a catalyst for deep organisational transformation. It redefines how decisions are made, how products and services are created, and even the structure of entire industries. Preparing for AI-led transformation requires deliberate vision and investment.

By 2045, nearly 30% of UK jobs — equivalent to 2.2 million roles — could be displaced by AI, according to government estimates. While this signals disruption, it also highlights a major opportunity for businesses to reimagine roles, invest in digital skills, and transform how value is created.
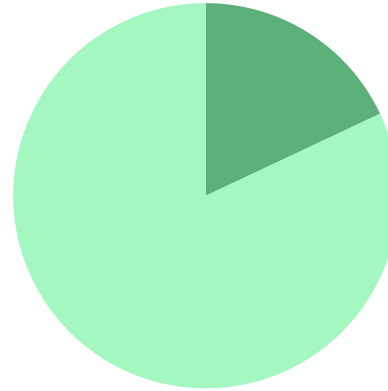
Jobs Displaced
7%

Jobs Displaced
18%

Jobs Displaced
30%
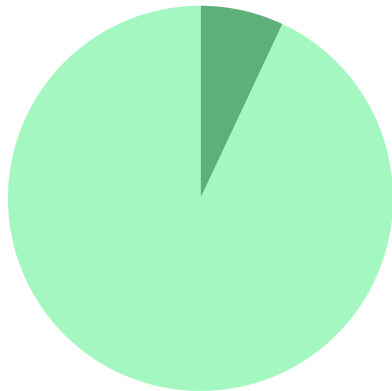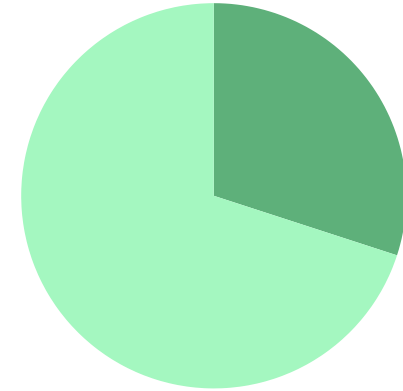
Year: 2025

Year: 2035

Year: 2045

approx. 500,000 jobs affected

approx. 1.3 million jobs affected

approx. 2.2 million jobs affected

Firstly, leadership must foster an innovation mindset that embraces experimentation and risk-taking. AI initiatives inevitably involve uncertainty and require agile approaches to learning and iteration.

Organisations also need to develop new capabilities beyond technology, including data literacy across all levels, change management expertise, and flexible governance models that balance innovation with ethical considerations.

Monitoring strategic impact continuously helps leaders understand whether AI is shifting competitive advantage, improving customer experiences, or opening new markets.
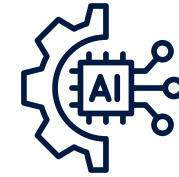
This feedback loop informs prioritisation and resource allocation. Companies that prepare holistically for AI transformation unlock new value streams and resilience, maintaining relevance in a fast-evolving landscape.

How to prepare for transformation:

Anticipate Change

Monitor emerging trends and evolving customer needs.

Embed AI Deeply

Integrate AI across processes, not just as an add-on.

Invest in Capabilities

Develop skills, culture, and processes for continuous AI evolution.

Monitor Strategic Impact

Track how AI initiatives influence overall business outcomes.

How Wanstor Accelerates Your AI-Driven Transformation

At Wanstor, we don't just implement technology; we partner with you to unlock tangible business value. Our approach combines strategic insight, cutting-edge solutions, and a commitment to measurable outcomes.

What we offer:

- Strategic alignment: We ensure your AI initiatives are closely aligned with your business objectives, translating technology investments into measurable success.

- Scalable solutions: From pilot projects to enterprise-wide deployments, we design AI solutions that grow with your business, ensuring long-term value.

- Cross-functional expertise: Our team integrates data science, IT, and business strategy to deliver solutions that are both innovative and practical.

- Continuous improvement: We embed feedback loops and performance metrics to refine AI models, ensuring they adapt to evolving business needs.

- Customer-centric approach: We focus on enhancing customer experiences, driving satisfaction, and fostering loyalty through intelligent solutions.

Wanstor's commitment to excellence has been recognised with multiple awards, including:

- MSP Service Desk of the Year at the Spark2025 SDI Conference.
- Best Service Desk CX at the same event, highlighting our dedication to customer experience.

SDI AWARDS 2024-25 WINNER MSP SERVICE DESK OF THE YEAR

SDI AWARDS 2024-25 WINNER BEST SERVICE DESK CX

SDI AWARDS 2023 WINNER TRUSTED PARTNER

SDI AWARDS 2022 WINNER BEST MANAGED SERVICE PROVIDER

Proven impact:

- Hestia: Seamless design and implementation of WAN, Wi-Fi, and cloud telephony solutions, modernising and securing IT infrastructure.

- Treetop Adventure Golf: Created IT gold standard for new flagship venue, ensuring robust and scalable infrastructure.

- Wagamama: Supported all IT hardware and software, 24/7, for all Wagamama restaurants and HQ worldwide, ensuring seamless operations.

- D&D: Fully managed WAN, Wi-Fi, and 24/7 onsite and remote support solutions for all D&D venues, enhancing service delivery.

Ready to turn your data into real business value?

Visit wanstor.com to speak with our data and AI specialists.

Discover how Wanstor can help you unlock smarter insights, drive performance, and stay ahead with AI that delivers measurable impact.

Sources

BMC: Why does Gartner predict up to 85% of AI projects will "not deliver" for CIOs?

Business.gov.uk: NA innovation Artificial Intelligence

Capital Economics for the Department for Digital, Culture, Media, and Sport (DCMS): AI ACTIVITY IN UK BUSINESSES An assessment of the scale of AI activity in UK businesses and scenarios for growth over the next twenty year

Gov.uk: Artificial Intelligence sector study 2023

Gov.uk: Autumn Budget 2024 – HC 295

Gov.uk: Government Commits up to £3.5 Billion to Future of Tech and Science

Gov.uk: Guidance: National AI Strategy – HTML version

Gov.uk Office for National Statistics: Understanding AI uptake and sentiment among people and businesses in the UK: June 2023

Gov.uk: The Potential Impact of Artificial Intelligence on UK Employment and the Demand for Skills

Gov.uk: UK unveils world leading approach to innovation in first artificial intelligence white paper to turbocharge growth

International Trade Administration, Market Intelligence, United Kingdom Artificial Intelligence Market 2023

Oxford Insights: Government AI Readiness Index 2024

Protext AI: Marks and Spencer Case Study

The Data City: The UK's Top Artificial Intelligence (AI) Hotspots

The Data City: UK Artificial Intelligence Industry

The Guardian: UK to invest £900m in supercomputer in bid to build own 'BritGPT'