



UNLOCKING UK'S AI POTENTIAL 2025

Introduction

The UK has set its sights on becoming a world leader in artificial intelligence (AI), recognising AI as the defining technology that will shape the next era of economic growth and global competitiveness. This year, the UK Government introduced the [AI Opportunities Action Plan](#) – a bold and targeted roadmap designed to accelerate AI adoption across industries, strengthen investment, and ensure the UK harnesses AI to drive productivity and innovation. The plan outlines the steps needed to unlock AI's potential, helping businesses of all sizes, from the smallest startups¹ to the largest enterprises,² access the tools, skills, and investment required to scale AI-driven innovation.

Underpinning these commitments is a focus on productivity. The UK's productivity challenge has been a persistent issue for over a decade, with growth stagnating since the 2008 financial crisis. Bank of England data shows that UK productivity has flatlined, running almost **20%** below its pre-crisis trend level.³ AI presents an opportunity to turn the tide on this challenge.

Businesses see this opportunity and are adopting AI at an accelerating pace. Across the UK, more than half (**52%**) are now using AI, up from **39%** last year. However, while AI adoption is growing, a gap is starting to emerge between the UK's startups and large enterprises.

While large enterprises are currently experimenting with AI to make surface-level efficiency gains, such as for data analysis or as scheduling assistants, startups are embracing AI and embedding it deeply within their organisations to transform business processes or build completely new products and services.

If this emerging gap is not addressed, there is a risk that a longtail of businesses, particularly large enterprises, may miss out on reaping the transformative benefits of AI, and, as a result, economic, productivity, and competitiveness gains.

To address this challenge, the UK must accelerate AI adoption and move beyond surface-level implementation to ensure that all businesses—large and small—have the tools, skills, and confidence to embed AI at scale across their organisation. By capitalising on the full opportunities that AI presents, the UK can fulfil its vision of being a global AI leader.

This report examines the UK's AI landscape, the current state of business adoption, and the support businesses need to fully harness AI's potential.



Key findings from this study:

- AI adoption in the UK has grown by **33%** in the past year among businesses (surpassing the European growth rate of **27%**). This is equivalent to at least one business on average adopting AI every minute.
 - This growth rate surpasses that of other transformative technologies, such as the peak in mobile phone adoption by consumers in the early 2000s.⁴
- Over half (**52%**) of UK businesses are now using AI, up from **39%** last year.
- **92%** of businesses who have adopted AI have reported increased revenue.
 - Those who reported this said their revenue has increased by an average of **28%** thanks to the adoption of AI.
- The UK Government has the opportunity to lead the way by encouraging AI adoption among the public sector. **78%** of businesses reported that public sector AI adoption would encourage them to increase their own adoption of the technology.
- Large enterprises, although quick to adopt AI, are not integrating it into core business processes or new products at the same speed as startups. **36%** of startups are developing new AI-driven products, while **25%** of large enterprises are doing the same.
- UK businesses report that the key barrier to AI adoption is the digital skills gap. Nearly half (**46%**) of UK businesses state that a lack of digital skills has slowed down their business.

The UK is on a path to AI leadership

The UK's digital landscape is undergoing profound and positive shifts. A game-changing AI revolution that gained momentum in 2023⁵ is rapidly gathering pace, with businesses of all sizes embracing AI to enhance productivity, drive innovation, and remain competitive. By continuing to support AI adoption across businesses of all sizes and sectors, the UK has the opportunity to become a global AI leader.

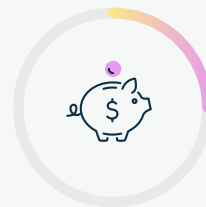
This research reveals that in the last year, at least one business in the UK adopted AI every minute, and AI yields clear benefits for those who have adopted the technology:



92% of businesses who have adopted AI reported increased revenue. Those who reported this say their revenue increased by an average of **28%**. This is a noticeable increase from 2023, which showed that **64%** of businesses reported increased revenue thanks to the adoption of AI.



More than three-quarters (**77%**) of UK businesses that adopted AI have experienced transformative or significant productivity gains. **44%** have seen improvements in decision-making, and **47%** use AI to speed up their business expansion.



Businesses reported a **21%** increase in AI budgets in the past twelve months, showing a growing commitment to using AI.

NatWest Group is one example of a UK business that is leading the way in AI adoption. NatWest has put AI at the heart of its business, and is using AI and generative AI to help its 19 million customers manage their financial wellbeing by providing personalised support — from buying a home, saving for the future, or setting up and growing a business. The bank is also using AI to detect if customers might be the victim of fraudulent activity. By analysing customers' behaviours with AI, the bank can spot unusual payment patterns earlier, enabling them to intervene more quickly and reduce financial loss.

Another example of an organisation pioneering AI adoption in the public sector is [Genomics England](#). The organisation's researchers used AWS AI to develop a solution which helps researchers identify associations between genetic variants and medical conditions. The solution can quickly process millions of pages of literature to surface the highest likelihood gene associations for further investigation, faster than manual review alone, with 30 potential clinically-relevant associations already identified.

[Robin AI](#) is an example of a UK startup that is harnessing the power of generative AI to transform its industry. Robin AI helps legal professionals save time and speed up contract work using AWS generative AI. Robin AI's solution enables lawyers and paralegals to process hundreds of pages of contracts in just a few seconds.

AWS is committed to supporting the UK by providing the cloud infrastructure, tools, and expertise needed to drive innovation and growth. In 2024, [AWS announced plans](#) to invest £8 billion in building, operating, and maintaining data centres in the UK (2024-2028). This investment is estimated to contribute £14 billion to the UK's GDP through to 2028 and support more than 14,000 full-time equivalent jobs on an annual basis at UK local businesses.

A two-tier AI economy

This research identified three stages of AI adoption. Businesses in the UK are split across these stages, with the majority of large enterprises at the earliest stage, and over a third (**34%**) of startups at the most advanced stage. A gap is starting to emerge between startups and large enterprises in AI adoption, which, if left unaddressed, could result in the emergence of a two-tier AI economy.

Stage 1

Exploring AI:

Businesses at Stage 1 of AI adoption are focused on small incremental improvements or one-off applications, rather than broader and deeper transformation across their organisation. **58%** of UK businesses are at this stage, and primarily use publicly available chatbots or AI tools for routine tasks (for example, scheduling assistants). This figure rises to **67%** for large enterprises. Many of these businesses use AI solutions from third-party independent software vendors (ISVs) to enhance specific business functions.

Stage 2

Integrating AI:

At this stage, businesses are beginning to move beyond implementing one-off AI applications and are integrating the technology into broader business functions (such as delivering personalised recommendations via websites or creating personalised features in apps) to enhance efficiencies and improve customer engagement in their operations and services. It is at this stage that we start to see a divergence between startups and large enterprises, with **28%** and **15%** reaching this stage, respectively.

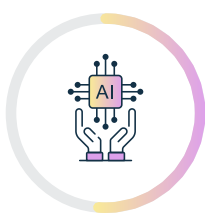
Stage 3

Transforming with AI:

At the most advanced stage of AI adoption, businesses are using AI not only to improve efficiencies, but also as a fundamental pillar of their strategy. **23%** of UK businesses have reached this level, which involves combining multiple AI systems for complex tasks (such as integrating multiple AI models for predictive analytics or combining Natural Language Processing and visual models to create multimedia content). A further **5%** are building their own AI systems or applications to analyse data, automate processes, and develop entirely new products and services. Over a third (**34%**) of startups have reached this stage, compared with only **14%** of large enterprises.

While large enterprises in the UK are increasing their use of AI (**55%** reported that they are consistently using the technology, up from **41%** last year), their use of AI remains surface-level, meaning they are focused on basic efficiency gains.

In contrast, startups are integrating AI into the centre of their business strategy and using it to develop new products and services for their customers, and in doing so are transforming their industries.



59% of UK startups have adopted AI



36% said they're developing new AI-driven products and services



compared to **25%** of large enterprises.

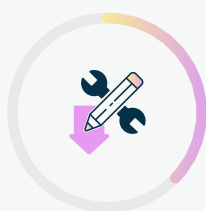
Startups are also more likely to have developed a roadmap for realising the full benefits of AI adoption: **31%** have a comprehensive AI strategy, compared to just **15%** of large enterprises. Over a third (**34%**) of startups have reached Stage 3 of AI adoption, the most advanced of the three stages identified in this research, compared with just **14%** of large enterprises.

If this emerging gap is not addressed, there is a risk that a longtail of businesses, particularly large enterprises, may miss out on reaping the transformative benefits of AI. Given enterprises are responsible for **48%** of UK turnover⁶, this could prevent the UK from fully realising the economic, productivity, and competitiveness edge that AI can unlock.



Tackling barriers to deeper AI adoption

Tackling the barriers to AI adoption will be instrumental in helping all businesses across the UK to unlock the opportunity of AI. Businesses identified the digital skills gap as the biggest barrier to AI adoption – a gap which is continuing to widen.



38% of businesses reported that access to digital skills is preventing them from adopting AI, up from **29%** of businesses surveyed [last year](#).



Nearly half (**46%**) of UK businesses said that a lack of digital skills has slowed down their business, compared with **32%** of UK businesses surveyed last year.

This lack of digital skills is becoming more important, as the demand for AI literacy increases. Businesses stated that AI literacy is expected to be required in nearly half (**47%**) of new UK jobs in the next three years, yet only **27%** of UK businesses said they felt adequately prepared. This demand is reflected in the fact that UK businesses reported that they're prepared to pay a salary premium, averaging **39%**, for employees with strong AI skills.

The lack of digital skills continues to hamper recruitment and businesses' ability to attract talent. UK businesses reported that it takes them, on average, 5.5 months to hire an employee with the sufficient level of digital skills, while **41%** of UK businesses said they are struggling to hire people equipped with the necessary digital skills.

Unlocking the UK's AI future

AWS encourages UK policymakers and industry leaders to take steps to help UK organisations unlock AI's transformative potential and maintain momentum in implementing the recommendations in the [UK AI Opportunities Action Plan](#). Key steps include empowering businesses with resources and skilled talent, establishing the UK government as a leader in AI, and further strengthening the startup funding ecosystem.

1. Empower businesses with resources and talent to accelerate AI adoption

To fully unlock AI's potential, the UK must establish a self-sustaining cycle of investment, innovation, and workforce development, and ensure that businesses have both the resources and digitally skilled talent needed for AI adoption.

AWS is focused on helping to address the digital skills gap, and is committed to creating the conditions for UK organisations to succeed through investment in skills and training.

For example, in 2023, AWS committed to training two million people of all ages with free AI skills training by 2025 to remove cost as a barrier to accessing AI skills. We achieved this goal one year early. AWS has also invested in broader digital skills programmes, for example, the [AWS re/Start programme](#), which is helping to build an inclusive, diverse global pipeline of new cloud talent. The programme, first piloted in the UK in 2017, is now available in 30 locations across all regions and nations in the UK and in countries around the world. Other programmes include [AWS Skill Builder](#), [AWS Educate](#), and [AWS Academy](#). [Amazon also announced that it is creating](#) more than 1,000 new apprenticeships across the country in 2025 in Amazon businesses including AWS, spanning more than 40 different programmes including cybersecurity, data centre operations, and engineering.

For those businesses that don't have digital skills readily available, ISVs can provide a pathway to accelerate AI adoption. Businesses who have adopted AI reported that their primary source for AI capabilities and expertise was from external providers or consultants (**35%**), followed closely by internal resources (**34%**).

ISV partners provide not only technology solutions, but also the specialised expertise and implementation support that many organisations currently lack in-house. UK businesses which reported sourcing AI capabilities from external providers said that the type of support these ISVs provided was:



more advanced
AI capabilities (**57%**)



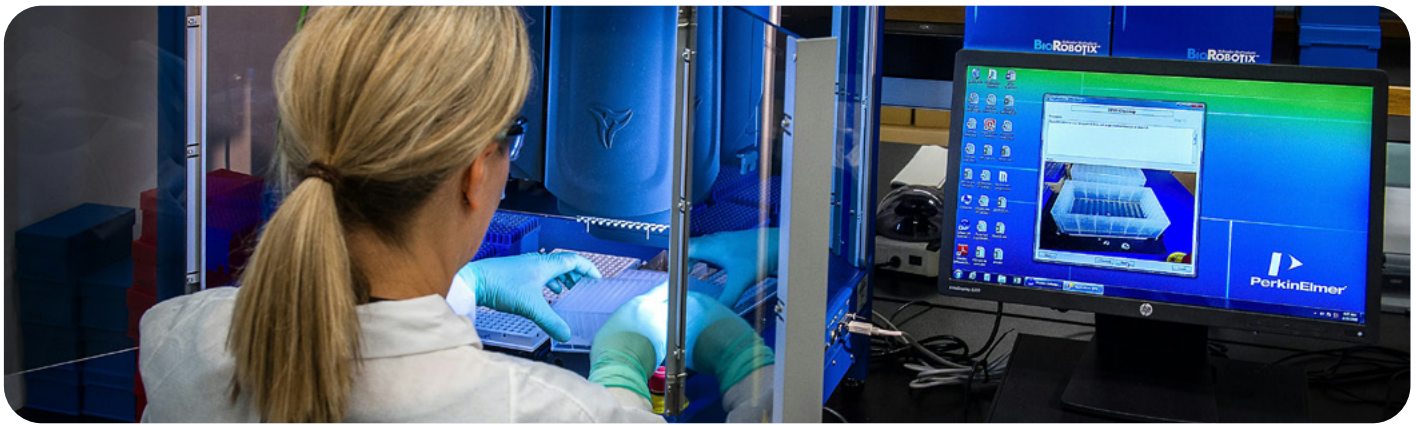
improved
cybersecurity (**54%**)



and help with training and
upskilling staff on AI tools (**43%**).

There are many other resources that are available to support organisations at every stage of their AI journey. For example, AWS is investing \$100 million in the AWS [Generative AI Innovation Center](#), which helps customers successfully build and deploy generative AI solutions. The aim of this programme is to connect AWS AI and machine learning (ML) experts with customers and partners worldwide, to help them envision, design, and launch new generative AI products, services, and processes. Another example is the AWS [Generative AI Accelerator](#), part of a \$230 million commitment to help startups turn ground-breaking ideas into impactful solutions that shape the future of technology.

By taking steps to close the digital skills gap and enable stronger collaborations with external experts, the UK can equip its businesses with the capabilities they need to innovate, scale, and stay competitive in an AI-driven economy.

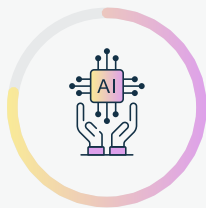


2. Scale AI across public services

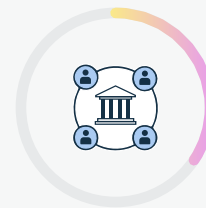
The UK Government has the opportunity to position itself as a digital leader through the adoption of AI. The Government's own analysis⁷ indicates that over £45 billion per year in unrealised savings and productivity benefits could be achieved through full potential digitisation of public sector services.

Taking the lead on digital transformation with AI, by scaling AI across public services, can catalyse technology adoption and innovation in the wider economy. Accelerating the digitisation of public services is key for the UK's competitiveness, given the productivity boosting benefits. Citizens are also enthusiastic about this digital transformation and reported that they would like to see greater investment by the Government in digital services, particularly within healthcare (**82%**) and education (**85%**).

More broadly, the adoption of AI in the public sector can serve to stimulate adoption among UK businesses.



More than three quarters (**78%**) said they are more likely to adopt AI if the public sector integrates AI into its own systems and services.



Furthermore, over a third of startups (**35%**) cite increased public sector adoption of new technologies and innovation-friendly procurement as one of the most important factors to support their ability to scale.

The UK Government taking the lead on digital transformation will demonstrate to businesses and citizens how new technologies like AI can improve their daily lives.

We are already seeing some standout examples of public sector organisations using AI to increase productivity and drive new product development to enhance citizens' experiences.

The [Department for Work and Pensions \(DWP\)](#) receives 25,000 letters a day, all of which need to be opened, scanned, categorised, and actioned – a process which took five weeks. To address this, DWP used generative AI to 'understand' the concept of vulnerability, enabling them to spot the most vulnerable cases on the day, and ensure they are put higher on case workers' agendas. DWP has seen a **91%** success rate since the launch of the solution in June 2024.

Another example is [Swindon Borough Council](#), which uses generative AI to make complex documents like tenancy agreements simpler and easier to understand. This helps individuals, for example those who have learning difficulties, to make informed decisions about their lives and their households. Using generative AI also helps the Council to achieve significant cost savings in comparison to creating content manually – reducing the cost from hundreds of pounds per document, to just a few pence, and reducing the time it takes from two weeks to minutes. The Council has also made the tool open source so it's available for others to use, license free, so other councils can extend similar benefits to their citizens.

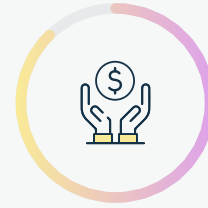
AWS is also helping the UK Government to innovate with AI, through the [One Government Value Agreement \(OGVA\)](#), which provides support for UK public sector organisations using AWS services, aiming to help them optimise their cloud infrastructure, reduce costs, enhance security, and access funding for innovative projects.

3. Ensure startups have the necessary funding to increase AI adoption

Access to funding is a key enabler for startups in their adoption of AI and their business growth:



Nearly half (**48%**) of startups said that VC and funding options have been one of the most important enablers of their growth.



88% of businesses reported that government support (e.g., grants) is important in their decision to adopt AI technologies.

Lowering barriers to use is essential for increasing AI adoption, and cloud technologies play an important role in this. Cloud helps businesses of all sizes to access the same technologies, including AI, by offering easy-to-access, pay-as-you-go, scalable infrastructure, which means businesses can quickly and easily experiment and innovate.

AWS has a deep commitment to supporting startups, offering a broad range of programmes and resources, such as [AWS Activate](#), which provides startups with cloud credits, technical support, business mentorship, and more. To date, AWS has provided more than \$7 billion in AWS Activate credits globally, helping startups to get off the ground and scale confidently.

One UK startup that has benefited from the AWS Activate programme is [Olio](#). The company has built an app on AWS to reduce food waste by allowing people to share surplus food and unwanted household items. Olio uses AI to streamline listing creation and enhance community engagement – just snap a picture of your surplus goods and the Olio app will turn it into a full listing, complete with title and description. Since launch, Olio has grown to eight million users and has saved 200 million portions of food.

Similarly, initiatives such as the [London AI Hub](#) can make it even easier for startups to access support and resources. This public-private partnership unites AI entrepreneurs, researchers, and industry leaders to shape the future of AI through community, co-working and impactful events, in one dedicated space. The Hub seeks to foster a dynamic and cross-disciplinary AI community to drive innovation.

The UK must continue to foster its already vibrant funding ecosystem for startups, and build on its current position as a leader in European venture capital (VC) funding.⁸





Conclusion

Businesses across the UK are adopting AI rapidly and harnessing its transformative potential. However, despite widespread AI adoption, a gap is starting to emerge between startups and large enterprises, which could result in a two-tier AI economy, if left unaddressed. Startups are leading the way in innovation, and integrating AI into the core of their businesses. However, while large enterprises are widely adopting AI, they remain focused on basic efficiency and productivity gains. This may prevent them from fully capitalising on the potential benefits of AI.

To ensure that businesses of all sizes and in all sectors can innovate with AI, the UK must work to equip businesses with the necessary digital skills to drive innovation, scale AI adoption across public services, and maintain its vibrant funding ecosystem to ensure startups have the necessary funding to increase their adoption of AI.

Glossary of terms

AI systems – computer programs designed to perform tasks that typically require human intelligence, such as learning, reasoning, and problem-solving.

Independent Software Vendors (ISVs) – a company that develops and sells software applications, often designed to run on third-party hardware or operating systems. Many businesses rely on ISVs to provide AI solutions.

Large Language Models (LLMs) - advanced artificial intelligence systems trained on vast amounts of text data to understand and generate human-like language. They can perform a wide range of natural language processing tasks, such as answering questions, summarising information, translating text, writing code, and more.

Natural Language Processing (NLP) – a field of AI that focuses on enabling computers to understand, interpret, and generate human language.

Scheduling assistant – an AI scheduling assistant is a smart tool that automates meeting planning, manages calendars, and finds the best times to connect, saving time and reducing back-and-forth.

Appendix

Methodology

The fieldwork for this study was undertaken by Strand Partners' research team for AWS. This research has followed the guidance set forth by the UK Market Research Society and ESOMAR. For the purposes of this study, business leaders are defined as founders, CEOs, or members of the C-suite in organisations.

'Citizens' are nationally representative members of the public based on the latest available census.

For inquiries regarding our methodology, please direct your questions to: polling@strandpartners.com.

In the UK:

- We conducted a survey targeting 1,000 businesses and 1,000 nationally representative members of the public.
- This survey has ensured representation based on age, gender, and NUTS 1 region.
- Additionally, we surveyed 1,000 business leaders, representative by their business size, sector, and NUTS 1 region.

Sampling:

Our sampling process used a mix of online panels that are recognised for their validity and reliability. These panels are carefully curated to ensure diverse representation across various demographics. For the business leaders, the panels are selected with a consideration for organisational size, sector, and position within the company. Our objective with the sampling strategy is to achieve an optimal mix that mirrors the actual distribution of our target populations in the respective markets.

Weighting Techniques:

Post-data collection, we applied iterative proportional weight to correct any discrepancies or over-representations in the sample.

Survey:

- Usage Patterns: This survey gauges the evolving patterns of digital technology usage. We are particularly interested in examining the adoption and implementation levels of technologies, focusing on cloud computing and artificial intelligence.
- Perceptions and Attitudes: The survey seeks to unearth the prevailing perceptions and attitudes towards digital technologies, understanding the perceived benefits, challenges, and potential ramifications of both present and emerging tech solutions.
- Barriers and Opportunities: The survey scrutinises the predicted challenges and potential avenues that both businesses and individuals anticipate on their digital trajectory. This involves pinpointing challenges, from skill deficits to regulatory complications, and recognising opportunities for growth, innovation, and market development.
- 'Size of the Prize': The survey shed light on the economic repercussions and growth prospects linked with digital transformation. By elucidating the 'size of the prize', we aspire to stress the importance of digital transformation and foster further investments and technology adoption.

References

1. A startup is a business founded in the last two years which provides a new product/service or innovation and is aiming for rapid growth in terms of employees and turnover.
2. A large enterprise is a business with 500 or more employees, founded 10 years ago or more.
3. [The UK's Productivity Problem: Hub No Spokes](#), Bank of England
4. The highest annual increase in global mobile phone adoption occurred between 2007 and 2008. In this period the number of mobile subscribers increased by 18%. Source: https://stats.areppim.com/stats/stats_mobilexpenetr.htm
5. Forbes, 2024, ['2023 Was the Year of AI Hype'](#)
6. House of Commons Library, [Businesses Statistics 2024](#)
7. January 2025. Department for Science, Innovation & Technology, ['State of digital government review'](#)
8. British Business Bank, 2024, ['UK now the third largest venture capital market in the world, with biggest increase in share of global investment'](#); Sifted, 2025, ['France almost doubled AI investment in 2024 but trails UK and Germany overall'](#)