



HM Government

Artificial Intelligence Adoption Research

Department for Science, Innovation and
Technology

January 2026



HM Government

January 2026

Contents

Executive summary	5
Introduction	5
Key insights	5
Key findings	6
AI adoption	6
Barriers to AI adoption	7
Impact of AI	8
Perceptions of trust and safety in AI	8
Introduction	9
Background	9
Research objectives	9
Methodology	10
Survey	10
Qualitative interviews	11
AI adoption	12
Understanding of Artificial Intelligence	12
Use of AI	13
Decision-making surrounding AI deployment	14
AI adoption as inevitable	15
AI technologies	16
Types of AI technologies currently being used	17
Timescales for adoption	19
Use cases for AI	21
Percentage of staff using AI	22
Expected changes to the workforce by 2030	25
Business areas using AI	25
Frequency of use	26
Human input or oversight	27
Future plans for AI	29
Main reasons for adopting or scaling AI	29
Expenditure on AI related activity	30
Planned investment in AI	31
Readiness to implement or increase the use of AI	31
Barriers to AI adoption	33

Attitudes towards adopting new technologies	33
Factors preventing AI adoption	34
Significance of implementation barriers	38
Factors hindering organisations from adopting AI more widely	39
Mitigating barriers	40
Making AI a more appealing or viable option	41
Impact of AI	42
Impacts of using AI so far	42
Impact on revenue and productivity	43
Perceptions of trust and safety in AI	46
Using AI responsibly	46
Challenges of deploying AI safely	47
Concerns from customers, clients or suppliers	49
Trust in AI systems	49
Appendix A: Glossary	51
Appendix B: Technical annex	52
Cognitive testing	52
Pilot fieldwork	53
Sample outcomes	55
Pilot feedback	55
Mainstage fieldwork	55
Interview targets and achieved interviews	55
Call outcomes and survey response rate	57
Weighting	58
Qualitative interviews	59

Executive summary

Introduction

The Department for Science, Innovation and Technology (DSIT) published the AI Opportunities Action Plan in January 2025¹, setting out a roadmap for government to capture the opportunities of AI to enhance growth and productivity and create tangible benefits for UK citizens. The plan outlines a comprehensive vision structured around three pillars: enabling foundational infrastructure (such as compute, data access, and skills); transforming public services through AI integration; and securing long-term technological sovereignty via homegrown frontier capabilities. Central to this vision is the ambition to embed AI across the UK economy—supporting productivity, competitiveness, and inclusive innovation.

Previous research conducted on AI use is useful for providing high level insights but there is a need for more detail to support AI policy development, particularly with AI evolving at such a rapid pace. DSIT therefore commissioned IFF Research and Technopolis Group to conduct research to assess UK businesses' use of Artificial Intelligence (AI), and explore the barriers facing businesses, to help them understand how the government can support businesses adopting AI. Understanding the current state of AI adoption—its scale, barriers, and enabling factors—is essential to achieving the Action Plan's objectives, particularly in ensuring that the UK's regulatory, infrastructure, and support mechanisms are aligned with the needs of businesses.

The quantitative survey was developed in collaboration with DSIT. Fieldwork was conducted using Computer Assisted Telephone Interviewing (CATI) and took place between 12th February and 2nd May 2025. A total of 3,500 interviews were completed with businesses (see the methodology section for more details). The interviewing team asked to speak to the person with responsibility/oversight for technology within the organisation. A limitation of this approach is that the survey will not provide insights into shadow AI adoption.

The survey data was weighted to ensure it was representative by business size and sector. The results are therefore more likely to reflect the true distribution of opinions, behaviours, or characteristics in the target population.

A total of 100 qualitative interviews were conducted with businesses who had taken part in the survey and agreed to be contacted to take part in a follow-up interview. The interviews were conducted over the phone or Microsoft Teams, and explored businesses' thoughts on, and use of, AI in more depth. Interviews lasted up to an hour and took place between March and May 2025.

Key insights

- **Adoption of AI is currently still modest.** One in six businesses currently use AI, but most businesses currently have no active plans to adopt AI. AI adoption varies by size and sector, with large and mid-sized businesses more likely to be using it, as are those

¹ [AI Opportunities Action Plan - GOV.UK](#)

in the information and communication, finance and real estate and business services / administration sectors.

- **Natural language processing and text generation are the most common uses**, with 85% of AI adopters currently using AI for these purposes.
- **Among AI adopters, 30% of staff currently use AI, on average**. Just over half of businesses currently using AI reported that they use AI constantly.
- **There is a notable gap in readiness to adopt and scale AI usage between businesses**. While just over half of organisations already using AI feel ready to further scale up their use, only a third of those planning to use AI feel ready to implement it, reiterating the challenge of limited skills and expertise in this area.
- **Lack of identified need and limited AI skills are the most commonly cited barriers to AI adoption, but ethical concerns are deemed more significant**. The most frequently cited reasons why businesses do not adopt AI are a lack of identified need and limited AI skills and expertise. However, among businesses that cited ethical concerns, these are considered the most significant barrier to AI adoption, followed by high costs and unclear or uncertain regulation.
- **Most businesses using AI report an increase in workforce productivity**. However, most business have not yet experienced a change in revenue.
- **Trust in AI systems varies, but many are willing to explore new technologies despite having some concerns around data security and the accuracy of AI outputs**. For most, their concerns do not prevent or delay them from deploying AI in their business.

Key findings

AI adoption

Adoption of AI is currently still modest among businesses in the UK. Around one in six businesses (16%) are currently using at least one AI technology. A further 5% said they plan to adopt AI in the future, but the majority are neither using nor had plans to adopt AI (80%). There are differences within this by size – large and mid-sized businesses are more likely than micro firms to be adopters – and by sector – adoption rates are higher within information & communication, finance & real estate, and businesses services & administration sectors.

Among those currently using AI, the vast majority are using natural language processing and text generation (85%) likely owing to the availability and accessibility of off the shelf generative tools. By contrast, agentic AI was the least adopted technology (7%), likely due to its relative newness in comparison to the other technologies. In-house development of AI was not prevalent, although it was more common for those using machine learning.

AI use among adopters

Among businesses using AI, most said that less than half of their staff are currently using it (77%). Meanwhile, around one in five businesses (21%) reported that over half of their staff are currently using AI. On average, 30% of staff are currently using AI.

AI Adoption Research

Among businesses that currently use AI, half of businesses expected the same number of employees to be using AI in the next 1-2 years that are currently using it, while just under half expected more employees to be using AI in the next 1-2 years (48%). A minority expected fewer employees to be using AI (2%).

Businesses that currently use AI or plan to use AI were asked which business areas in their organisations are using AI or plan to at some point in the future. The most common areas are in marketing (72%), administration (72%) and IT (64%).

Over half of businesses currently using AI reported that they use AI constantly (53%). Just over a quarter (27%) said they use AI at least once a week, meaning eight in ten businesses (80%) are using AI at least weekly.

Businesses currently using AI were asked the extent to which there is human oversight applied to outputs or decisions produced by AI. Most businesses (84%) reported at least some input or checking, with around two thirds (67%) reporting significant input or checking. Only 2% of businesses reported no input or checking.

Future plans for AI

The most commonly cited reason for adopting or expanding AI use among current and prospective AI users was to increase efficiency or productivity, reported by 65% of this group. Other motivations, while less prevalent, included improving employee experience or supporting workforce tasks (16%), and reducing costs (12%).

Organisations were also asked about specific areas in which they plan to invest in AI over the next 12 months. The most commonly reported plans include implementing off-the-shelf AI applications (65%) and embedding AI into existing tools or systems (59%).

Just over half of organisations already using AI (54%) feel ready to scale their use, with 13% describing themselves as completely ready and 41% as fairly ready. Just under a quarter (23%) are unsure, while 12% reported that they are not ready to increase their use.

Looking at organisations that were planning to adopt AI, readiness levels are slightly lower. Among this group, 34% feel ready, 33% are unsure and 32% said they are not ready.

Barriers to AI adoption

Businesses are most likely to face significant barriers implementing agentic AI (32%) and least likely to face significant barriers implementing natural language processing and text generation (18%).

The most common factors that prevent businesses from adopting AI are a lack of identified need and having limited AI skills and expertise.

When asked to rate the significance of each barrier they faced, the barrier seen as most significant was ethical concerns, with eight in ten citing this (80%). The next most significant barriers were high costs (76%) and the regulation being unclear or uncertain (72%).

When asked, in an ideal scenario, what could help reduce or remove these barriers, several suggestions were put forward, including:

- Government support in the form of funding, training, and incentives to adopt AI

AI Adoption Research

- Clearer regulation and industry standards
- Staff training and education
- Tried-and-tested use cases to demonstrate the value of AI

Impact of AI

AI has had a wide range of impacts on the businesses currently using it. Three quarters (75%) reported improved productivity of the workforce and over half (57%) had developed new or improved processes or operations. However, one in ten (10%) reported AI as having no impact so far. These and the following figures are self-reported by businesses, so may not provide a completely accurate picture of real impacts, and should be viewed as estimates.

Businesses currently using AI were asked if they had experienced a change in their revenue since they had adopted AI. The impact on revenue was limited, with over three quarters (77%) of businesses reporting having not yet seen a change in revenue. Just over one in ten (12%) reported an increase in revenue.

Over half of businesses using AI (56%) reported an increase in their employees' overall productivity since adopting AI. Just over a third (35%) reported no change and just 1% reported a decrease.

Perceptions of trust and safety in AI

The most common challenges businesses face around deploying AI safely are data security and ensuring the accuracy of outputs produced by AI.

When asked to consider any concerns or risks they associate with AI more broadly across all industries and society, ethical concerns were expressed. In particular, this was often around a loss of human interactions and many businesses expressed that there could be significant job losses more broadly as a result of AI. This was despite many businesses not feeling that there would be significant job losses in their own industry. Another risk highlighted was businesses potentially becoming over reliant on AI.

The extent to which businesses have trust in AI systems was generally mixed, though many expressed cautious trust. They are willing to explore new technologies despite having some concerns around data security and the accuracy of AI outputs. Businesses that are not using AI were more likely to express a lack of trust, and this was often due to a limited understanding of how AI would work in their business. Most businesses said that despite some concerns around trust, it did not prevent or delay them from deploying AI in their business.

Introduction

Background

In 2025, several leading AI organisations have unveiled significant advancements in foundational and specialized models, underscoring rapid progress in AI capabilities and application scope. OpenAI launched GPT-5, featuring improved speed, reliability, and safety controls alongside expanded personalization options. Anthropic introduced Claude Opus 4 and Claude Sonnet 4, models optimized for complex reasoning and coding tasks, expanding AI accessibility across major cloud platforms. Google DeepMind advanced multimodal AI with Veo 3, a text-to-video model now capable of synchronized audio generation, complemented by Genie 3, which creates immersive interactive 3D environments for gaming and simulation. Meanwhile, new entrants such as Falcon-H1 blend Transformer and state-space architectures for efficient long-context handling in open-source models, and companies like Mistral and Italy's Almawave with their Velvet 14B models emphasize cost-effective and sustainable AI solutions. Together, these releases highlight the dynamic innovation landscape driven by both established leaders and emerging challengers, propelling AI's integration into diverse sectors and real-world use cases. With AI evolving at such a rapid pace, DSIT commissioned IFF Research and Technopolis Group to conduct research to assess UK businesses' use of Artificial Intelligence (AI), and explore the barriers facing businesses, to help them understand how the government can support businesses adopting AI. The findings offer timely insight to help inform the continued rollout of the AI Opportunities Action Plan², and to support DSIT in shaping interventions that foster widespread, responsible, and value-generating AI uptake across sectors.

Artificial intelligence is the broader field encompassing knowledge-based systems, data-driven and machine learning-enabled systems, including classic machine learning (supervised learning, unsupervised learning), deep learning, and reinforcement learning, referring to the development of systems that can perform tasks requiring human intelligence.

Research objectives

The core objectives of the research were to understand:

- The extent to which AI is being adopted and scaled within businesses now, as well as future plans;
- To what extent enablers and barriers are influencing businesses' decisions to adopt and scale AI in their businesses; and
- The impact AI adoption has on businesses on a range of key metrics, such as revenue and productivity.

A glossary which includes definitions of the different types of AI can be found in Appendix A at the end of this report.

² [AI Opportunities Action Plan - GOV.UK](#)

Methodology

Survey

A quantitative survey was developed in collaboration with DSIT and refined during cognitive testing and pilot phases (details of which can be found in Appendix B of this report). Interviews lasted an average of 20 minutes and fieldwork was conducted using Computer Assisted Telephone Interviewing (CATI) between 12th February and 2nd May 2025.

The interviewing team asked to speak to the person with responsibility/oversight for technology within the organisation. Before progressing with the survey questions, a screening question was included to confirm they have a good knowledge of the technology their business uses, and any challenges they may have faced in adopting it.

Sectors of interest and interview targets

This research sought to interview a total of 3,500 UK private sector businesses, with at least five employees, among the following grouped sectors:

- Agriculture /Mining /Manufacturing/Energy (ABCDE)
- Construction (F)
- Retail/Distribution (G)
- Transport and Storage (H)
- Hotel/Catering (I)
- Information and Communication (J)
- Finance and Real Estate (KL)
- Business Services/Administration (MN)
- Arts/Other (RS)

By sector, the only exclusions were those in divisions O-Q and T-U (Public Administration and Defence, Education, Human Health and Social Work Activities, Activities of Households as Employers, and Activities of Extraterritorial Organizations and Bodies). However, there were a small number of businesses that disagreed with the sector description on the sample and provided an alternative during the survey. When coded later, they fell into a sector outside of those targeted for this research, but were still included in the dataset.

The sectors information and communication, finance, business services and administration were oversampled as DSIT deemed businesses in these sectors more likely to be using AI and were particular sectors of interest.

The interview targets can be found in Table 6 in Appendix B of this report.

Sample and achieved interviews

The sample for the survey was sourced from Market Location, a commercial database of UK businesses.

A total of 3,500 interviews were achieved. The breakdown by size and sector can be found in Table 7 in Appendix B of this report.

Call outcomes and survey response rates can be found in Table 8 in Appendix B of this report.

Weighting

The survey data was weighted to ensure it was representative by business size and sector. The regional split was assessed and was in line with the population and therefore a regional weight was not needed. Further information can be found in Appendix B of this report.

Qualitative interviews

A total of 100 qualitative interviews were conducted with businesses who had taken part in the survey and agreed to be contacted to take part in a follow-up interview. The interviews were conducted over the phone or Microsoft Teams, and explored businesses' thoughts on, and use of, AI in more depth. Some questions involved referring to answers provided during the survey, to understand their answers more fully. Interviews lasted up to an hour and took place between March and May 2025.

Interview targets were set with the aim of achieving a good spread by business size and sector. Targets were also set to include a mix of businesses currently using AI, as well as those who aren't. Among those using AI, a minimum target was set for those using natural language processing or computer vision, machine learning, and agentic AI.

The completed interviews by size and sector are shown below in Table 10 in Appendix B of this report.

AI adoption

This chapter explores how businesses are engaging with AI, from awareness through to practical deployment. It looks at the current use of AI, decision making surrounding AI deployment, and the types of AI technologies used. It covers the percentage of staff currently using AI, the percentage expected to use it in the near future, before exploring the areas within businesses using AI, the frequency of AI usage and the level of human oversight. The chapter concludes by examining the main drivers behind these plans, anticipated changes in AI-related expenditure, intended areas of investment, and reported levels of organisational readiness to implement or scale AI.

- The chapter shows adoption is still modest and uneven, with a focus on readily available, typically language-based tools. Interest is widening, even though many organisations set limited budgets and progress varies by business sector and size.
- Whilst most businesses reported that less than half of their staff were using AI, eight in ten businesses using AI reported using AI at least weekly. Marketing, administration and IT were the business areas most likely to be using or planning to use AI. Most businesses reported significant human oversight when using AI.
- Survey findings indicated that organisations in the UK that are already using AI, or planning to do so, are actively incorporating it into their future strategies. Their responses point to a combination of short-term implementation plans and longer-term intentions to increase investment and expand usage.

Understanding of Artificial Intelligence

When asked during the qualitative interviews about AI technologies, most organisations understood AI to be a tool that can improve efficiency and automate routine tasks within their business. Many saw its potential to streamline operations, reduce errors, and support data-driven decision-making.

For the most part, organisations were positive about the applications of AI, particularly when it came to time-saving capabilities and support in reducing repetitive work. Some emphasised its value in being able to handle large volumes of internal data and provide actionable insights, especially in data-intensive sectors like retail and manufacturing.

“It's a potential to get things done faster, smarter, you know, just harness technology to cut through some of the unnecessary work that we do.” (Mid-sized business, construction, South East)

Alongside the optimism many businesses expressed about AI, there was also a degree of caution, particularly around data privacy and the reliability of AI-generated content. Some organisations felt that AI wasn't currently relevant to their sector and struggled to envision how it could be meaningfully applied in their day-to-day operations.

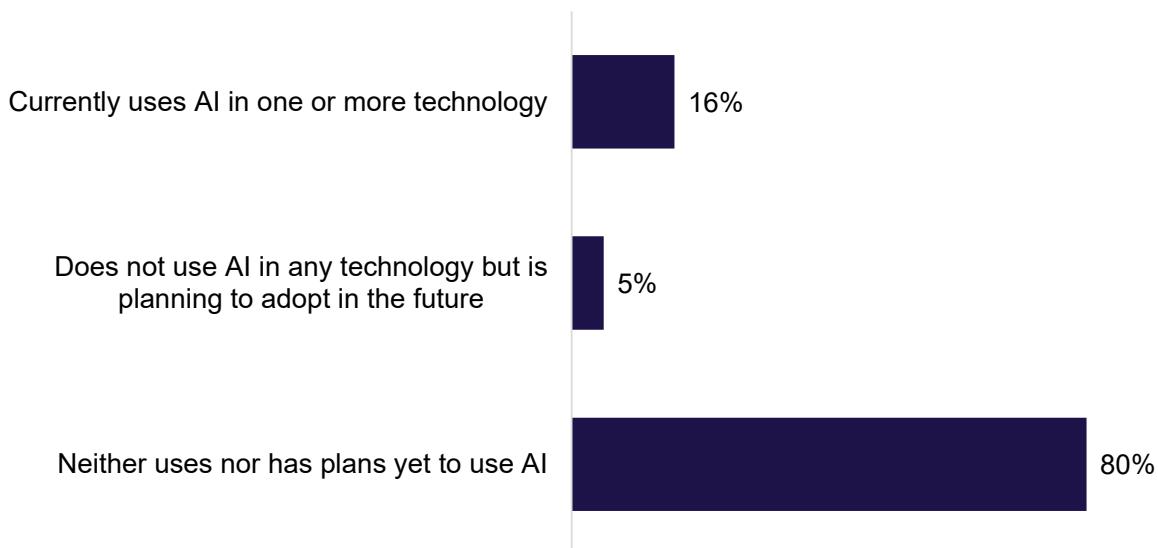
In construction and agriculture, for example, several businesses expressed that there was a reluctance when it came to change and integrating new technologies. However, others anticipated that AI would need to be carefully adapted to address sector-specific challenges

such as safety risks. In contrast, sectors like retail and logistics were already actively integrating AI to improve customer insights and streamline functions such as inventory management and supply chains.

Use of AI

The vast majority of businesses (80%) neither use nor have plans yet to use AI, as shown in Figure 1. Around one in six businesses (16%) are currently using at least one AI technology and 5% have plans to adopt AI in the future. Over half of businesses (51%) do not see AI as relevant to their organisation.

Figure 1: AI adoption status



Source: Derived: AI usage status. Base: All Businesses (3,500)

AI adoption varies by size and sector. Large (36%) and mid-sized (23%) businesses are more likely to be currently using AI, whereas micro businesses are less likely (14%), compared to 16% across all businesses.

Across sectors, those in the construction (88%), retail / distribution (86%), transport and storage (90%) and hotel / catering (88%) sectors are more likely to neither use nor have plans yet to use AI, compared to 80% across all businesses. These sectors are also more likely to perceive AI as not relevant to their organisation.

In contrast, information and communication (43%), finance and real estate (21%) and business services / administration (23%) sectors are more likely to be currently using AI, compared to 16% across all businesses.

There is some regional variation, with businesses in London more likely to be currently using AI (20% vs. 16% overall). In contrast, businesses in Scotland are more likely to neither use nor have plans to use AI (84% vs. 80% overall).

In the qualitative interviews, many of those who had adopted AI cited a need to stay competitive as the primary reason for adopting it. There was a perception among AI users that the majority of businesses were using AI and they would be 'falling behind' if they did not also adopt it.

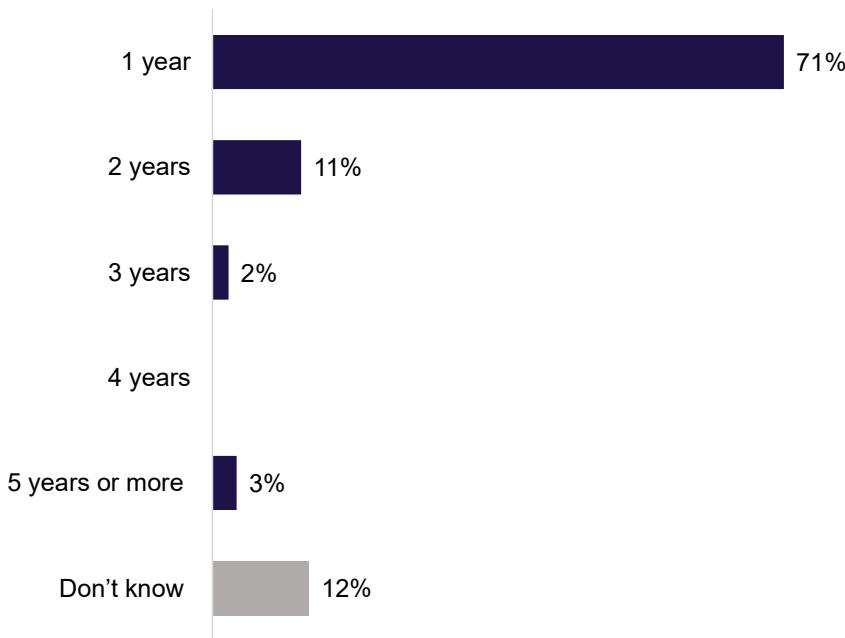
“AI is something you have to use to stay competitive.” (Small business, business services/administration, East Midlands)

“Imperative to survival.” (Large business, Information and Communication, East Midlands)

“Everyone seems to be using it and everyone is talking about it.” (Micro business, transport and storage, East of England)

Most businesses (71%) that had adopted AI tools in their organisations had been considering AI for around a year before deploying it with their organisation; as shown in Figure 2.

Figure 2: Length of time considering AI before deploying



Source: B2: How long had you been considering using AI before you decided to deploy it in your organisation? Please estimate to the nearest year. Base: Businesses that have adopted AI tools in their organisations (645)

Decision-making surrounding AI deployment

The qualitative interviews explored why businesses who neither used nor had plans to use AI had no such plans. Many saw AI as a tool they could use in the future but the technology in its current form was too novel and not yet applicable to their business. Some were also apprehensive of new technology, both AI and technology more broadly, and wanted AI to become more established before adopting.

“I’m looking at AI to log epidemiological and statistical data, rather than me to (do it). There are certain things that could be sped up with AI, but it’s figuring out how it’s done.” (Medium business, Construction, Neither uses nor has plans yet to use AI, London)

“I think we would rather it would be an established technology rather than [us] trailblazing.” (Small business, construction, Neither uses nor has plans yet to use AI, North West)

Some, particularly those in the creative industries or with a large customer service function, saw less value in AI, fearing that it removed uniqueness from their product or touch points with customers that were each seen as a vital part of their product offering.

"I think the loss of personal service. I think that it is very important that there is a social aspect to what we do, which I think is often undervalued." (Small business, retail/distribution, Neither uses nor has plans yet to use AI, East of England)

Among businesses currently using or planning to adopt AI, decisions around deployment of AI ranged from informal trials, often with a basic 'trial and error' approach commonly seen in micro and small businesses, to formal return on investment analysis commonly seen in mid-sized and large businesses:

"It [deployment of AI is] completely ad-hoc and arbitrary, and the reason for that is that we are a small company." (Micro business, information and communication, Currently uses AI, London)

"Usually [we'd] try and set up some kind of quick, easy, cheap test. So rather than delving into it and throwing a lot of money at it." (Small business, retail/distribution, Does not use AI but is planning to adopt in the future, South West)

"My current owner would require an ROI. So if I say I want to buy something that costs £50,000, but it'll save them £100,000 in the next two years, it's more likely that would get it signed off and installed." (Medium business, hotel/catering, Does not use AI but is planning to adopt in the future, Scotland)

"With AI, it's selling it to the business ...providing solutions that will benefit the business ...not just a toy." (Large business, agriculture /mining /manufacturing/energy, Currently uses AI, Scotland)

In contrast, amongst those who have not adopted AI and have no plans to, if hypothetically they were to adopt AI, would likely approach it as they do other technologies with simple chain of command or seek external help.

"I would have to propose what systems would work. He (MD) would call it financially, but I'd be the one implementing it." (Medium business, construction, Neither uses nor has plans yet to use AI, London)

AI adoption as inevitable

The qualitative interviews explored whether those neither using AI nor planning to saw AI adoption as inevitable in their industry, or whether it is still uncertain. The majority perceived AI adoption as inevitable.

"Pretty much inevitable." (Large business, information and communication, Neither uses nor has plans yet to use AI, North West)

"I would certainly think it's [AI] going to become more prevalent. I would be surprised if it's not actively being used within the business by then [2030], or being looked at." (Large business, transport and storage, Neither uses nor has plans yet to use AI, East Midlands)

AI Adoption Research

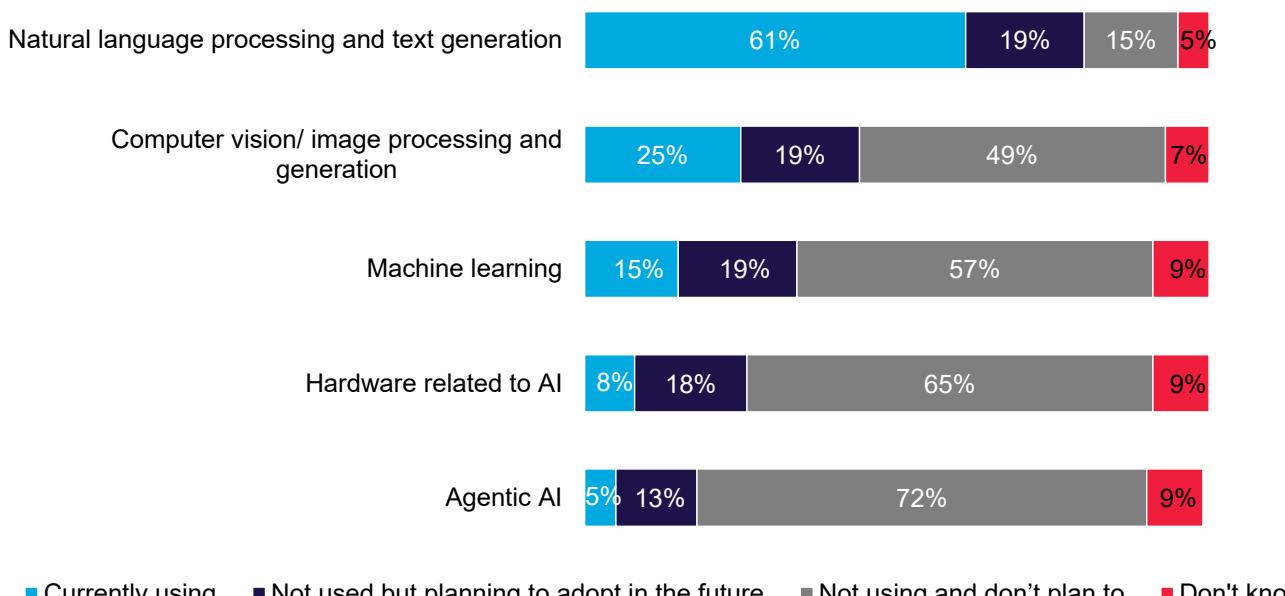
Some cited a need for further enhancements to the technologies before they would adopt it, and perceive others would adopt it, but they saw this enhancement coming and therefore saw AI adoption as inevitable. For example, one business in the transport and storage sector said that currently they are only aware of driverless cars, but they expect there to be driverless lorries in the future which would be of use to them.

Very few thought that AI would have no role in their business now or in the future. These businesses reported an incompatibility of the technology to their business model, typically those with large customer facing or manual based work functions.

AI technologies

Amongst businesses that either use or plan to use AI, the majority (61%) were using natural language processing and text generation, with a further fifth (19%) planning to use this technology; as shown in Figure 3.

Figure 3: Plans for using each type of AI technology



Source: B3. For the following Artificial Intelligence technologies, please could you tell me whether your organisation is currently using it (including piloting), not currently but have plans to adopt in the future, or has no plans to use it? Base: Businesses that use AI or plan to (986)

Micro businesses were more likely to report using natural language processing and text generation (67%) or computer vision/ image processing and generation (29%) compared to businesses overall (61% and 25% respectively). Large businesses however were more likely to report using machine learning (24%) compared to 15% across businesses overall.

There were also a few differences by sector. Those in the information and communication sector and business services/administration were more likely to report using machine learning (21% and 19% respectively, compared to 15% across businesses overall). Businesses in information and communication were also more likely to report using natural language processing and text generation (69% compared to 61% among businesses overall). Agentic AI was more likely to be used by those in the agriculture, mining, manufacturing and energy

sectors (12%) and those in information and communication (10%), compared to 5% among businesses overall.

It is worth commenting that, while there was a high level of awareness of AI among businesses in the qualitative interviews, understanding of specific AI technologies varied widely. Participants were asked directly about their familiarity with five categories of AI technologies, and responses revealed that even where organisations were already using AI solutions, they were often unclear about the specific technologies underpinning them. This highlighted a common gap between practical use and technical understanding, with familiarity largely shaped by direct application and industry relevance.

Awareness of machine learning was relatively high, with participants recognising its role in automating tasks and improving processes, particularly in areas like forecasting and quality control. Natural language processing (NLP), especially in the form of tools like ChatGPT and CoPilot, was one of the most commonly recognised and applied technologies, used for tasks such as email writing, marketing content, and translation. Computer vision was somewhat understood, particularly in relation to quality assurance, security, and visual content creation, though concerns were occasionally raised about its reliability. In contrast, awareness of AI hardware was limited, with most businesses associating it only with general devices rather than specific components.

Agentic AI was the least understood; few participants were familiar with the term, and even among those who had heard of it, its relevance to their work remained unclear.

Amongst the minority who were aware, most were unable to define how the technology worked but knew of its potential use cases. Awareness was mostly peripheral, gained from occasional news articles and other sources that covered the term.

“They’re saying it’s going to be a game changer because it’ll be making changes based on the data, without that human interaction, and almost in real time.”

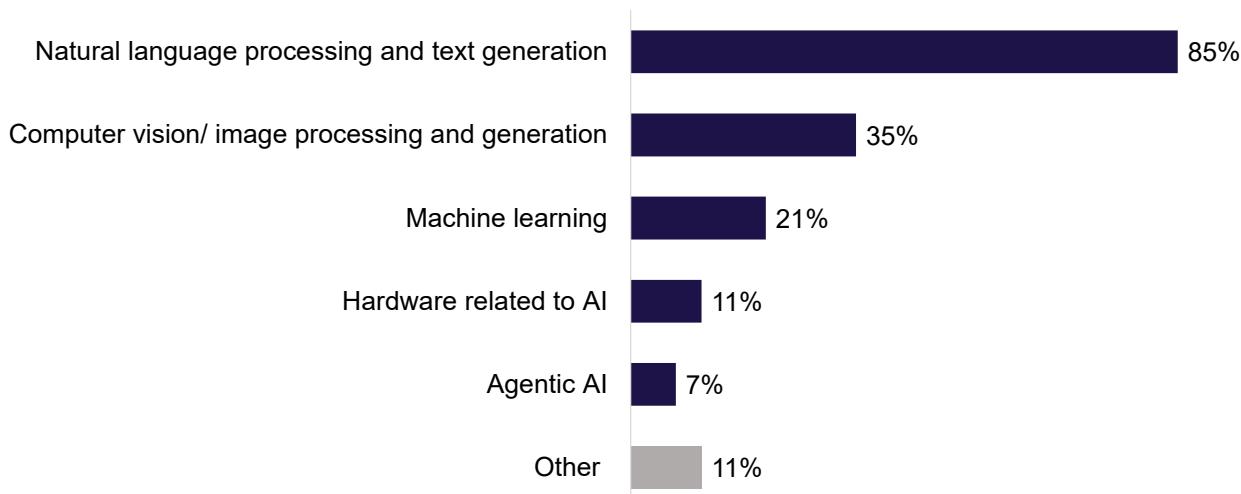
(Small business, retail/distribution, Does not use AI but is planning to in the future, South West)

Very few businesses could define how agentic AI worked and what specifically the technology involved.

Types of AI technologies currently being used

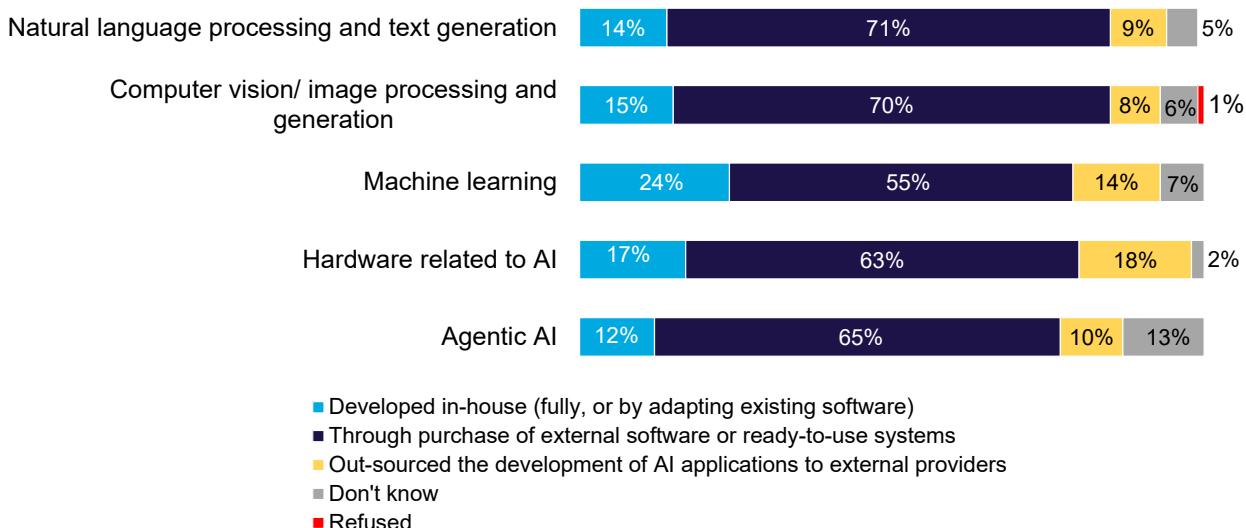
Among those currently using AI, the vast majority were using natural language processing and text generation (85%), likely owing to the availability and accessibility of off the shelf generative tools. In contrast, agentic AI was the least adopted technology (7%), likely due to its relative newness in comparison to the other technologies.

Half of businesses currently using AI (50%) were utilising more than one type of technology. Around a third (32%) were using two technologies, 12% were using three, and 6% were using four or five. The mean average number of technologies being used was 1.7.

Figure 4: AI technologies currently used among adopters

Source: Derived: AI technologies currently being used. Base: Businesses currently using AI (700)

For all AI technologies explored in the survey, most businesses deployed the AI through the purchase of ready-to-use external solutions rather than developing them in house or outsourcing development. In-house development was most common for machine learning adopters at 24%. Only a small minority fully outsourced development across each technology, peaking at 18% for hardware related to AI.

Figure 5: How businesses adopted each AI technology among current users

Source: B9. How did your organisation adopt each of the following technologies? Base: If currently uses AI: natural language processing (598), computer vision/ image processing (232), machine learning (169), hardware related to AI (86), agentic AI (59)

Findings from the qualitative interviews support this, with many citing a lack of knowledge or technical expertise as the reason for purchasing ready-to-use systems.

"We're just not technically smart enough to try and create our own. We don't have that experience. We hope that the AI journey really grows and when there are

any new off the shelf items that we can review and look at then we'll consider it."
 (Micro business, retail / distribution, Currently uses AI, West Midlands)

"There was no appetite to build our own because we don't know [precisely] what we want from it." (Large business, agriculture /mining /manufacturing/energy, Currently uses AI, West Midlands)

Some also cited cost, with ready-to-use systems considered the cheaper option, often without a sunk cost of developing in house or external bespoke applications:

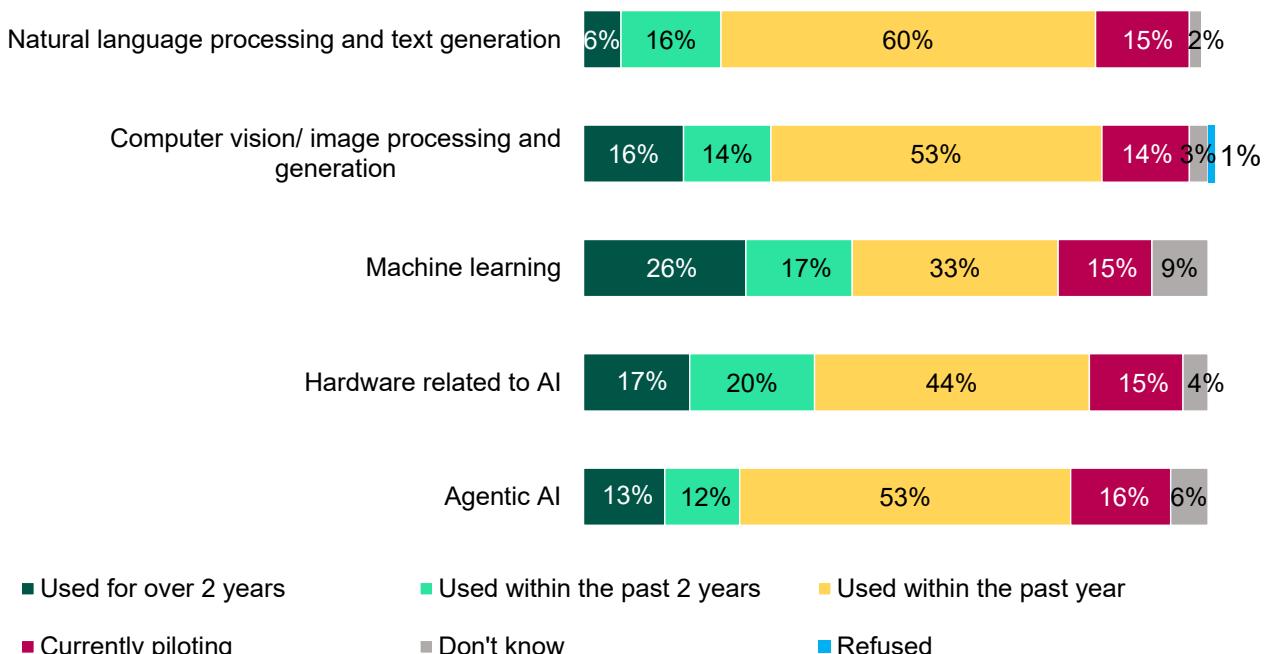
"With any software development there will be fairly significant cost, whereas if you buy something off the shelf, you can pick it up and drop it." (Small business, construction, Currently uses AI, Scotland)

Timescales for adoption

Across all five AI technologies, within businesses currently using that technology, most have moved past piloting and into live use as shown in Figure 6. Machine learning emerges as the most mature with around a quarter (26%) of business using that technology having done so for over 2 years.

Among those currently using multiple AI technologies who provided a response, over half were using tools at the same level of maturity (59%). Meanwhile, the remaining 41% were using multiple AI tools at different maturities.

Figure 6: Duration of use of AI technologies amongst current adopters

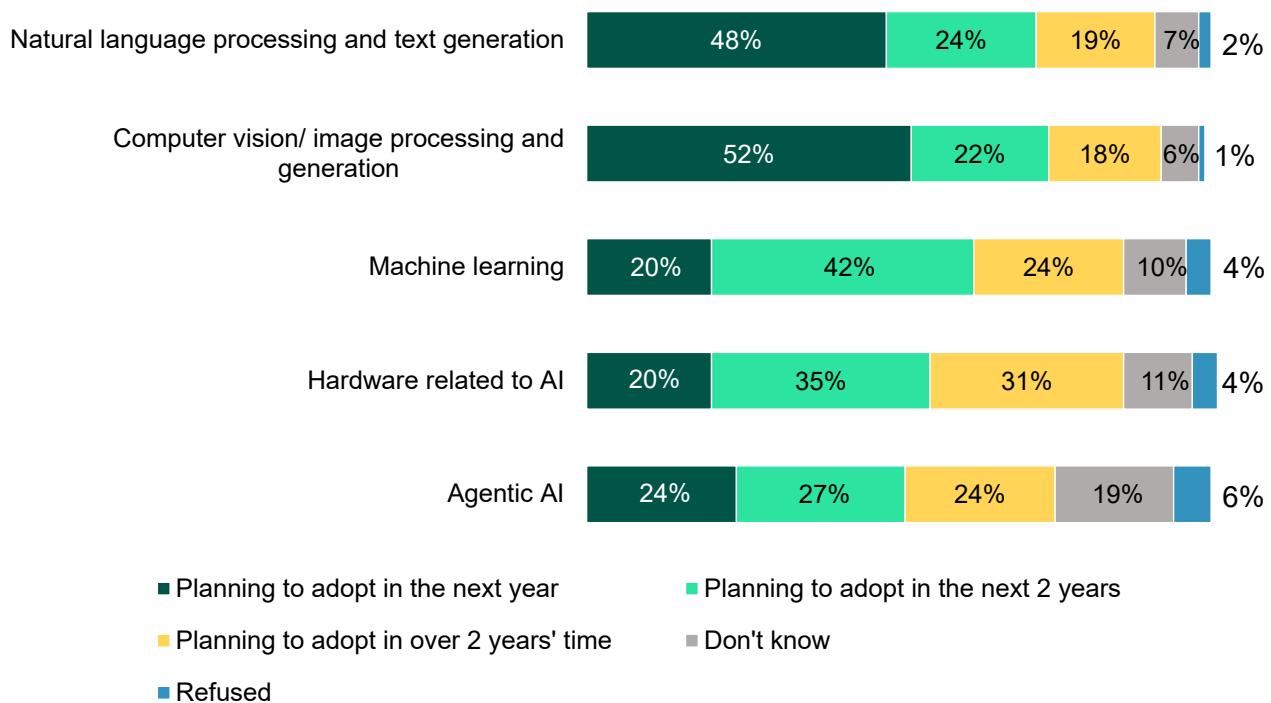


Source: B6.1-6: For each of the following technologies, please could you tell me whether your organisation is currently piloting the following technology, has used it within the last year, within the past 2 years, or has used it for over 2 years. Base: Businesses currently using that technology (natural language processing and text generation 598, computer vision/ image processing and generation 232, machine learning 169, hardware related to AI 86 and agentic AI 59)

AI Adoption Research

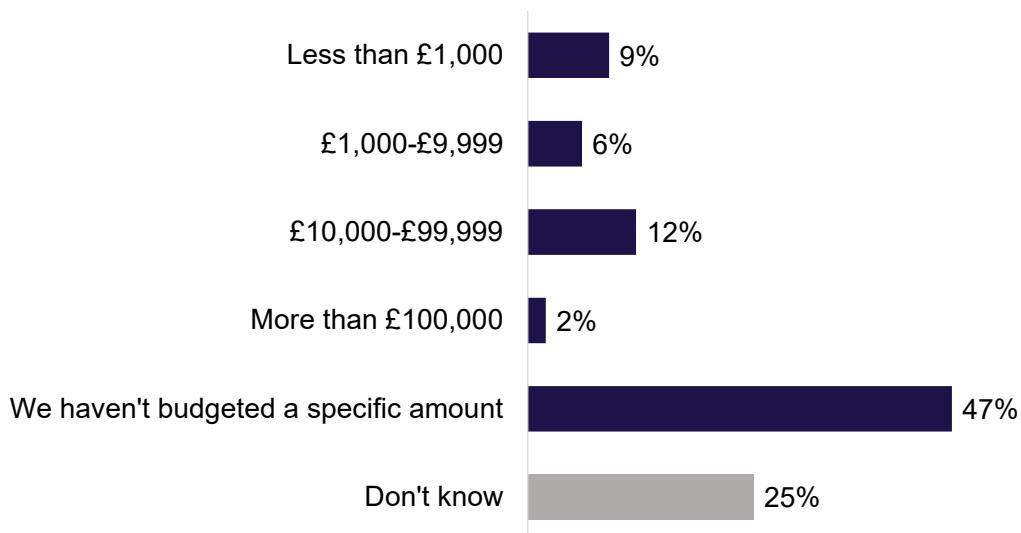
Among businesses that plan to adopt each respective technology, timelines for rollout vary. Around half of those intending to adopt natural language processing and text generation or computer vision/ image processing and generation were expecting to implement them within the next 12 months (48% and 52% respectively), potentially reflecting the higher confidence in present use cases. On the other hand, planned adopters of other technologies had longer timelines in mind, with only 24% of agentic AI adopters planning to adopt within the next 12 months, and 24% planning to adopt in over 2 years' time. This could be due to relative infancy of the technology and that it is more complex to test and implement, requiring more skills and time investment.

Figure 7: Planned timeframe for adopting AI technologies among those planning to deploy



Source: B7.1-6: For each of the following technologies, please could you tell me whether your organisation is planning to adopt the technology in the next year, the next 2 years, or whether you plan to adopt it further in the future. Base: Businesses planning to adopt that technology (natural language processing and text generation 150, computer vision/ image processing and generation 79, machine learning 95, hardware related to AI 80 and agentic AI 50)

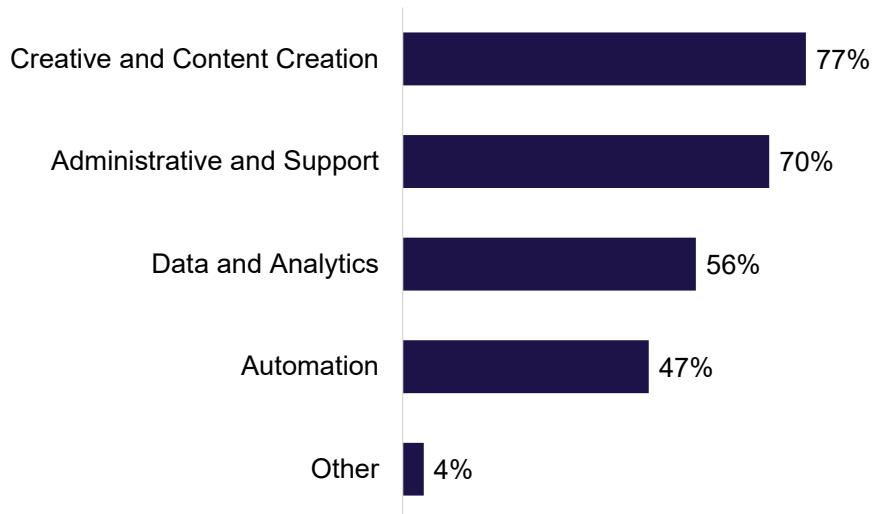
There was uncertainty around budgeting for AI, with most businesses planning to adopt AI in the next year either not having a specific budget set (47%) or not knowing how much was budgeted (25%), as shown in Figure 8.

Figure 8: Amount budgeted to adopt AI in the next year

Source: B8. How much have you budgeted to adopt this AI in the next year? Base: Businesses planning to adopt AI in the next year (104)

Use cases for AI

Businesses, both those currently using AI and those planning to use AI in the future, were asked what they use or plan to use AI for. Over three quarters (77%) cited creative and content creation, 70% administrative and support, 56% data and analytics and just under half (47%) cited automation, illustrated below in Figure 9.

Figure 9: What businesses use or plan to use AI for

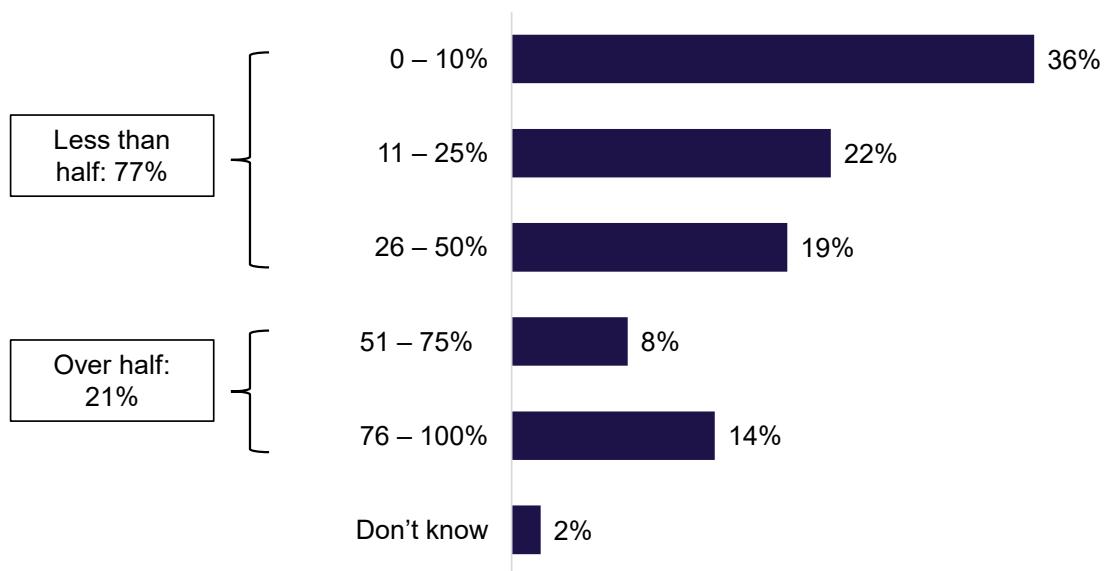
Source: B10: Which of the following do you use, or plan to use, AI for? Base: Businesses who use or plan to use AI (919)

Use cases for AI varied by size, with mid-sized and large businesses more likely to use or plan to use AI for data and analytics (68% and 86% respectively vs. 56% overall) and automation (58% and 75% respectively vs. 47% overall). Large businesses were also more likely to use AI for administration and support (79%), compared to 70% overall. In contrast, micro businesses were more likely to use AI for creative and content creation (81%) compared to 77% overall.

Some variance was also observed by sector, with those in hotel/catering more likely to use AI for creative and content creation (91%) compared to 77% overall. Those in the information and communication sector were more likely to use AI for automation (60% vs. 47% overall).

Percentage of staff using AI

Among businesses using AI, most said that less than half of their staff are currently using it (77%). Meanwhile, around one in five businesses (21%) reported that over half of their staff are currently using AI. On average, 30% of staff are currently using AI.

Figure 10: Percentage of staff currently using AI

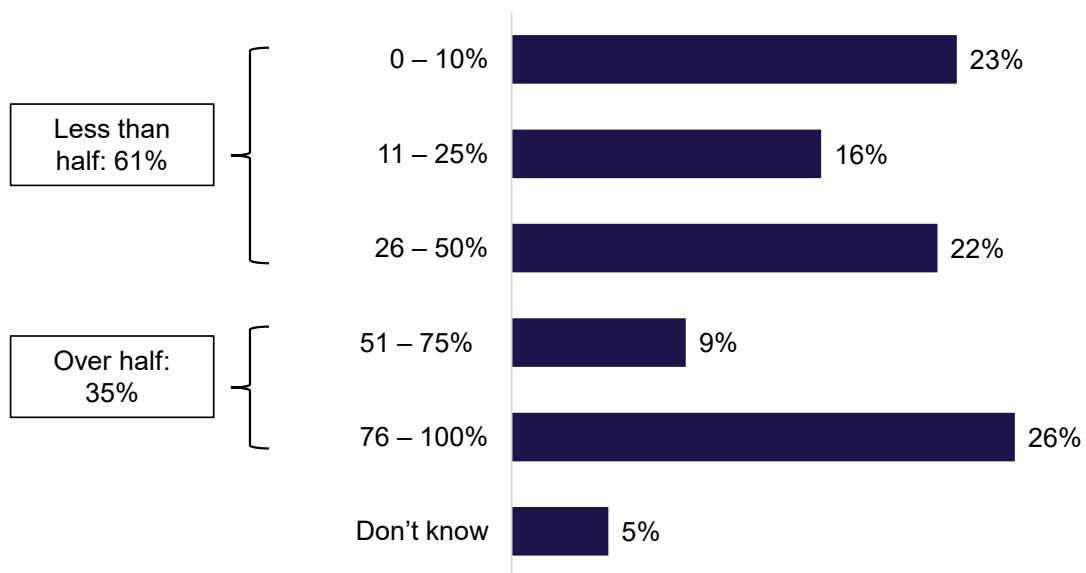
Source: E1. What percentage of staff in your organisation are currently using AI? Base: Businesses using AI (700)

Among micro businesses with 5-9 employees, on average, 38% of their staff are currently using AI. This compares to an average of 26% among small businesses, 18% among medium and 20% among large businesses.

By sector, businesses in the information and communication (39%) and business services and administration (30%) sectors were more likely to report having over half of their staff currently using AI. In contrast, businesses in the hotel and catering (93%) and construction (89%) sectors were more likely to have less than half of their staff currently using AI.

By region, businesses in the West Midlands were more likely to have less than half of their staff currently using AI (88%).

Businesses currently using or planning to use AI were asked what percentage of staff they expected to use AI in the next 1-2 years. Around a third of businesses (35%) reported that they expected over half of their staff to use AI in the next 1-2 years. In contrast, six in ten businesses (61%) reported that they expected less than half of their staff to use AI in the next 1-2 years. On average, businesses expected 43% of their staff to use AI in the next 1-2 years.

Figure 11: Percentage of staff expected to use AI in the next 1-2 years

Source: E2. What percentage of staff in your organisation are expected to use AI in the next 1-2 years? Base: Businesses using AI or that plan to use AI (919)

Micro (43%) and small (32%) businesses were more likely to expect over half of their staff to use AI in the next 1-2 years compared to medium (21%) and large (19%) businesses.

By sector, businesses in the information and communication (54%), finance and real estate (51%) and business services and administration (45%) sectors were more likely to expect over half of their staff to use AI in the next 1-2 years. In contrast, businesses in the hotel and catering (86%), retail and distribution (76%) and arts/other (74%) sectors were more likely to expect less than half of their staff to use AI in the next 1-2 years.

As shown in Figure 12, among businesses that currently use AI, half of businesses expected the same number of employees to be using AI in the next 1-2 years that are currently using it, while just under half expected more employees to be using AI in the next 1-2 years (48%). A minority expected fewer employees to be using AI (2%).

Figure 12: Percentage of staff expected to use AI in the next 1-2 years compared to the percentage currently using it

Source: E1/E2. Percentage of staff expected to use AI in the next 1-2 years compared to the percentage currently using AI. Base: Businesses that are using AI and provided a percentage (646)

Expected changes to the workforce by 2030

In the qualitative interviews, businesses were asked whether they expect their workforce to have changed by 2030. Most businesses did not anticipate dramatic changes to the overall size of their workforce over the next five years. While a few expected to grow and bring in new staff, many predicted continuity, citing the nature of their work as the key factor in this:

"There's certain roles which AI is never going to change. We have a lot of face-to-face meetings, so that side of things isn't going to change, but the back-end processing and stuff I can see being done by smaller teams." (Small business, manufacturing, West Midlands)

Across sectors such as hospitality, logistics, and site-based work, manual or face-to-face roles were widely seen as resilient to technological change, particularly AI. In these contexts, the focus was on sustaining human involvement rather than replacing it.

"I think we still need to go and do the manual work. Collect the goods... So it's still going to be roughly the same." (Micro business, transport and storage, East of England)

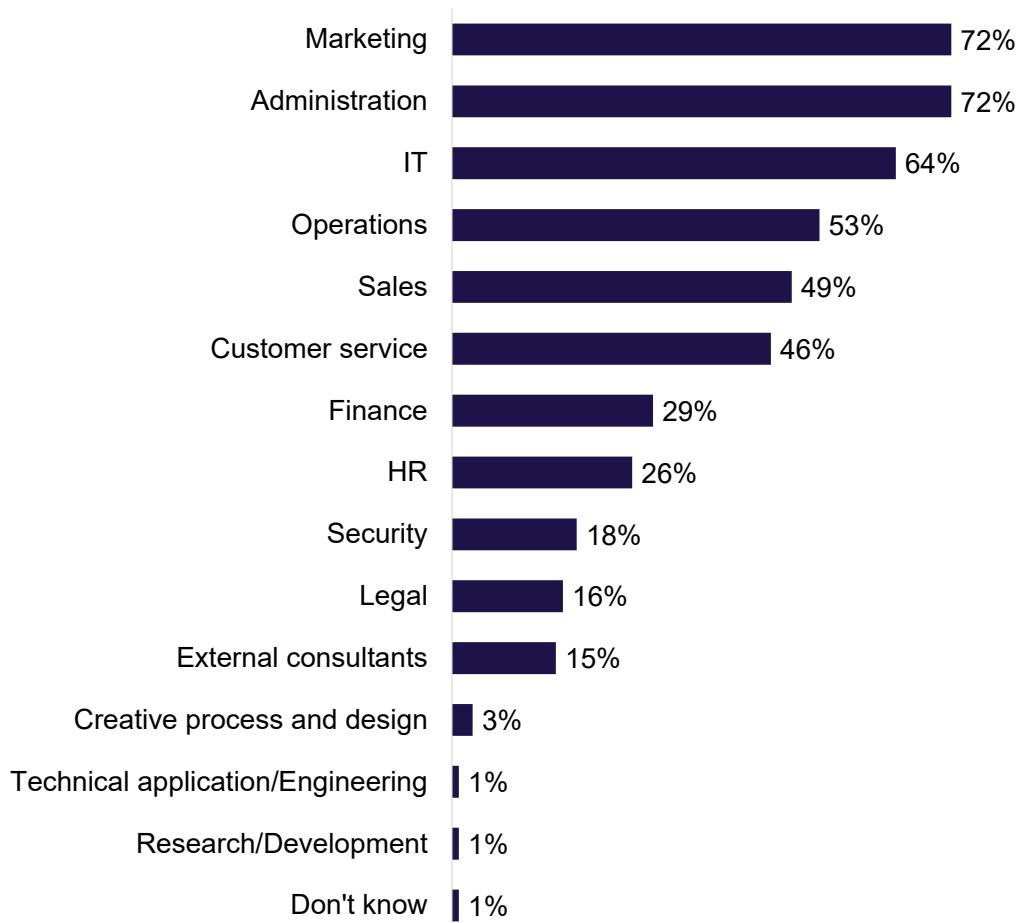
Where change was expected, it centred more on how work is done rather than who does it. Businesses, particularly those in professional services and design sectors, spoke about AI as a tool to augment staff rather than displace them. They predicted a shift that supported growth and improved efficiency with AI technologies, particularly in back-office and processing tasks.

"We don't tend to use it as a tool to reduce the amount of people we need... we tend to use it as a tool to maximise what individuals are doing." (Mid-sized business, information and communication, London)

These reflections suggest a redefinition of roles rather than reduction, with AI increasingly seen as a support layer that enables human staff to focus on more interactive, creative, or strategic aspects of their work.

Business areas using AI

Businesses that currently use AI or plan to use AI were asked which business areas in their organisation are using AI or plan to at some point in the future. The most common areas are in marketing (72%), administration (72%) and IT (64%). Areas that were the least likely to be using or planning to use AI were research and development (1%), technical application/engineering (1%) and creative process and design (3%).

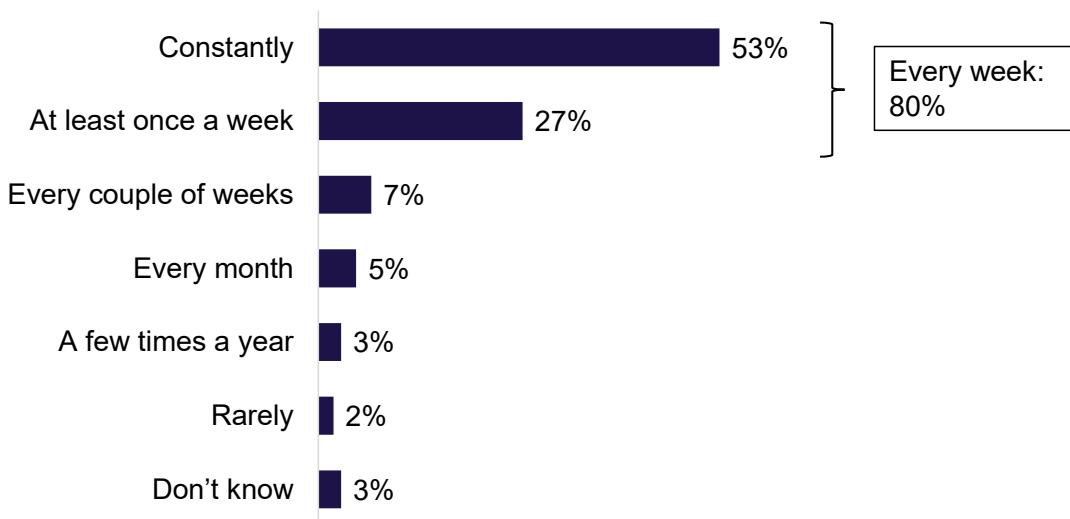
Figure 13: Business areas using AI

Source: E3. Which of the following business areas, if any, at your organisation are using AI today, or plan to at some point in the future? Base: Businesses using AI or that plan to use AI (919)

Large businesses were more likely to use or plan to use AI in many of the business areas. These included: IT (90%), operations (74%), customer service (57%), finance (48%), HR (53%), security (31%), legal (28%).

Frequency of use

Businesses that currently use AI were asked how often their organisation uses it. Over half reported that they use AI constantly (53%). Just over a quarter (27%) said they use AI at least once a week, meaning eight in ten businesses (80%) are using AI at least weekly. Over 90% of businesses using AI use it at least monthly with only small proportions of businesses reporting using it a few times a year (3%) or rarely (2%).

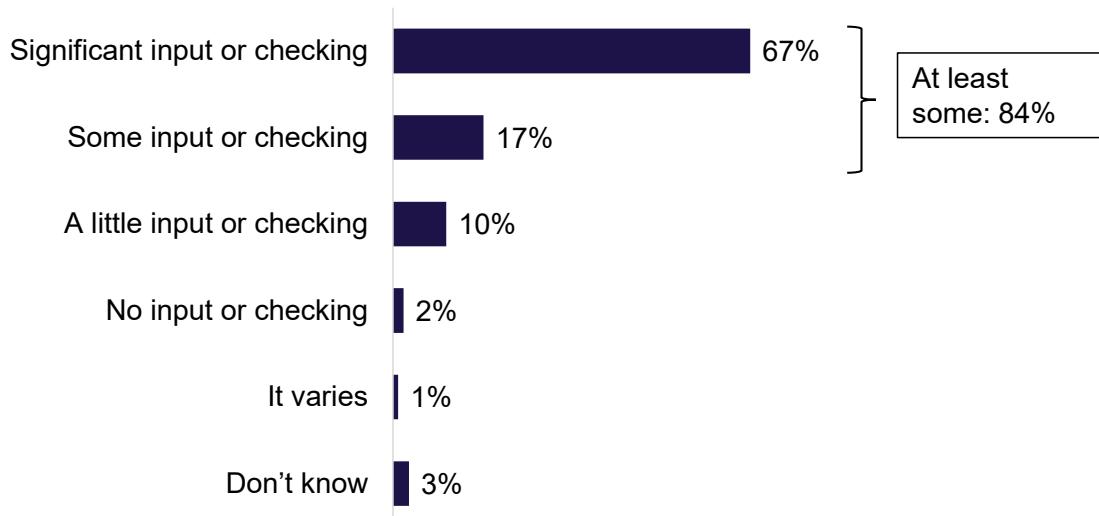
Figure 14: How often organisations use AI

Source: E4. How often does your organisation use AI? Base: Businesses that use AI (700)

Large businesses (91%) were more likely to report using AI every week compared to micro (83%), small (77%) and mid-sized (81%) businesses. Businesses in the finance and real estate (96%) and information and communication (92%) sectors were more likely to report using AI at least weekly. In contrast, businesses in the arts and other services sector (59%) were less likely to use AI at least weekly.

Human input or oversight

Businesses currently using AI were asked the extent to which there is human oversight applied to outputs or decisions produced by AI. Most businesses (84%) reported at least some input or checking, with around two thirds (67%) reporting significant input or checking. Only 2% of businesses reported no input or checking.

Figure 15: Extent of human input/oversight applied to AI outputs

Source: E5. What percentage of staff in your organisation are expected to use AI in the next 1-2 years? Base: Businesses that use AI (700)

Large (87%) and micro (87%) businesses were more likely to have at least some input or checking compared to mid-sized businesses (77%). Businesses in the business services and administration were more likely to have at least some input or checking (91%).

In the qualitative interviews, businesses were asked how they maintain appropriate human oversight while using AI systems. Most businesses expressed that having a human check AI outputs was of critical importance and most businesses said that outputs were always reviewed.

"It's an input output. We tell it to do something, it does it and then you review that data and publish it." (Small business, construction, North West)

However, these checks were often more on a person to person level and therefore checks were usually down to the individual who had been using the AI and it was their responsibility to check.

"We use it to generate blogs. So the person who generates that blog would need to have knowledge of what the blog's about, so that when they proofread what ChatGPT's come up with, you can confirm that it's relevant." (Micro business, agriculture/mining/manufacturing/energy, South West)

Only a few businesses said that they had a specific procedure for checking AI outputs, and if they did, this would usually involve a checklist of things to check. In the construction sector and amongst businesses using machinery, most AI-powered machinery had settings that meant a human would have to authorise what the machine was used for.

There were some businesses that said they did not have human oversight of AI outputs. This tended to be businesses that did not use AI very often or had only recently started adopting AI. It also tended to involve ChatGPT outputs which would not be checked as these businesses said they did not feel they needed to check it.

"AI systems are not monitored. Co-Pilot and ChatGPT are only used in a very basic manner once a month." (Small business, construction, East of England)

“We are mainly using ChatGPT to do time saving tasks. There is no oversight required.” (Large business, agriculture/mining/manufacturing/energy, South East)

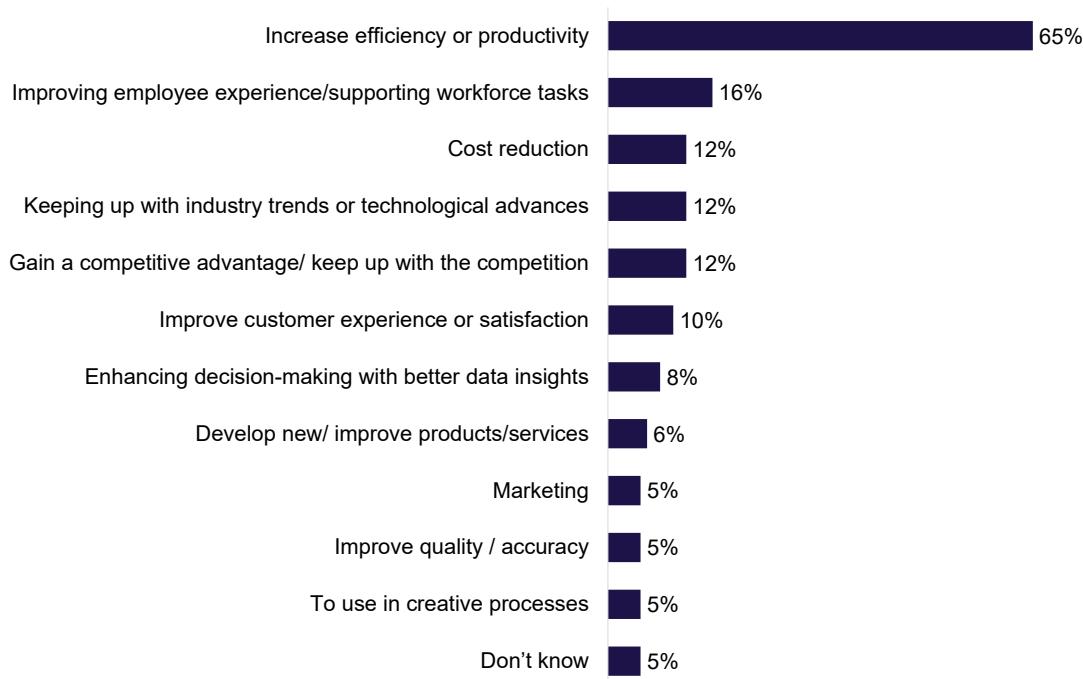
Future plans for AI

Main reasons for adopting or scaling AI

The most commonly cited reason for adopting or expanding AI use among current and prospective AI users was to increase efficiency or productivity, reported by 65% of this group. Other motivations, while less prevalent, included improving employee experience or supporting workforce tasks (16%), and reducing costs (12%).

As shown in Figure 16, businesses were also influenced by developments within their industry and competitive landscape, with 12% citing keeping up with industry trends or technological advances and a further 12% citing the need to maintain competitiveness as key motivators.

Figure 16: Reasons for organisation’s interest in adopting or scaling AI



Source: F1: What are the main reasons for your organisation’s interest in adopting or scaling AI, whether now or in the future? Base: Businesses who use or plan to use AI or are actively considering using AI (942). Codes <5% have not been charted

There was some variation by business size and sector when it came to reasons for AI adoption. For example, 13% of large businesses reported a focus on developing new or improved products, compared to 6% across all businesses. In terms of sectoral differences, organisations in construction (23%) and information and communications (19%) were more likely than average to be motivated by the need to keep up with technological advances.

Expenditure on AI related activity

When asked how their AI-related budget was expected to change, 65% of organisations anticipated an increase over time. A further 25% expected their budget to remain the same, while only 1% foresaw a decrease.

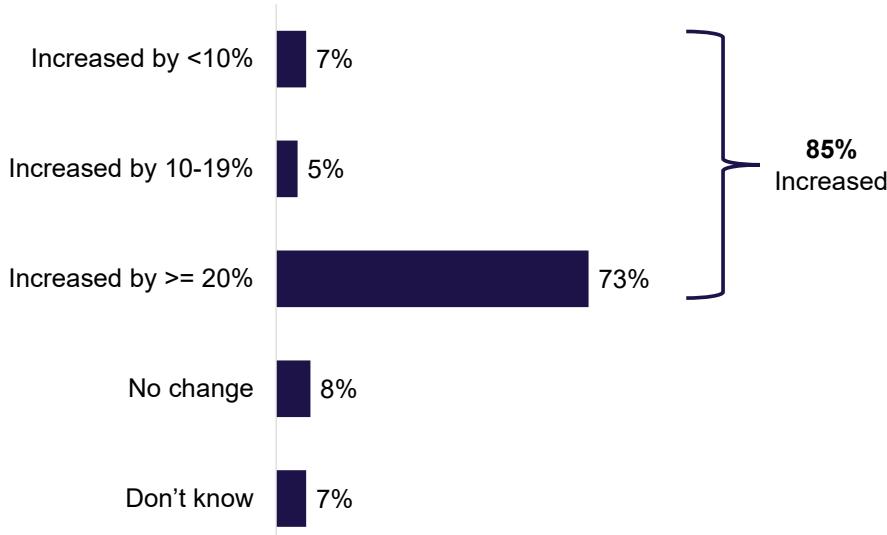
The likelihood of increased budget allocation rose with organisational size: 58% of micro businesses expected an increase, rising to 67% of small businesses, 75% of mid-sized businesses and 82% of large businesses. In contrast, those in arts and other services were more likely to predict no change, with just under half (46%) expecting their AI budget to remain broadly the same.

Despite these forward-looking intentions, reported spending in 2024 varied considerably. Just over one third (35%) of businesses that currently use or plan to use AI indicated they did not know how much their organisation had spent on AI-related activity. Among those able to provide an estimate, 11% reported spending less than £1,000, 16% reported between £1,000 and £9,999, and 7% reported more than £10,000. This translated to an average (mean) expenditure was £19,000 (rounded to the nearest thousand), and a median spend of £2,000 among those able to provide a figure. This increased to an average of £22,000 (mean) among those currently using AI.

Just under one third (31%) reported no AI-related spending in 2024 (£0). Even among those currently using AI, 27% indicated that they had spent nothing. This could reflect AI technology built into existing solutions used by the business, or the use of free or low-cost AI tools (such as ChatGPT) that do not require dedicated budgets.

Looking instead at the last five years, of the organisations that were able to provide an estimate of their business expenditure on AI in 2024, the majority reported a significant increase in AI investment. As shown in Figure 17, 85% indicated that spending had grown, with 73% stating it had increased by more than 20% during that period.

Figure 17: Change in AI investment over the last five years



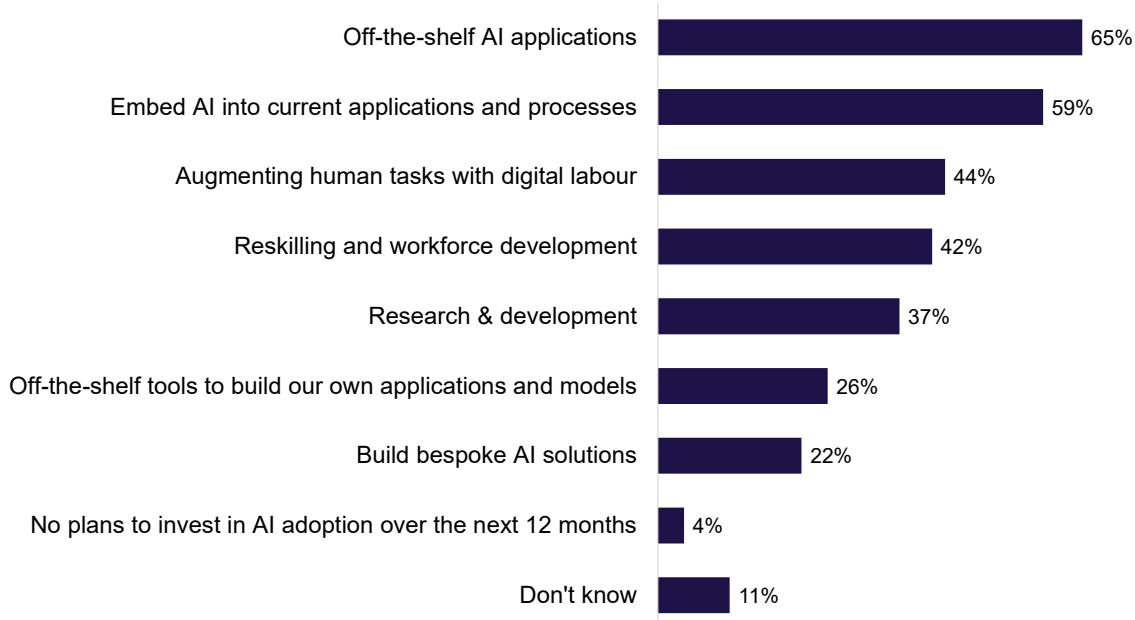
Source: F4: Thinking about your organisation's expenditure on AI related activity in 2024, by how much has this increased in the last five years in percentage terms? Base: Businesses that provided a cost (289)

Planned investment in AI

Organisations were also asked about specific areas in which they plan to invest in AI over the next 12 months. The most commonly reported plans included implementing off-the-shelf AI applications (65%) and embedding AI into existing tools or systems (59%).

Additional areas of planned investment included augmenting human tasks with digital labour (44%), reskilling or workforce development (42%) and AI-focused research and development (37%).

Figure 18: How businesses plan to invest in AI over the next 12 months



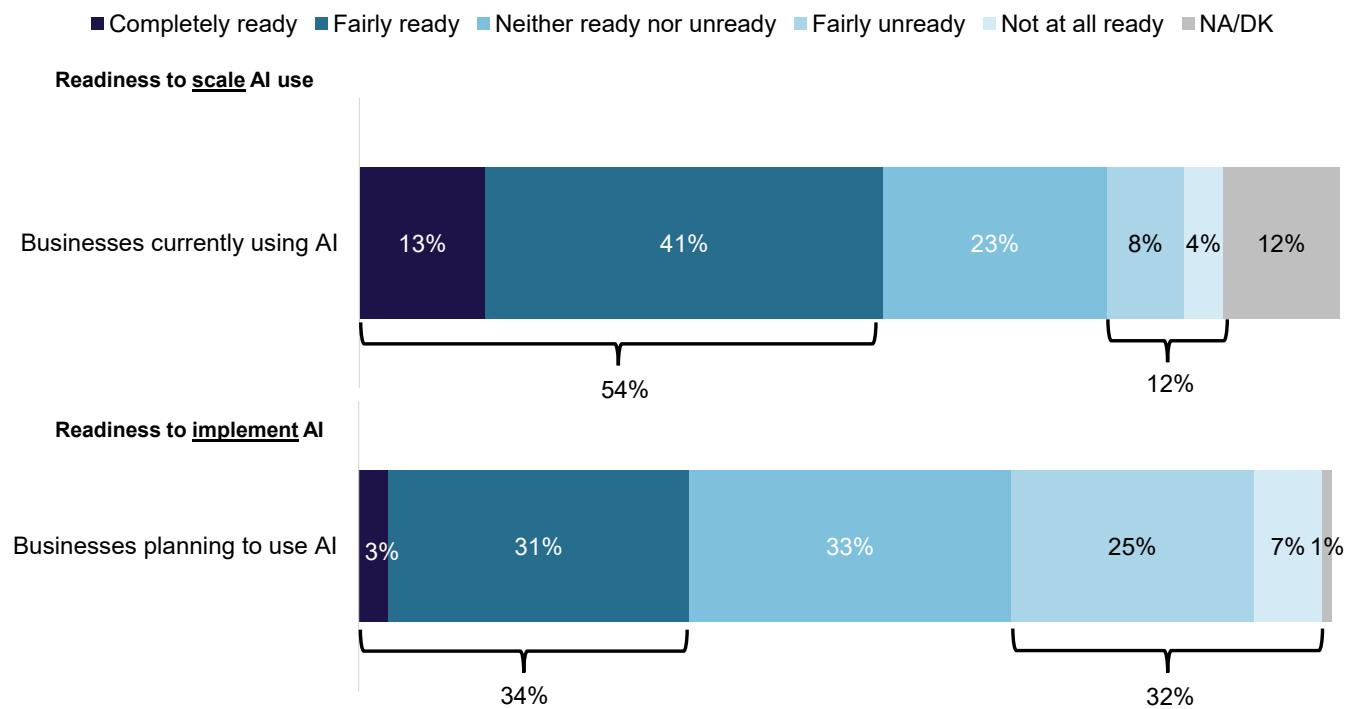
Source: F6: How does your company plan to invest in AI adoption over the next 12 months? Base: Businesses who use or plan to use AI (919)

As shown in Figure 18, more resource-intensive approaches were less common but still notable. A quarter (26%) of organisations planned to build their own AI models using off-the-shelf tools, and 22% intended to develop bespoke AI solutions. These approaches were more frequently reported among large businesses, with 46% planning to build models and 39% planning to develop bespoke systems.

Readiness to implement or increase the use of AI

Just over half of organisations already using AI (54%) feel ready to scale their use, with 13% describing themselves as completely ready and 41% as fairly ready. Just under a quarter (23%) are unsure, while 12% reported that they are not ready to increase their use.

Looking at organisations that are planning to adopt AI, as shown in Figure 19, readiness levels are slightly lower. Among this group, 34% feel ready, 33% are unsure and 32% said they are not ready.

Figure 19: Readiness to scale or implement AI

Source: F5 SCALE: How would you rate your organisation's readiness to increase the use of AI? Base: Businesses currently using AI (700). F5 IMPLEMENT: How would you rate your organisation's readiness to implement AI? Base: Those planning to adopt AI (219)

Readiness levels varied by sector among those that had already adopted AI, with the most notable difference observed in the information and communications sector, where 76% of organisations reported feeling ready to scale their AI activity. On the other hand, those in the hotel and catering sector were less likely to feel ready to scale their AI use (38%). Readiness levels did not differ significantly by business size and were broadly consistent across regions, with the exception of Wales, where only 34% of businesses reported feeling ready to scale their AI use.

Looking instead at readiness to implement AI among those not currently using AI but planning to, readiness to implement the technology also varied by sector. Those in the information and communications sector were the most likely to feel prepared, with 52% reporting readiness to adopt AI. However, there were no significant differences in readiness by business size or region.

Barriers to AI adoption

This chapter explores the extent to which organisations have faced barriers in implementing AI technologies, as well as factors that prevent or have previously prevented businesses from adopting AI. It also covers what could help to address or remove barriers.

A lack of identified use for AI and limited AI skills and expertise were the most common barriers to AI adoption. However, the barriers deemed most significant in preventing businesses from adopting AI were ethical concerns, followed by high costs and the regulation being unclear or uncertain. Unsurprisingly, businesses currently using some AI tools or planning to adopt AI were more likely to have taken some form of action to overcome the barriers they were facing. These included initiating training programs to enhance staff capabilities, the exploration of government grants and funding opportunities to support AI initiatives, and maintaining rigorous human oversight in AI processes to ensure accuracy and reliability.

Attitudes towards adopting new technologies

To contextualise some of the barriers faced by businesses in adopting AI, businesses were asked in the qualitative interviews about their attitudes to adopting new technologies more generally.

Businesses mostly showed an open and positive attitude towards adopting new technologies, though they often demonstrated a cautious approach. Many were willing to explore new tools and systems, but there were several key factors that influenced their decision.

There was a notable distinction between organisations currently using AI and those neither using nor with plans to. While not all of those currently using AI described themselves as proactive, some identified instead as "fast followers", this group overall displayed significantly greater proactivity and optimism about the adoption of new technology. They were more likely to actively seek out new tools, integrate them strategically across operations, and be willing to invest in the infrastructure required. In many cases, this approach was underpinned by a business culture that embraces change.

In contrast, businesses not yet using AI tended to be more reluctant and cautious. Adoption of new technology was frequently reactive, driven by external pressures such as client demands or industry trends, rather than internal strategic vision. These organisations often expressed concerns about integrating new technologies into existing processes and were more likely to face cultural or organisational resistance to change.

Cost remained a central concern across both groups. Decision makers were primarily motivated by the potential for long-term savings or efficiency gains, with return on investment (ROI) a central concern. Particularly in cases where respondents were not owners or directors, they noted that new solutions needed to demonstrate clear, tangible value to gain support from senior stakeholders and secure internal approval.

"We're fairly lucky that we've got a reasonable bank balance that we can put projects ahead if we want to. We've looked at certain technologies, you know, barcoding stores and things like that. But actually, the cost was quite high, not because we didn't have the money, but because we didn't feel that the investment was worth it." (Micro business, agriculture/mining/manufacturing/energy, South West)

Alongside cost, client expectations and wider industry trends were also influential. In client-facing sectors, organisations were more likely to adopt new technologies in response to customer demands. Many of these businesses were willing to innovate but typically waited for technologies to be tried and tested elsewhere.

"I wouldn't say we're ahead of the curve - we're just going with the flow. It's primarily client led. They're the ones with the bigger budget who are pushing it." (Mid-sized business, construction, London)

Despite an openness to new technology among businesses more generally, resistance to change remained a challenge in some organisations. In the construction, hotel and catering, and retail and distribution sectors particularly, there were examples of businesses that felt culturally less inclined to proactively adopt new and innovative technologies, with some attributing this reluctance in part to the age profile of their workforce. While the extent of resistance varied across industries, it was often identified as a barrier by those that were slower to adopt new technologies. Many of the same attitudes and concerns were reflected when businesses were asked specifically about AI, as explored in the following section.

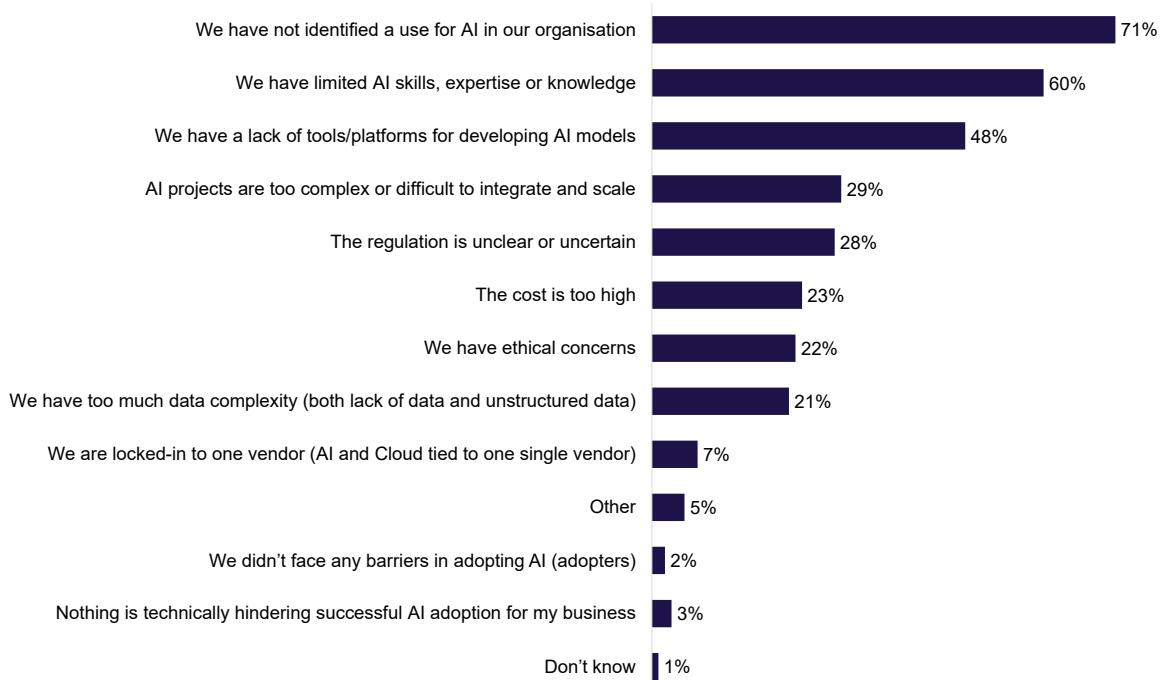
Factors preventing AI adoption

In the survey, all businesses were asked which factors, if any, prevent or have previously prevented them from adopting AI in their organisation. As shown in Figure 20, the top barriers were a lack of identified need for AI (71%) and limited AI skills, expertise and knowledge (60%).

Among those currently using AI, the most common factors that prevented them from adopting AI in their organisation in the past were having limited AI skills (60%), followed by a lack of tools/platforms for developing AI models (40%).

Among those planning to adopt AI in the future, the most common factors preventing them from doing so were also limited AI skills (68%) and a lack of tools/platforms for developing AI models (54%). The regulation surrounding AI being unclear or uncertain was also a prominent barrier to adoption (43%).

Among businesses with no plans to adopt AI, the biggest preventing factor was a lack of identified need for AI (81%). The next most common barriers were limited AI skills (59%) and a lack of tools/platforms for developing AI models (49%).

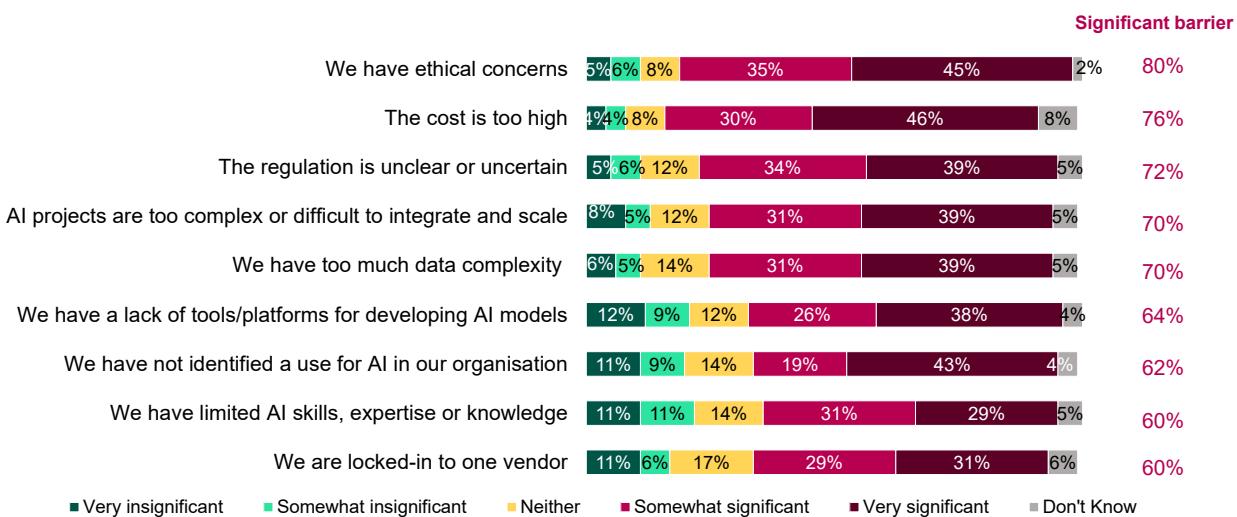
Figure 20: Factors that prevent or have previously prevented AI adoption

Source: C2. Which factors, if any, prevented you from adopting AI in your organisation in the past? Base: Businesses currently using AI (700). Which factors, if any, prevent you from adopting AI in your organisation? Base: Businesses not currently using AI (2,800); plans to adopt in the future (219); neither uses nor plans to use AI (2,581)

For each barrier reported, businesses were asked to rate its significance in preventing them from adopting AI in their organisation. As shown in Figure 21, the barrier seen as most significant was ethical concerns, with eight in ten citing this (80%).

The next most significant barriers were high costs (76%) and the regulation being unclear or uncertain (72%). The cost being too high was more likely to be cited as a significant barrier by large organisations (90%) and less likely to be reported by micro businesses (72%). Meanwhile, regulation being unclear was more likely to be reported as a significant barrier preventing the adoption of AI by those in finance and real estate (81%).

Having too much data complexity was more likely to be reported as a significant barrier to AI by large businesses (84%) and those in finance and real estate (81%), compared to 70% among businesses overall.

Figure 21: Significance of barriers preventing AI adoption

Source: C3. Businesses currently using AI: Please can you tell me how significant the following barriers were in preventing you from adopting AI in your organisation in the past? Businesses not currently using AI: Please can you tell me how significant the following barriers are in preventing you from adopting AI in your organisation?
Base: All those who stated barriers (sizes range from 254 to 2,238).

The qualitative interviews explored each of these barriers to AI adoption in more depth:

Have not identified a need for AI

Several organisations had not identified a compelling business case for AI. Without a defined issue to address, for some businesses AI feels like a solution in search of a problem. This was slightly more prevalent among those working in construction or the agriculture, mining, manufacturing and energy sectors.

*"It's hard to really visualise what a real application of AI in a shop would be."
(Mid-sized business, retail/distribution, South West)*

Lack of AI expertise and skills

Many organisations cited limited internal knowledge or confidence in AI as a core problem. This created a barrier even before AI adoption begins, making it hard to evaluate or pilot tools effectively. Some businesses highlighted a lack of available time to look into potential AI solutions, explaining that staff are busy with day-to-day tasks, leaving no time to research or explore AI options.

"You're talking to the person who most surely knows more about AI than anybody else in the business...we're just not aware of all the solutions that are available to us. And because we're not aware of it, we're not using it. So we're not comfortable in using it. So that's where the limited expertise comes from." (Large business, retail/distribution, Wales)

Lack of tools and platforms

Some organisations were at the start of their AI journey and did not know what tools are available or how to implement them. One business in the agricultural sector explained that there is not much development of AI tools in their industry.

"There's not a lot of investment going into the agricultural sector to look at AI. There's not a lot of things to use within our sector, you could look at using AI in the office, ChatGPT, stuff like that we use, but apart from that, industry-specific development is pretty poor." (Small business, agriculture/mining/manufacturing/energy, East Midlands)

Cost

High perceived or actual costs was a common concern. For smaller organisations especially, AI adoption appears risky without guaranteed Return on Investment (ROI), making investment hard to justify.

"We have to look at what it would cost and what it could save ...that's the crossroads we're at, at the moment." (Mid-sized business, transport and storage, South East)

Unclear regulation

Many businesses expressed unease around data privacy, ethical use, or compliance due to unclear or absent regulations, deterring them from exploring AI further.

"I know it's been talked about in the news several times; talking about Government regulation for AI, well, currently there really isn't any." (Mid-sized business, retail/distribution, South East)

An architecture practice raised liability concerns around building safety. They questioned who would be liable if an AI tool produced something for a design and there was a mistake.

Data complexity

Fragmented, unstructured, or siloed data was a technical barrier to deploying AI effectively. Without clean, centralised data, AI models cannot perform accurately.

"We've got too many various systems that don't all link together. For it to get a true picture of the business, it will need data sets from all of them to be able to give you the bigger, larger picture of what's going on within the company." (Mid-sized business, construction, East Midlands)

Ethical concerns

Uncertainty about AI's impact on jobs and decision-making introduces hesitation. This was more prevalent in people-centric or ethically sensitive industries.

"I really don't know what it [AI] could do for us without losing one of us doing it." (Small business, construction, East of England)

"Does AI have any inherent bias in hiring for instance? There'd always be a human element in this, so you hope it'd be picked up, but there are questions to consider." (Micro business, retail/distribution, East of England)

Trust and data security concerns

Businesses without current plans to adopt AI highlighted concerns about data privacy, security, and ownership, especially regarding sensitive patient or client data. There was a fear that data

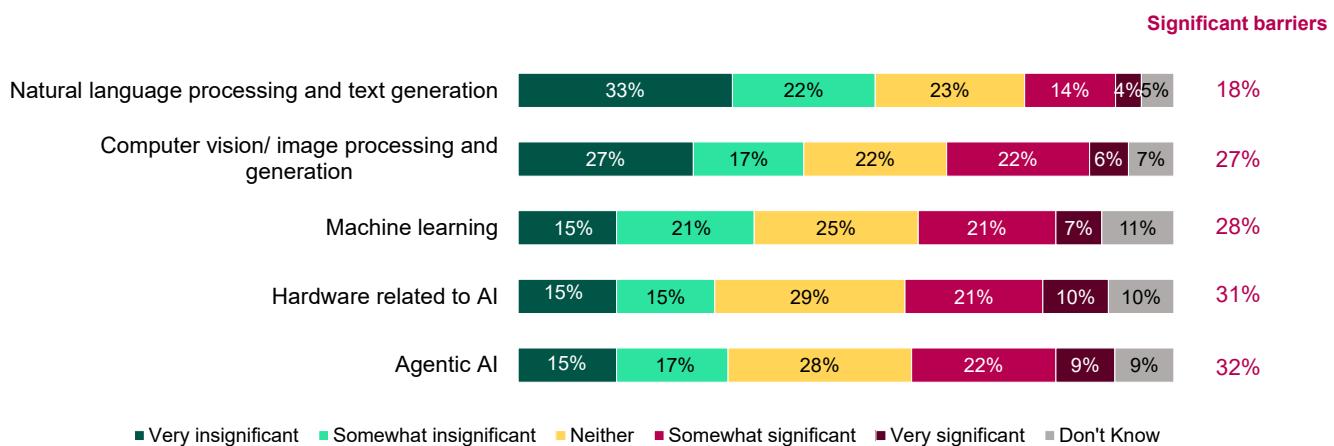
might be mishandled, accessed by unauthorised parties, or sold. Furthermore, there was a lack of confidence in AI systems being fully reliable or safe, especially in critical applications.

“The fear of it going wrong is another issue. That’s partly why I’ve come on board, to try and help educate and transition things into the industry. Technology does not always work, which can frighten people because they go: ‘well, it’s not reliable’.” (Mid-sized business, business services/administration, East Midlands)

Significance of implementation barriers

When focusing on the significance of any barriers faced in implementing the different types of AI, as shown in Figure 22, agentic AI posed the most significant barriers, while natural language processing and text generation presented the least. Around a third of businesses reported facing significant barriers implementing agentic AI (32%) and hardware related to AI (31%). Over a quarter faced barriers implementing machine learning (28%) and computer vision/image processing and generation (27%). Meanwhile, around one in six businesses (18%) said they faced significant barriers implementing natural language processing and text generation.

Figure 22: Significance of barriers faced in implementing AI technologies



Source: C1. For each of the following technologies, please can you tell me the significance of any barriers your organisation faced, or faces, in implementing them? Base: If currently uses or plans to use AI: natural language processing (774), computer vision/ image processing (429), machine learning (382), hardware related to AI (273), agentic AI (194)

Businesses in the agriculture, mining, manufacturing and energy sectors were also more likely to have faced barriers implementing machine learning (51% vs. 28% among businesses overall), as well as computer vision/image processing and generation (39% vs. 27% among businesses overall), and hardware related to AI (53% vs. 31% among businesses overall).

Large businesses were more likely to have faced barriers implementing natural language processing and text generation (27%). As noted in the previous section, large businesses citing cost and data complexity were particularly likely to view these as significant challenges (90% and 84% respectively), factors which may help explain the difficulties in scaling NLP and text generation across larger organisations, given their broader employee base and more complex data.

Factors hindering organisations from adopting AI more widely

Businesses currently using AI were asked which factors, if any, are hindering or have previously hindered their organisation in adopting AI more widely across their whole organisation. As shown in Figure 23, limited AI skills and expertise was a hinderance for over half of these businesses (54%). This was more likely among mid-sized businesses (64%).

Having a lack of tools and platforms for developing AI models was a hindering factor for over a third (37%), and a prior lack of identified use was a hindering factor for three in ten businesses (30%).

Figure 23: Factors that hinder or have previously hindered adopting AI more widely



Source: C4. Which factors, if any, are hindering or have previously hindered your organisation in adopting AI more widely across your whole organisation? Base: Businesses that use AI (700)

Large businesses were more likely than businesses overall to report the regulation being unclear or uncertain (39%), the cost being too high (43%), and data complexity (39%). Both large and mid-sized businesses were more likely report ethical concerns as a hindering factor to adopting AI more widely across their whole organisation (34% and 32% respectively).

There were several differences by sector. Those in agriculture, mining, manufacturing and energy sectors were more likely to report limited AI skills (69%) and high costs (37%). Those in retail and distribution were more likely to cite data complexity (33%). Those in hotel and catering were more likely to report having a lack of tools/platforms for developing AI models (54%), while those in finance and real estate were more likely to report that AI projects are too complex or difficult to integrate and scale (36%). Those in arts and other service sectors were more likely to report a lack of identified use of AI in their organisation (55%).

Mitigating barriers

The qualitative interviews explored how, if at all, organisations have tried to address or mitigate the barriers they are facing with regard to AI adoption. Unsurprisingly, businesses currently using some AI tools or planning to adopt AI were more likely to have taken some form of action to overcome the barriers they were facing.

Recognising the limited in-house AI expertise, some organisations had initiated training programs to enhance staff capabilities. This included engaging with an external AI expert to deliver specialised training sessions, ensuring that staff gain targeted knowledge. Some also encouraged staff to make use of integrated AI features in tools like Microsoft 365 and ChatGPT, reducing the need for additional investments.

Some businesses made use of industry networks, engaging with industry professionals and attending seminars to gather insights and guidance on AI implementation. Meanwhile, others were considering future exploration of government grants and funding opportunities to support AI initiatives.

Some businesses were implementing pilot AI projects whereby they were trialling AI tools with select members of staff, to assess their effectiveness before considering broader deployment.

To alleviate concerns surrounding data accuracy, some businesses explained that they maintain rigorous human oversight in AI processes to ensure accuracy and reliability.

The challenges businesses experienced in implementing AI were often considered to be a combination of wider industry issues as well as some issues that were unique to their organisation. For example, a lack of clear regulation and data security issues were considered to be industry-wide challenges. Meanwhile, challenges such as limited AI skills and expertise were seen as more specific to individual organisations, in particular family-run businesses and those with an ageing workforce.

"It (age) does play a part and I would say that if we have younger people coming in, but the majority of the sort of decision makers, the more senior people here, would be the first to admit that we're not really at the forefront of technology."
(Mid-sized business, construction, South East)

When asked, in an ideal scenario, what could help reduce or remove these barriers, several suggestions were put forward:

Government Support

Funding, training, and incentives from the government were seen as crucial to reducing financial and knowledge barriers to adopting AI. Government-backed training courses were recommended, as well as government grants to support commercial viability. Government presentations or awareness sessions via business groups, such as the Chamber of Commerce, would be useful to expose companies to available AI technologies.

Clearer regulation and industry standards

There was a desire for clear regulatory frameworks and government-produced industry standards to provide guidance and reassurance around compliance, ethical use, and safety implications.

Training and education

Staff training and awareness were felt to be critical, in particular sector-specific training and upskilling. Ideally, all staff would be trained to have expertise in AI tools. This would help staff to understand the capabilities, limitations, and correct use of AI tools. Businesses believed that training would ease decision-making and build confidence in adopting AI.

Tried-and-tested use cases

Some businesses without plans to adopt AI expressed interest in seeing AI successfully implemented in businesses like theirs, especially by those of a similar size and in the same industry. “Trailblazer” examples were cited as a way to build trust and illustrate real-world benefits of utilising AI.

Making AI a more appealing or viable option

Businesses with no plans to adopt AI were asked what would need to change, internally, or externally, to make AI a more appealing or viable option for their organisation.

Clearer information about the value of AI, including what AI can be used for and the subsequent benefits was cited by several businesses. Some specifically mentioned wanting evidence of successful deployment of AI within their industry before they would consider adoption.

“If we hear that it's out there and other companies are doing similar things and doing them more efficiently, that would definitely pique our interest.” (Mid-sized business, construction, South East)

“We would need more confidence in its reliability and accuracy.” (Micro business, business services/administration, East Midlands)

Some businesses emphasised that affordable AI solutions are necessary to overcome any cost barriers in implementing AI.

“The cost is the biggest factor for any industry these days.” (Mid-sized business, retail/distribution, South West)

Clear regulation was deemed important in making AI more appealing and viable, particularly as a safeguard if something goes wrong. This would aid confidence that it was safe to allow AI tools access to sensitive data.

Some businesses simply did not see AI as something they would be implementing in the near future, highlighting the importance of disseminating clear information about the value of AI.

“No, if I look ahead at the moment, I couldn't sort of say that in the next 12-18 months we're going to implement AI unless something changes that I'm not foreseeing at the moment.” (Large business, transport and storage, East Midlands)

Impact of AI

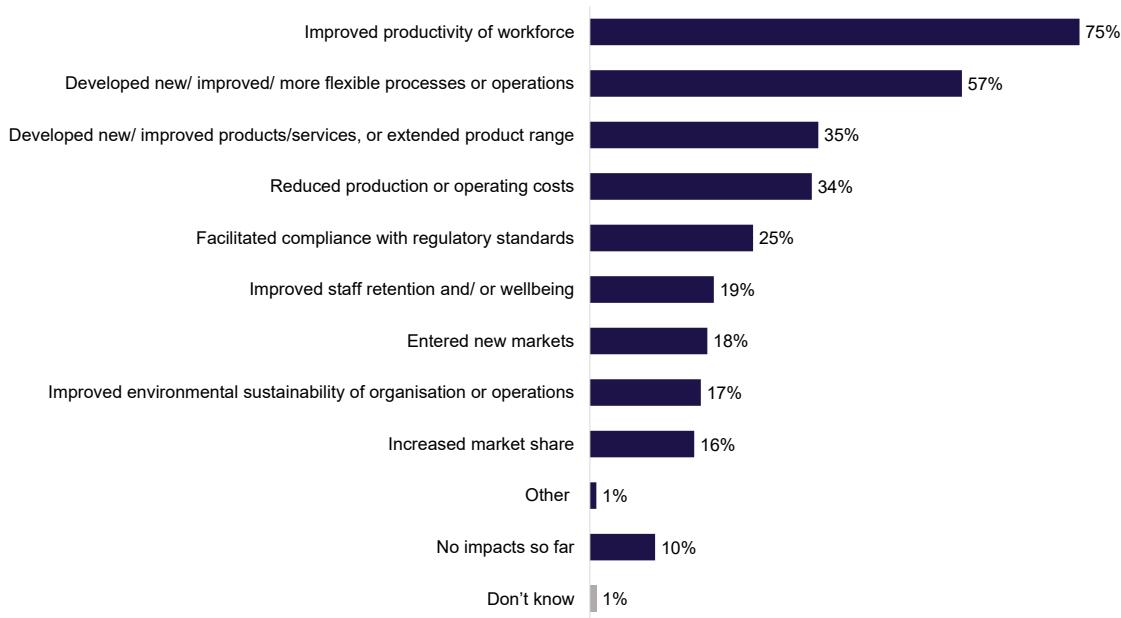
This chapter examines how AI is already shaping UK businesses and where its influence is likely to grow next. It is organised in three parts: the impacts of using AI so far, the effect on revenue and productivity, and the view that further AI adoption is inevitable. Together, the chapter sets out AI's emerging impact and what businesses expect from this technology in the future.

Most current users of AI reported an increase in workforce productivity and more than half had improved processes. However, only around one in eight have seen an increase in revenue since adopting AI, with most businesses reporting no change in revenue yet. Despite these mixed results, interviewees across sectors believed that wider AI adoption is inevitable.

Impacts of using AI so far

As shown in Figure 24, AI has had a wide range of impacts on the businesses currently using it. Three quarters (75%) reported improved productivity of the workforce and over half (57%) had developed new or improved processes or operations. Despite this, one in ten (10%) reported AI as having no impact so far.

Figure 24: Impact of using AI among adopters



Source: D1. Which, if any, of the following impacts has the use of AI had on your organisation thus far? Base: Businesses that use AI (700)

Overall, the impacts of AI adoption were broadly consistent across organisations of different sizes. However, large businesses were more likely to have developed new and improved processes or operations (72%), and to have used AI to enhance their organisation's environmental sustainability (27%).

When considering differences by sector, businesses using AI in the information and communications sector were more likely than others to report a range of impacts, including the development of new or improved products and services or an extended product range (55%), reductions in production or operating costs (43%), and entry into new markets (29%). In the qualitative interviews, businesses that cited improved productivity of the workforce said they attributed this to the reduction or removal of repetitive or administrative tasks.

"We did a lot of manual work and realised that utilising AI is not only going to save the company a lot of money, but we also don't need that large amount of staff. We integrated with companies like Microsoft. We don't need Microsoft or Excel experts to teach new staff how to do it, they just fully utilise Co-Pilot and then report back to myself." (Micro business, retail/distribution, Currently uses AI, West Midlands)

"The workforce is happier because they're not stuck doing tedious admin anymore." (Small business, agriculture/mining/manufacturing/energy, Currently uses AI, South West)

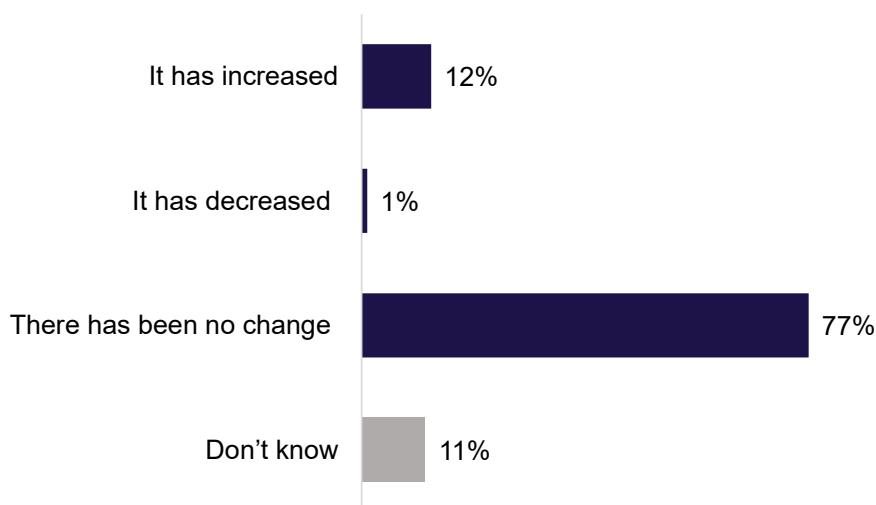
Many businesses saw AI as a complementary tool to their broader organisational goals and that its impacts will help achieve these goals.

"I think it could be a real driver for growth, in terms of helping us efficiently work as we scale up." (Micro business, retail/distribution, Currently uses AI, East of England)

"I wouldn't say it's a major driver yet, most ideas come from people, AI just supports on turning visions into reality." (Small business, information and communication, Currently uses AI, London)

Impact on revenue and productivity

Businesses currently using AI were asked if they had experienced a change in their revenue since they had adopted AI. As shown in Figure 25, the impact on revenue was limited. Over three quarters (77%) of businesses reported having not yet seen a change in revenue. Just over one in ten (12%) reported an increase in revenue.

Figure 25: Change in revenue since AI adoption

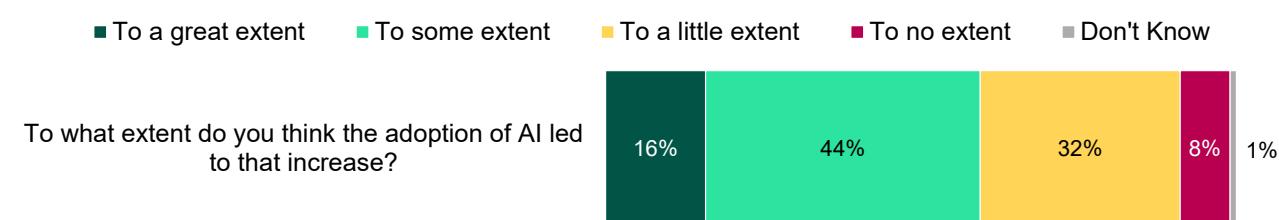
Source: D3. Have you experienced a change in revenue since your organisation's adoption of AI? Base: Those using AI (700)

Large businesses were less likely to report no change in their revenue, at 59%. However, this is likely driven by the fact that a quarter (24%) of these businesses were uncertain whether their revenue had changed. The impact on revenue also varied depending on the proportion of staff that used AI. One in five (19%) businesses with over half of their staff using AI reported increased revenue, compared to only one in ten (10%) businesses with less than half using AI.

Many businesses in the qualitative interviews reported no formal metrics to precisely attribute revenue and productivity changes from using AI. Some deployed AI in non-revenue areas such as quality control systems or administrative functions, which were noted to indirectly impact revenue but had no clear metric to define a change.

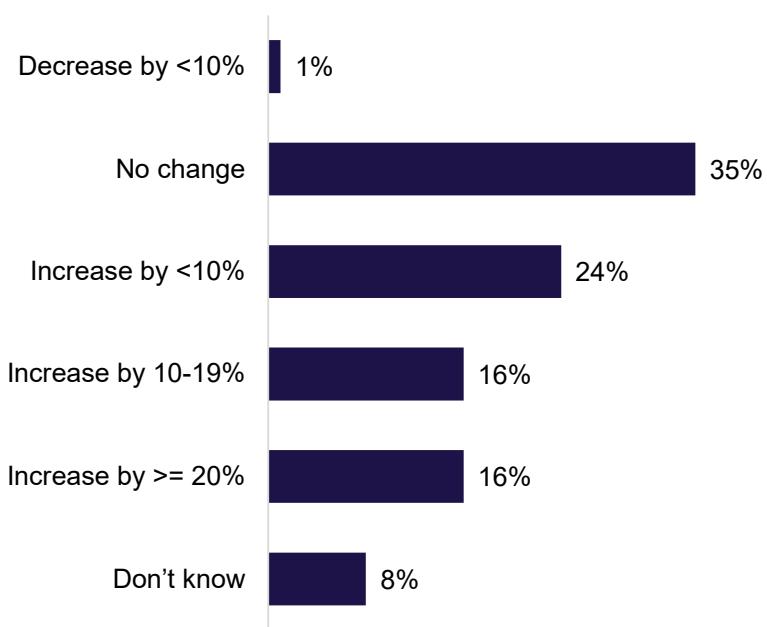
"It's more a time-saving thing and an image thing for the company." (Micro business, transport and storage, Currently uses AI, East of England)

Amongst those reporting an increase in revenue, 91% said that the adoption of AI had led to the increase to some degree. Around one in six (16%) said it had led to the increase to a great extent.

Figure 26: Extent to which the adoption of AI led to that increase in revenue

Source: D4. Increase: To what extent do you think the adoption of AI led to that increase? Base: Businesses that have experienced a change in revenue (85)

Over half of businesses using AI (56%) reported an increase in their employees' overall productivity since adopting AI. Just over a third (35%) reported no change and just 1% reported a decrease, illustrated in Figure 27.

Figure 27: Change in employees' overall productivity since AI adoption

Source: D5. In percentage terms, how, if at all, has adopting AI impacted your employees' overall productivity?
Base: Those using AI (700)

Perceptions of trust and safety in AI

This final chapter explores findings from the qualitative interviews around the challenges and concerns faced by businesses deploying AI, exploring trust in AI systems and safe AI usage. Key challenges faced by businesses included ensuring data security and the accuracy of AI outputs. Trust in AI systems was mixed although many businesses expressed cautious trust. For businesses, safe AI usage must involve human oversight.

Using AI responsibly

When asked how they would define 'safe' AI usage, businesses interpreted the term in different ways. Many businesses emphasised the importance of security when using AI safely, in terms of data protection but also physical security in some sectors such as construction and manufacturing. Some businesses also mentioned that safe AI usage needed to be regulation-compliant.

Most businesses also expressed that, for AI to be used safely, there needed to be human oversight. Businesses tended to express concerns around AI being used without human checks.

"Safe AI usage is consistent monitoring of outputs." (Small business currently using AI, business services/administration, East Midlands)

Very few businesses said they had any internal guidelines or specific policies around using AI responsibly or ethically. Among businesses that had introduced policies, these tended to be around safe usage or tips for using AI effectively.

Some businesses expressed that although they currently did not have any internal AI policies, either they were in the process of creating them or felt that it would be useful for their business to introduce them in the future. However, most businesses expressed that they did not have any current plans to develop any policies. Larger businesses were more likely than smaller businesses to have policies in place or were in the process of creating them.

"Currently, our organisation does not have specific internal policies or guidelines about using AI responsibly or ethically. However, we are in the process of updating IT policies, and AI is one of the areas being considered for future guidelines." (Mid-sized business not using AI currently but plans to adopt AI in the future, retail/distribution, South West)

Businesses were asked if there were particular topics for which guidance or standards for the use of AI would be helpful for their organisation. While some businesses did not feel that they needed any additional guidance, many businesses expressed a desire for more general guidance, particularly amongst smaller businesses. Some common areas where businesses would like more guidance included:

- More guidance on ethical usage of AI;
- More guidance on safe data protection;

- A list of which AI tools are approved and have a good reputation; and
- Sector specific guidance around how to use AI effectively.

Challenges of deploying AI safely

Businesses were asked what the biggest challenges have been for their industry around deploying AI safely. Many expressed similar challenges, with one of the most common being data security. Businesses expressed concerns over how to ensure the safety of sensitive client and customer data and some mentioned these concerns had prevented them from deploying AI.

“The main challenge has been security of data and intellectual property and ensuring this is not taken outside of the organisation.” (Large business currently using AI, retail/distribution, London)

Another common challenge many businesses faced around deployment was whether they can ensure the accuracy of AI outputs. Some businesses did not feel that AI outputs were accurate enough for them to use or believed that it would be better for them to not use AI at all.

“When we are composing emails, writing articles or getting AI to answer on our behalf, AI gets it wrong quite a lot of times and that obviously causes issues with issuing refunds or providing false information and advertising. There is a big risk involved there.” (Micro business currently using AI, retail/distribution, West Midlands)

Some businesses did not understand how AI could be implemented in their business. This lack of understanding therefore meant these businesses questioned whether it was relevant to their business to invest in AI.

Cost was also cited as a challenge to deployment by some businesses. For these businesses this was both the actual cost of deployment being viewed as expensive but also that to some businesses implementing AI did not feel like value for money. In these instances, businesses cited the inaccuracy of AI outputs or not feeling AI was relevant to them, as discussed above, alongside cost as a major challenge.

“The challenge is mostly cost. You don't know if you're buying something fantastic or not, there's a lack of real understanding of the new tech.” (Small business currently using AI, agriculture/mining/manufacturing/energy, East of England)

For some businesses, overcoming an existing work culture was a significant challenge to adopting AI. These businesses mentioned that either current staff were against using AI or that they were reluctant to change existing practices.

“The average age of the people that work here is a little bit older than normal workplaces, so we don't have very many young people with the energy to invest in new things. So we are a little bit reactionary.” (Mid-sized business neither using AI nor has plans to, retail/distribution, South West)

While there were some businesses that said they did not have any challenges in deploying AI safely, most expressed that they faced at least some of the above challenges.

AI Adoption Research

There were some notable differences by the size of business in terms of the most commonly mentioned challenges. Large businesses tended to say that the security of data was their primary concern, whereas smaller and micro businesses tended to mention the accuracy of AI.

Businesses were also asked if there were any concerns or risks they associated with AI specific to their industry. Common concerns in several sectors included:

- Data protection: This was considered a key risk across most sectors. Many businesses felt that using AI could put personal data at risk and worried about the impact a potential data breach could have on their business.
- Physical safety: This was particularly prevalent amongst businesses in the agriculture, mining, manufacturing, energy and construction sectors. Physical safety was often a main concern amongst these businesses due to AI-operated machinery. Another safety concern mentioned by some businesses in these sectors was how AI operated software is working on manufacturing items that need to be manufactured to high standards or they could prove safety hazards for those buying the products. For example, one business manufacturing medical equipment needs to ensure product quality for the safety of its consumers.
- Accuracy of AI outputs: Many businesses felt a major risk using AI was that they could not guarantee the accuracy of outputs.
- Job losses: Although not widespread, some businesses mentioned concerns over possible job losses in their sector. Concerns were usually around customer service type roles being taken over by AI chatbots or physical roles where an AI powered machine could take over a role previously held by a manual worker.
- Negative effect on creativity: Some businesses expressed a worry about creativity being lost through the use of AI.

When asked to consider any concerns or risks they associate with AI more broadly across all industries and society, there were similar worries expressed as to the challenges in businesses' own industries around data security and output accuracy. However, there were more ethical concerns expressed by businesses around AI usage more broadly. In particular, this was often around a loss of human interactions and businesses potentially becoming over reliant on AI. The potential loss of human oversight was a major worry expressed.

“The main risk is taking the human element out of things and everything just being computerised.” (Mid-sized business not using AI but is planning to adopt AI in the future, agriculture/mining/manufacturing/energy, Yorkshire and the Humber)

Many businesses also expressed a view that there could be significant job losses more broadly as a result of AI, despite many businesses not feeling that there would be significant job losses in their own industry. Businesses tended to be more worried around AI's impact on the wider society than to their own industry.

“There are a lot of jobs AI can replace. It's potentially going to be able to do a lot of jobs that humans can do, at a much faster pace.” (Small business not using AI but is planning to adopt in the future, transport/storage, South East)

Concerns from customers, clients or suppliers

Most businesses said they had not experienced any customers, clients or suppliers voicing opinions about the use of AI. Among those that had, however, these comments were usually positive. Some businesses mentioned a perception amongst their clients that using AI was viewed positively as it gave the impression that the business was using modern technology and therefore ahead of competitors who had not embraced AI. Some businesses mentioned that some feedback from clients was also positive as they felt that using AI made their business more efficient which they believed would positively impact the price.

“We are not being pushed by our customers to bring AI in and develop AI within our industry.” (Small business currently using AI, agriculture/mining/manufacturing/energy, East Midlands)

Only a handful of businesses mentioned receiving negative comments from suppliers, customers or clients in relation to AI usage. These comments tended to be based around a general lack of trust in AI.

Trust in AI systems

The extent to which businesses had trust in AI systems was generally mixed, though many expressed cautious trust. They were willing to explore new technologies despite having some concerns around data security and the accuracy of AI outputs. Businesses that were not using AI were more likely to express a lack of trust, and this was often due to a limited understanding of AI resulting in a general mistrust of AI powered technology.

Some businesses were very trusting of AI systems, however. This was often because these businesses believed AI systems to have been rigorously tested and developed to be accurate and store data securely. Some businesses also mentioned trusting more widely used AI systems more than others, or systems developed by big brand names, as they felt more secure using these.

“The basic thinking is as long as it has human oversight, and it is thoroughly vetted before it is implemented into your systems, then yes, I have a lot of trust in AI.” (Mid-sized business currently using AI, retail/distribution, South East)

Most businesses said that despite some concerns around trust, it did not prevent or delay them from deploying AI in their business.

Most businesses did not mention any instances where concerns about reliability, trust, or safety with an AI system have affected deployment decisions. There were a few instances cited by businesses, however:

- Some businesses cited media reports of hacking or issues of reliability as instances putting them off adopting AI;
- One business mentioned a client having security concerns over AI as a reason why they were less keen to deploy it;

AI Adoption Research

- One business mentioned that they had looked into a specific new AI technology but did not find it reliable enough to justify the cost, so the decision to deploy has been delayed to see if reliability improves; and
- One business in the transport and storage sector reported that they had trialled installing AI cameras on trucks which are supposed to pick up on moving objects and people, but they have found them unreliable and therefore not rolled them out further at this stage.

Appendix A: Glossary

Artificial Intelligence (AI): The broader field encompassing knowledge-based systems, data-driven and machine learning-enabled systems, including classic machine learning (supervised learning, unsupervised learning), deep learning, and reinforcement learning, referring to the development of systems that can perform tasks requiring human intelligence.

Machine learning: This is a branch of artificial intelligence which focuses on the use of data and algorithms to imitate the way that humans learn, gradually improving its accuracy. Example AI tools include Microsoft Azure Machine Learning and Google TensorFlow.

Natural language processing and text generation: This is the use of artificial intelligence programming to produce written or spoken narratives from a data set or prompt. This includes drafting, creating computer code or transcribing audio to text in real time. Example AI tools include GPT-4, Microsoft Copilot and Google Cloud Natural Language API.

Computer vision/ image processing and generation: This is the use of artificial intelligence programming to produce, generate, analyse, interpret, and manipulate digital images. Examples AI tools include DALL-E and Veo2.

Hardware related to AI: Examples include Graphics Processing Unit (GPU), Edge Computing Chips, Quantum Hardware, Application Specific Integrated Circuits (ASIC), Neuromorphic Hardware, and Field Programmable Gate Array (FPGA).

Agentic AI: This refers to artificial intelligence systems that possess the ability to autonomously perform tasks, make decisions, and take actions within a specific environment based on predefined goals, data inputs, and learned experiences. Examples include Autonomous Vehicles and Robotic Process Automation (RPA).

Appendix B: Technical annex

Cognitive testing

The main aims of the cognitive testing were to check whether the proposed questions are clear, explore their understanding of particular questions, and whether there is anything that could be done to improve the survey questionnaire.

A total of 20 interviews were conducted between 20th and 27th January 2025. In each interview, the interviewer initially went through the survey with the participant as they would if they had contacted them via telephone to invite them to take part in the research. Participants were subsequently asked about how they found the survey, whether any of the questions were difficult to answer, and if anything could be done to improve the questionnaire.

Tables 1 and 2 show the profile of the completed interviews by size, sector and whether or not they use or plan to use AI.

Table 1: Profile of businesses by size

Size of business	Completed interviews
5-9 employees	5
10-49 employees	12
50-249 employees	2
250+ employees	1
Total	20

Table 2: Profile of businesses by sector and use of AI

Sector of business	Completed interviews	Uses/plans to adopt AI	Does not use, nor plan to, use AI
Agriculture /Mining /Manufacturing/Energy (ABCDE)	2	1	1
Construction (F)	1	-	1
Retail /Distribution (G)	1	-	1
Transport and Storage (H)	1	1	-
Hotel/Catering (I)	2	-	2
Information and Communication (J)	1	-	1
Finance and Real Estate (KL)	4	3	1
Business Services/Administration (MN)	8	3	5
Total	20	8	12

All businesses responded that the questions were clear and were straightforward enough to answer and suggested changes were minor. However, some felt the subject matter was not relevant to them when AI was mentioned in the survey introduction, as their business did not use AI. The survey introduction was subsequently updated for the pilot to focus more on advancements in technology rather than AI.

Pilot fieldwork

The primary objectives of the pilot fieldwork were to assess respondents' comprehension of the proposed survey questions, assess the survey length and identify opportunities for enhancing the overall quality of the questionnaire.

A total of 50 interviews were conducted between 3rd and 5th February 2025. The survey was conducted in the same way as the mainstage survey will be conducted.

Tables 3 and 4 show the profile of the completed interviews by size, sector and whether or not they use or plan to use AI.

Table 3: Profile of businesses by size

Size of business	Completed interviews
5-9 employees	12
10-49 employees	27
50-249 employees	8
250+ employees	3
Total	50

Table 4: Profile of businesses by sector and use of AI

Sector of business	Uses AI	Plans to adopt AI	Does not use, nor plan to, use AI	Total
Agriculture /Mining /Manufacturing/Energy (ABCDE)	2	0	2	4
Construction (F)	0	0	3	3
Retail /Distribution (G)	0	0	3	3
Transport and Storage (H)	0	0	1	1
Hotel/Catering (I)	0	0	2	2
Information and Communication (J)	3	1	4	8
Finance and Real Estate (KL)	3	0	3	6
Business Services/Administration (MN)	8	2	9	19
Arts/Other (RS)	0	0	4	4
Total	16	3	31	50

Sample outcomes

The sample was drawn from Market Location (the same sample source that will be used for the mainstage survey), with a view to achieving a range of businesses in terms of business size, location and sector.

Table 5 shows the call outcomes for the sample that we attempted to contact during the pilot fieldwork. We have no concerns regarding the number of refusals and unobtainable numbers. Only one respondent refused due to a disinterest in the survey topic.

Table 5: Call outcomes for pilot fieldwork

Call outcome	Count	%
Completed	50	3%
Future appointment made with respondent	35	2%
Respondent refusal	64	4%
Screen out based on business size	5	0.3%
Contact made – no definite outcome	919	53%
No direct contact made with respondent	606	35%
Unobtainable (e.g. wrong number, out of service)	43	2%
Total	1,722	100%

Pilot feedback

The changes made to the survey introduction after the cognitive testing had a positive impact on respondent participation. Avoiding mention of AI in the survey introduction seemed to result in respondents being more likely to feel the survey is relevant to them. Changes made to the survey questions prior to the mainstage fieldwork were very minor.

Mainstage fieldwork

Interview targets and achieved interviews

This research sought to interview a total of 3,500 UK private sector businesses, with at least five employees, among the grouped sectors shown in Table 6.

Table 6: Interview targets

Sector	Size	5 to 9	10 to 49	50 to 249	250+	Total
Agriculture /Mining /Manufacturing/Energy (ABCDE)	125	120	65	49	360	
Construction (F)	136	97	47	41	321	
Retail/Distribution (G)	192	148	71	62	473	
Transport and Storage (H)	81	72	38	30	221	
Hotel/Catering (I)	144	143	58	51	396	
Information and Communication (J)	157	159	59	37	411	
Finance and Real Estate (KL)	200	127	48	37	413	
Business Services/Administration (MN)	260	228	94	69	651	
Arts/Other (RS)	107	77	38	33	255	
Total	1,402	1,171	518	409		3,500

A total of 3,500 interviews were achieved. The breakdown by size and sector is shown in Table 7.

Table 7: Achieved interviews by size and sector (survey)

Sector	Size	5 to 9	10 to 49	50 to 249	250+	Total
Agriculture /Mining /Manufacturing/Energy (ABCDE)	153	178	90	69	490	
Construction (F)	131	99	74	20	324	
Retail/Distribution (G)	185	134	61	43	423	
Transport and Storage (H)	75	67	45	18	205	
Hotel/Catering (I)	137	138	73	31	379	
Information and Communication (J)	145	140	68	26	379	
Finance and Real Estate (KL)	204	127	50	26	407	
Business Services/Administration (MN)	261	203	91	57	612	
Arts/Other (RS)	102	76	46	20	244	
Public Administration/ Education/ Human Health and Social Work (OPQ)	9	9	11	8	37	
Total	1,402	1,171	609	318	3,500	

Call outcomes and survey response rate

A call outcome is defined as a definite response to the survey invitation, i.e. whether an interview was achieved, or whether an interview could not be achieved and the reason was established. Among the 38,983 businesses called at least once, the response rate for the survey was 9% (shown in Table 8). This included businesses where no final outcome was reached, for example where the interviewing team were not able to get through to the right person, where an appointment had been made to call back at a later date, or where a or where the call went to answerphone.

Table 8: Call outcomes for mainstage fieldwork

	Number	%
Total records called at least once	38,983	100%
Completed	3,500	9%
Screen out - Organisation is not aware of AI	40	<1%
Screen out - Organisation has <5 employees	351	1%
Respondent refusal	2,732	7%
Respondent unavailable during fieldwork	95	<1%
Contact made – no definite outcome	8,124	21%
No direct contact made with respondent	21,127	54%
Over quota	606	2%
Unobtainable (e.g. wrong number, out of service)	2,408	6%

Weighting

The survey data was weighted to ensure it was representative by business size and sector. The regional split was assessed and was in line with the population and therefore a regional weight was not needed. Weighted and unweighted counts by size and sector are shown in Table 9.

There were a small number of businesses that disagreed with the sector description on the sample and provided an alternative during the survey. When coded later, they fell into a sector outside of those targeted for this research. They were subsequently given a weight of one.

Table 9: Weighted and unweighted counts - by sector and size

Sector	Unweighted	Weighted
Agriculture /Mining /Manufacturing/Energy (ABCDE)	490	445
Construction (F)	324	357
Retail /Distribution (G)	423	707
Transport and Storage (H)	205	126
Hotel/Catering (I)	379	529
Information and Communication (J)	379	182
Finance and Real Estate (KL)	407	182
Business Services/Administration (MN)	612	732
Arts/Other (RS)	244	203
Size		
Micro (5-9)	1,402	1,794
Small (10-49)	1,171	1,400
Medium (50-249)	609	245
Large (250+)	318	62

Qualitative interviews

A total of 100 qualitative interviews were conducted with businesses who had taken part in the survey and agreed to be contacted to take part in a follow-up interview. The completed interviews by size and sector are shown in Table 10.

Table 10: Achieved interviews by size and sector (qualitative interviews)

Sector	Employees: 5 – 49	Employees: 50+	Total
Agriculture /Mining /Manufacturing/Energy (ABCDE)	9	7	16
Construction (F)	7	3	10
Retail/Distribution (G)	6	9	15
Transport and Storage (H)	5	2	7
Hotel/Catering (I)	6	2	8
Information and Communication (J)	11	4	15
Finance and Real Estate (KL)	6	5	11
Business Services/Administration (MN)	8	6	14
Arts/Other (RS)	1	3	4
Total	59	41	100

This consultation is available from: www.gov.uk/government/organisations/department-for-science-innovation-and-technology

If you need a version of this document in a more accessible format, please email alt.formats@dsit.gov.uk. Please tell us what format you need. It will help us if you say what assistive technology you use.