Going for Growth:
Creating an AI-first future in accounting
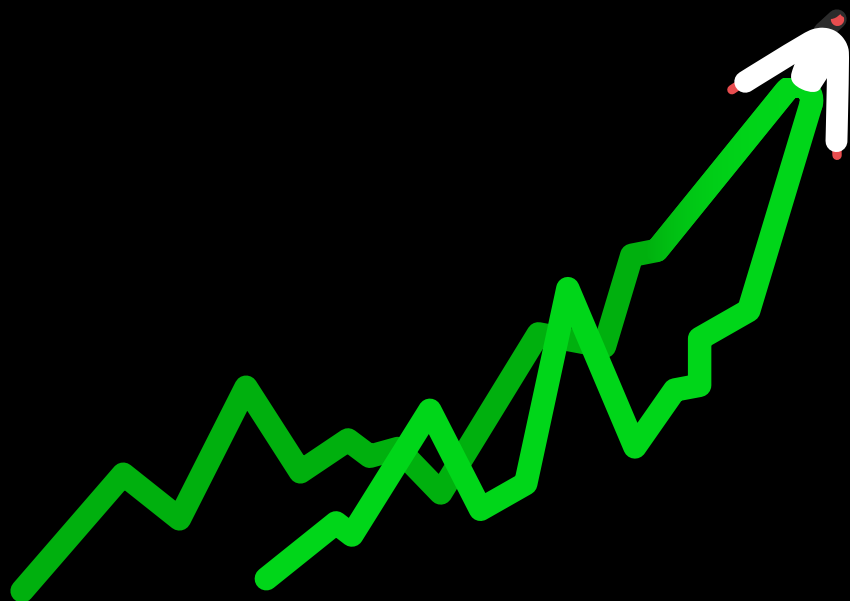
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Contents

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Foreword by
Aaron Harris, CTO of Sage

Artificial Intelligence (AI) is no longer a futuristic concept; it is transforming the accounting industry today.

This powerful technology is elevating human work by automating repetitive tasks and freeing up time for accountants and bookkeepers to focus on higher-value tasks.

From chatbots that enhance client communication, to automation of routine tasks like processing vendor invoices, and generating data insights that improve cash flow; AI is set to become a driving force of growth within the industry. In turn this will unlock significant value for the UK economy. If every practice adopted AI at the same pace as industry leaders, this could add £2 billion to GDP and create an additional 19,000 jobs, contributing to the improvement of public services and society.

The benefits of AI are also being felt beyond productivity. Reduced workloads, improved well-being, and increased job satisfaction are all highly valued by accounting and bookkeeping professionals. Not only is this creating a happier and healthier workforce, but it is also attracting new talent to the profession, helping to address the industry's skills shortage.

Sage envisions a future of connected accounting where audit, assurance and trust are continuous, rather than locked in monthly cycles. A future where accountants can access real-time and up-to-date information on business performance that fosters more strategic decision-making.

Whilst some accountants have already started their AI journey, action is needed to ensure the whole industry can reap the benefits. A lack of AI skills within the accounting workforce could hinder the adoption and potential of this technology. With only 16% of practices feeling well-prepared to meet the AI skills demand, addressing this gap is a collective responsibility.

Secondly, ensuring ethical practices are embedded in AI development is crucial. Customers will only embrace AI if they trust the technology. So, the UK must establish a clear regulatory environment supported by sector standards.

Finally, we need to create a thriving digital economy and tech ecosystem that provides the right fiscal incentives and regulatory levers, such as e-invoicing, to enable businesses to adopt digital tools.

By taking these steps, the UK has the potential to create a world-leading accounting and bookkeeping industry, underpinned by AI and cementing its status as a leading exporter of professional services across the globe.

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About Sage

Sage exists to knock down barriers so everyone can thrive, starting with the millions of small and mid-sized businesses served by us, our partners and accountants.

Customers trust our finance, HR and payroll software to make work and money flow. By digitising business processes and relationships with customers, suppliers, employees, banks and governments, our digital network connects SMBs, removing friction and delivering insights. Knocking down barriers also means we use our time, digital tech and expertise to tackle digital inequality, economic inequality and the climate crisis.

About Demos

Demos is Britain's leading cross-party think-tank. We produce original research, publish innovative thinkers and host thought-provoking events.

About ACCA

ACCA (the Association of Chartered Certified Accountants) is a globally recognised professional accountancy body providing qualifications and advancing standards in accountancy worldwide.

Founded in 1904 to widen access to the accountancy profession, we've long championed inclusion and today proudly support a diverse community of over 252,500 members and 526,000 future members in 180 countries.

Our forward-looking qualifications, continuous learning and insights are respected and valued by employers in every sector. They equip individuals with the business and finance expertise and ethical judgement to create, protect, and report the sustainable value delivered by organisations and economies.

Guided by our purpose and values, our vision is to develop the accountancy profession the world needs. Partnering with policymakers, standard setters, the donor community, educators and other accountancy bodies, we're strengthening and building a profession that drives a sustainable future for all.

Executive Summary:
Key findings & recommendations

Sage, in partnership with Demos and ACCA, has conducted a deep dive study of 1,126 representative accountants and bookkeepers[1] who hold senior roles in their organisations in the UK.

The purpose of this study is to uncover how AI is going to re-shape the industry over the next five years including the impact on jobs and the economy. Responses were weighted to align with ONS data on the average number, turnover, and size of accountancy practices in the UK.
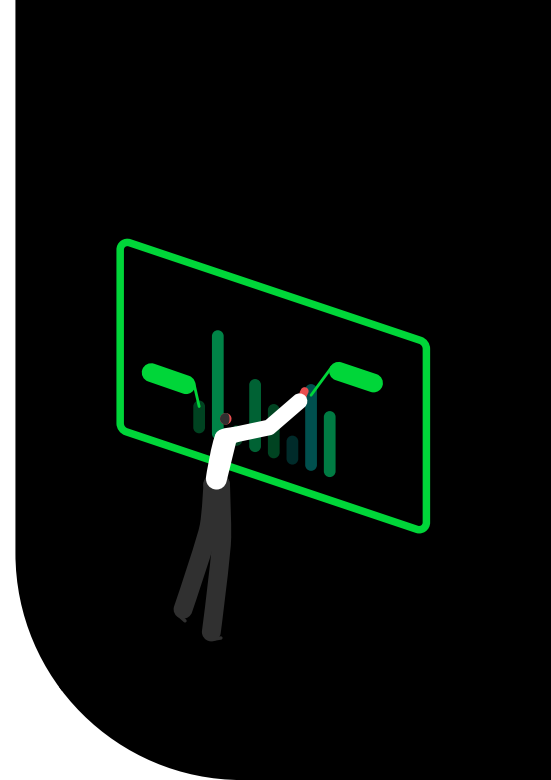
1.
AI will become widespread across the industry in the next five years

Currently, over a quarter (26%) of accounting and bookkeeping practices have adopted AI technologies. In five years' time, this is expected to increase to over 52%.

2.
Accountants and bookkeepers are technology optimists

61% believe AI will create more opportunities than risks with nearly two-thirds (68%) feeling confident that they will be able to adapt to AI.

3.
High levels of AI adoption could add £2bn to the UK economy

If every practice adopted AI at the same pace as industry leaders, this could add £2 billion to GDP and create an additional 19,000 jobs.[2]

4.
AI is set to have a positive impact on work-life balance and free up time to focus on higher-value work

Over half (51%) of practices that are using AI have reported improvements in wellbeing, including reduced workload stress and improved job satisfaction.

5.
Practices who are leading the way on AI see it as a catalyst for growth and expect to hire more employees

Those who have integrated AI into several core processes expect to increase the number of employees in their business by 29% over the next three years. This is ten times more than those who are not currently using any AI technologies.

6.
Unless tackled, an AI skills deficit will restrict the successful adoption of AI

Nearly two-thirds (63%) of accountants and bookkeepers are concerned that a lack of AI skills in their workforce will restrict how effectively they can use AI and only one in six practices (16%) feel well prepared.

1. For brevity, this report sometimes uses the shorthand of 'Accountants' to refer to the Accounting and Bookkeeping industry. Our sample included a robust number of bookkeepers, alongside tax professionals and others. We have focussed on findings which are true across the industry.
2. We recognise that actual growth outcomes will vary depending on various factors beyond levels of AI adoption, including economic conditions, regulatory changes and changes in the structure of the industry. The figures presented should be considered as potential scenarios rather than definitive predictions. We also recognise the challenge of having all practices embedding AI across their workflows, and this report makes recommendations to break down barriers to successful adoption.

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Based on these findings, we have outlined **four policy recommendations** that will help to unleash the power of AI and prepare the accounting industry for an AI ready future:

1.
Urgently invest in boosting AI skills across the industry through a bigger, long-term AI Skills Fund and reformed Apprenticeship Levy

We recommend the AI Skills Fund is put on a longer term footing, lasting five years to support the transition towards effective use of AI. This money should come through departmental underspends and could help 8,000 businesses per year.

The Apprenticeship Levy should be expanded into a Growth and Skills Levy that is more flexible and can be used to fund shorter-term accredited training programmes that upskill and reskill workers on AI. Companies should also be able to increase the proportion of their unspent levy funds to their supply chains from 25% to 40%. This could unlock millions of pounds for accountants and bookkeepers to develop AI skills.

2.
### Extend full expensing of capital investment to digital technology

The UK should extend the full expensing of capital to cover digital technology investments, not just plant and machinery. This would enable every business that invests in digital tech, such as new AI tools, to cut their tax bill by 25p for every £1 they invest.

3.
Introduce e-invoicing and consider how it could support Making Tax Digital

The UK Government should announce plans to work with the private sector to ensure practices and SMBs benefit from the opportunities of e-invoicing, such as improved productivity, reduced late payments and enhanced international trade. E-Invoicing also ensures real-time, quality data that enable better AI solutions.

4.
Putting in place a strong regulatory framework

Governments, regulators, professional bodies, software developers and accountants need to work together to ensure there are strong standards to regulate the use of AI, developing ethical and human principles for the future direction of this technology.

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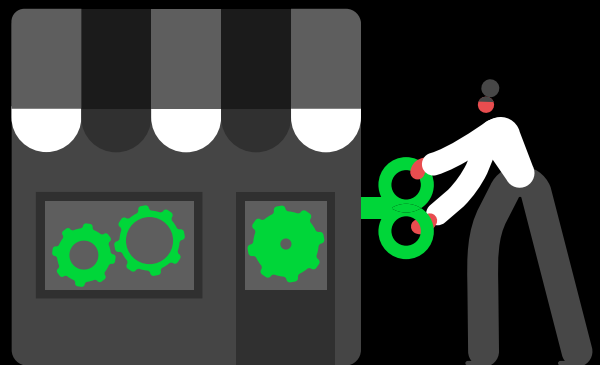
Chapter 1:
Embracing the AI revolution

What is Artificial Intelligence (AI)?

AI in this report refers to computer systems that use maths and logic to learn from data and make decisions, kind of like how humans do. For example, AI can help with tasks like sorting receipts or automatically generating reports.[3]

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3. What is Artificial Intelligence? | Microsoft Azure.

Accounting and bookkeeping play a critical role in the functioning of the UK economy and have a huge impact:

323,000
people employed

£5.8bn
contributed in tax revenues

37%
growth since 2017 (nearly double the rate of the UK economy as a whole)
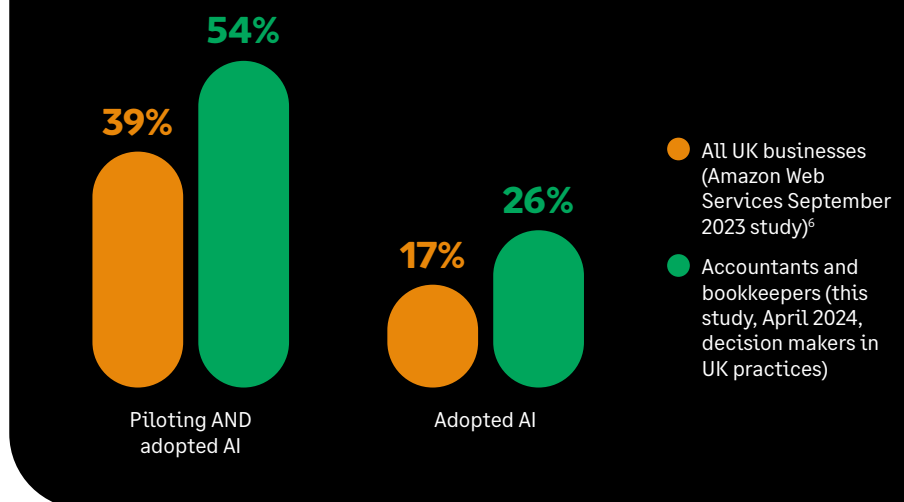
£33.3bn
contributed to UK GDP

£4bn
made in exports

Source: 2022 statistics CCAB, Oxford Economics, January 2024.

Accounting is constantly evolving. As this report shows, the industry is in the midst of another major transformation, this time led by the recent growth of Artificial Intelligence (AI) technologies.

Our research suggests that accountants and bookkeepers are **embracing AI at a faster rate** than a benchmark of all UK sectors. As of September 2023, 39% of businesses in the UK were piloting or adopting AI,[4] compared with 54% of accountants and bookkeepers.[5] Our survey demonstrates that AI is not something that will have an impact on accounting in the distant future, it is transforming the profession now.

Figure 1.
Comparative adoption levels of AI

39% — Piloting AND adopted AI (All UK businesses)
54% — Piloting AND adopted AI (Accountants and bookkeepers)
17% — Adopted AI (All UK businesses)
26% — Adopted AI (Accountants and bookkeepers)

● All UK businesses (Amazon Web Services September 2023 study)[6]

● Accountants and bookkeepers (this study, April 2024, decision makers in UK practices)

4.   www.unlockingeuropesaipotential.com/uk
5.   Sage & Strand Partners, Online survey of accountants and bookkeepers, April 2024 (all references to our survey share this source)
6.   In this study, researchers employed a six-point scale to estimate the level of AI adoption among a sample of 'decision makers'. In both studies, decision makers were selected based on their job titles and were surveyed through online B2B panels.

How different accountants and bookkeepers are approaching AI

Through our research, we have uncovered **four distinct groups of accountants and bookkeepers to categorise their approach to AI**:

Trailblazers: businesses that have adopted AI or are using it consistently in core business functions.

Strategic Adopters: businesses that have adopted AI for some specific tasks or are beginning to explore it.

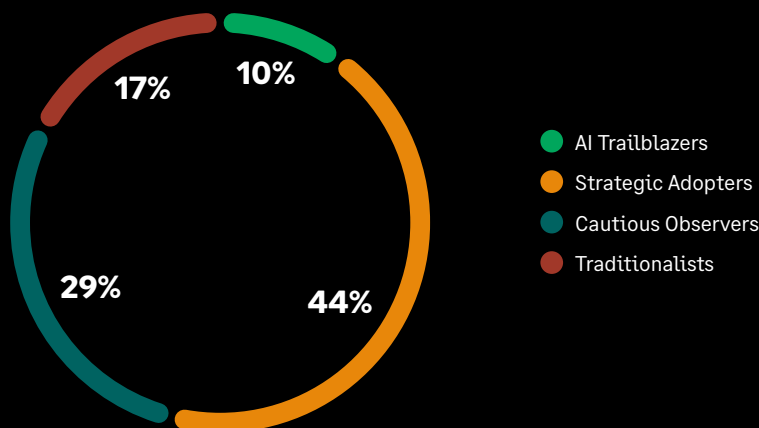**Cautious Observers:** businesses that have not yet adopted AI but are planning to.

Traditionalists: businesses that have not adopted AI and do not plan to do so.

Figure 2.
Accounting and bookkeeping practices attitudes to AI

10%
17%
29%
44%

- AI Trailblazers
- Strategic Adopters
- Cautious Observers
- Traditionalists

Those practices who are already using AI are doing so in a range of different ways. Whether it is **chatbots, AI driven insights, or automating data entry**, AI is helping accountants and bookkeepers provide a **better service to their clients** and is improving the quality of their work. **Nearly three quarters (76%)** report that AI is having a valuable impact on their practice with only 3% reporting no impact.

Figure 3.
Top five AI technologies that accounting and bookkeeping practices are using today

Type of technology and total number of respondents

51%
Chatbots for client communication and support (e.g., answering FAQs, scheduling appointments, collecting basic information)

34%
AI and machine learning tools for automating repetitive tasks (e.g., data entry, invoice processing, bank reconciliation)

32%
AI-driven insights and reporting (e.g., automatically generating reports with insights and recommendations)

30%
AI-powered / assisted document processing (e.g., Optical Character Recognition (OCR), automatic data extraction and categorisation

29%
Machine learning for forecasting, scenario analysis (e.g. analysing financial data to predict cash flow)

The industry is optimistic about the opportunities and benefits that can be created by using AI technologies. Our research indicates that greater use of AI could tackle three key challenges facing the industry:

1. Elevating growth

Despite media headlines, accounting practices who are trailblazing and consistently using multiple AI tools are **creating** *more* **jobs** than those who are not. These practices expect to hire **ten times more** than those with no plans to adopt AI. They also expect to grow **three times faster** in the next three years, **increasing their revenue by 18 percentage points more** than those with no plans to use AI (six percentage points on average). Further, those practices that are growing the fastest are utilising AI to increase their competitiveness. 24% of accountants and bookkeepers using AI have already seen a noticeable increase in their efficiency and productivity.

It is important to note that trailblazing practices with greater AI capabilities currently tend to serve larger business clients and are skewed toward certain regions like London and Yorkshire and the Humber. It is therefore crucial that we support practices of all types, sizes, and locations in adopting AI technologies. By understanding their unique needs, our recommendations contribute to this goal of inclusive AI adoption across the accounting industry.

2. Elevating the workforce

Accountants and bookkeepers are also reporting benefits that stretch beyond growth and productivity. **Over half (51%)** of accountants and bookkeepers using AI are already experiencing improvements to their **personal and staff wellbeing**. Additionally, 61% see the potential for AI to enhance their work-life balance and allow for more flexible work, helping to **attract new talent** to the profession, particularly the next generation. Research by ACCA found that 48% of Gen Z regard work-life balance as a key factor when considering employment opportunities.[7] AI is also set to dramatically transform the relationship between HMRC and accountants. Some of the most time consuming and complex parts of an accounting job are related to information gathering and compliance.[8] However, **59% of practices believe that the increased use of AI will improve the relationship** between the accounting industry and HMRC by automating tasks to allow more time to understand the latest developments as well as enabling real-time sharing of information and identifying and reducing tax errors. To harness this potential, it is important that HMRC takes full advantage of new digital opportunities and invests in AI technologies to improve customer experience and digitalise tax compliance.

3. Elevating human work

Repetitive tasks that consume time and prevent learning are reported by over half of accountants and bookkeepers (58%) as a leading blocker to advancing careers in the industry. It is therefore notable that accountants and bookkeepers see AI as a tool that will allow them to shift their focus from manual tasks to **more strategic and higher-value work**. Around half of accountants and bookkeepers that have adopted AI say that using AI could allow them more time to focus on valuable work and strategic thinking. Higher-value work means shifting from compliance only services to more **advisory work**. Accountants and bookkeepers have described this as being able to "level up" the support they give to their clients, by spending more time to better understand their business goals and helping them identify more revenue streams so they can be more successful.

7. Accountancy Today, Nearly 40% of accountants spend half the day on manual tasks, 28 February 2023
8. ACCA, Groundbreakers: Gen Z and the future of accountancy, April 2021

Sage Customer
Bee Motion

Based in Stockport, Bee Motion is a passionate technology-based accountancy practice that specialises in all areas of financial planning.

"

AI will transform our roles from number crunchers to business coaches. In the future, I imagine accounting firms buzzing with human interaction, where technology takes care of the mundane tasks and frees up time to engage more with clients and advise on business growth.

I know there has been some concern in the industry around AI replacing jobs, but I expect that it will create a dynamic blend of tech and human touch. Where we're not just embedded with work or wearing grey suits saying here's your tax return but are meeting clients more, understanding different sectors, and moving into being more of an adviser."
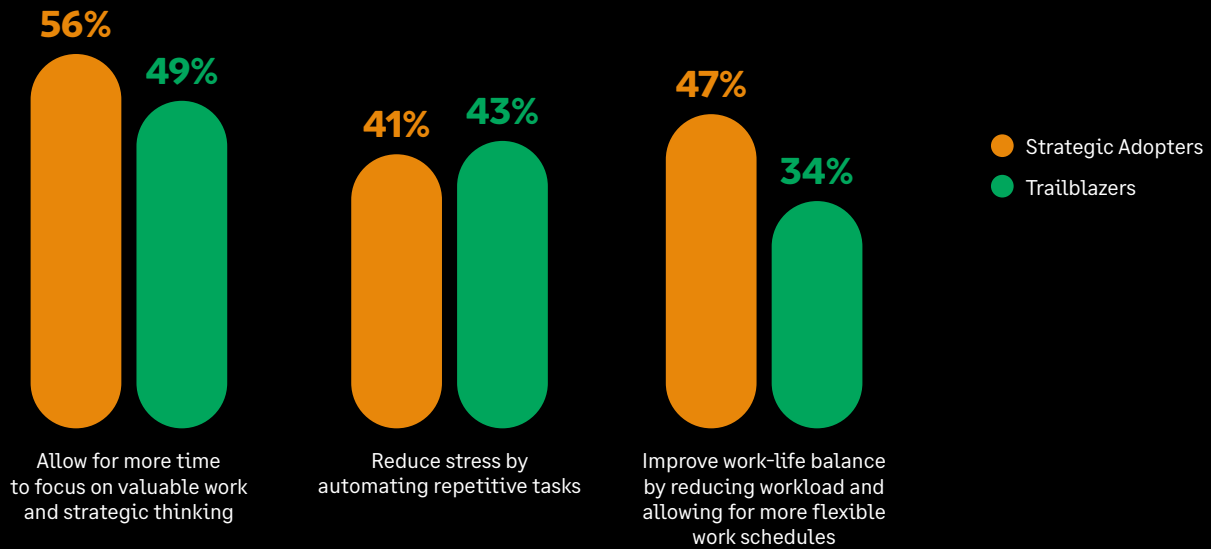
George Moss, Practice Manager

Figure 4.
Impact of AI on jobs and work within the accounting industry

How accountants and bookkeepers believe AI could potentially improve their jobs

56% — Allow for more time to focus on valuable work and strategic thinking (Strategic Adopters)
49% — Allow for more time to focus on valuable work and strategic thinking (Trailblazers)

41% — Reduce stress by automating repetitive tasks (Strategic Adopters)
43% — Reduce stress by automating repetitive tasks (Trailblazers)

47% — Improve work-life balance by reducing workload and allowing for more flexible work schedules (Strategic Adopters)
34% — Improve work-life balance by reducing workload and allowing for more flexible work schedules (Trailblazers)

● Strategic Adopters
● Trailblazers

AI in Action:
Sage Copilot

Our new generative AI-powered assistant transforms how SMBs and accountants manage their business and do their work. It is an intelligent tool that automates routine tasks, offers insights for growth and enables better decision making and enhanced productivity. By acting as a trusted team member, Sage Copilot helps with forecasting, cash flow management and invoice processing, creating more time and space for customers to focus on scaling their businesses.

Bridging the AI gaps in accounting

The UK has the potential to create a world leading accounting and bookkeeping industry underpinned by AI, however we need to ensure that we tackle the potential challenges in adopting this new technology.

While some practices are already taking full advantage of AI, **close to half (46%) are not currently using or piloting any AI technologies**.

It is important to ensure that accounting and bookkeeping practices do not fall into a digital divide and we empower the whole industry to harness the benefits of AI. We therefore need to tackle three barriers:

1. **A lack of skills**

2. **Addressing AI risks**

3. **Low digital adoption**

AI Skills

Six in ten (63%) practices are concerned that they **lack the skills** to use AI effectively and only **one in six practices (16%) feel well prepared** for having the AI skills they need. In practice, this means:

1. The skills needed to **understand AI**, including its capabilities, limitations, and potential uses.

2. The skills needed to **effectively and responsibly use AI**, this includes using software packages which incorporate AI, but also keeping client data secure and being able to interpret and analyse the outputs of AI.

3. The analytical skills needed to **take the data insights produced by AI, and use them effectively with clients**. Previous studies have found that AI will mean a greater role for accountants as "advocates for change and improvement," and accountants will need the skills to do this effectively.[9]

This is supported by ACCA research which found that over 70% of accountancy and finance professionals said that they needed better knowledge of artificial intelligence and machine learning.[10]

Our study also showed that more than four-in-ten (43%) recognise the challenge of not having enough skilled staff to manage and use AI, affecting their decision to adopt AI solutions in their business. Additionally, a quarter (24%) support more **investment in training and skills** to better prepare for an AI-driven future.
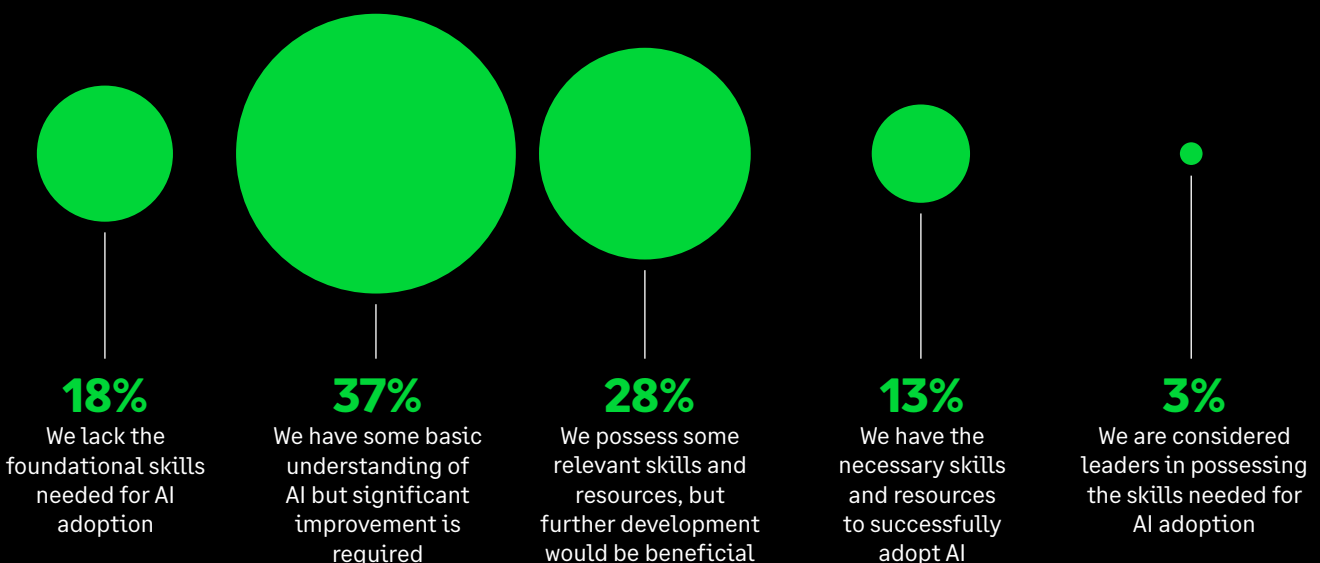
> "
> *If you don't understand something, how can you implement it?"*
>
> **Sage accounting customer**

Figure 5.
Accounting and bookkeeping practices view on whether they have the right skills to successfully adopt and use AI

18%	37%	28%	13%	3%
We lack the foundational skills needed for AI adoption	We have some basic understanding of AI but significant improvement is required	We possess some relevant skills and resources, but further development would be beneficial	We have the necessary skills and resources to successfully adopt AI	We are considered leaders in possessing the skills needed for AI adoption

9. ACCA, AI (Artificial Intelligence) in the finance profession, August 2023
10. ibid

Sage Customer
Infinitas Accounting

Founded in 2020, Infinitas Accounting is a cutting-edge accountancy practice that embraces technology to help their clients grow.

"

As an industry, we've got a knowledge and skills gap, and we don't have enough people coming through to do the jobs available. I know the Government recently announced a skills grant, but there are quite a few barriers, especially for small businesses as it's capped, quite a cumbersome application process and there is a limited number of training providers.

So, we need to address that especially as AI will only create more opportunities and will help to attract new and younger talent who will be excited by the potential of the technology. I also think it will help with retention and work-life balance as personally, I'm looking forward to closing the office door and not waiting for a holiday to spend time with my children, read a book or go for a walk."

Caroline Armstrong, Founder

Elevating the role of accountants with AI skills

The users of AI, need to be educated in a range of new skills. This includes basic skills such as understanding the types of work AI is suitable for, effective prompt construction, critical thinking and side by side training with AI systems. Accounting students will need to learn new skills to use the new capabilities that AI automation provides. This means that educators will need to create new training guidance and companies like Sage will need to work with accounting bodies to equip members with the correct skills. Sage is currently working with accounting bodies to provide advice on what impact AI is likely to have on the profession so that qualifications can evolve. It is our ambition to work in partnership with educators and professional bodies to create the right accounting courses and qualifications that are fit for an AI driven future.

Addressing AI risks

Although a clear majority of practices **(61%) believe AI will present more opportunities than risks** to the accounting industry, it is paramount that industry stakeholders work in partnership to address risks needed to **build trust in AI**. Governments, technology developers and accounting bodies need to work together to establish the right regulations and sector standards that safeguards AI and the use of data.
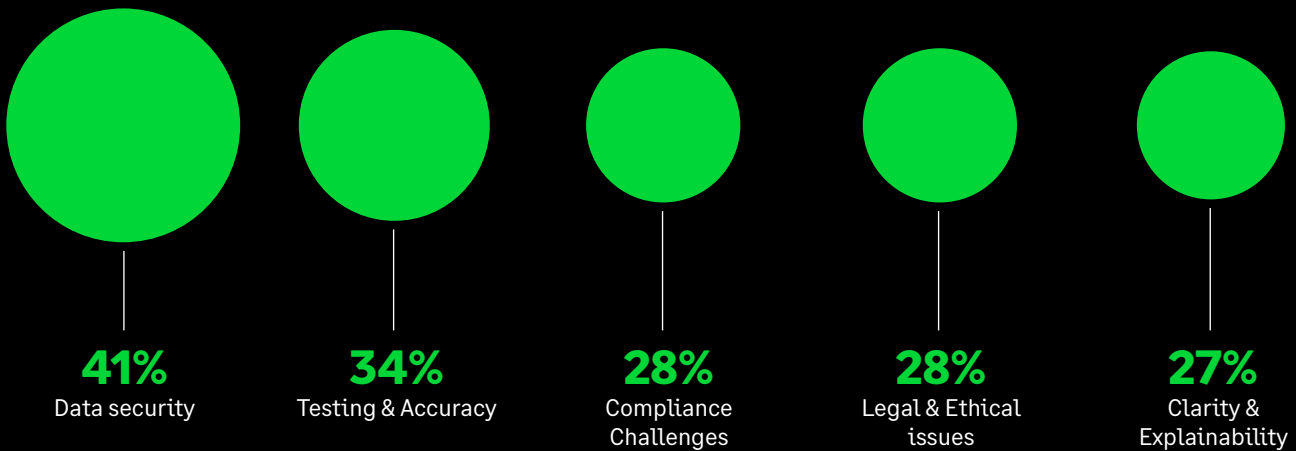
Over half (55%) of practices rated compliance, for example, data protection, tax regulations and adhering to existing standards, as the biggest AI risk that tech developers should consider when building new technologies. In addition, 41% of accountants and bookkeepers ranked **data security, i.e. keeping client data safe and secure**, as the leading AI risk when using AI within their own practice.

> *Trust is really important; we need guidance and support from the Government and the governing bodies."*
>
> **Sage accounting customer**

Figure 6.
Accounting and bookkeeping practices view on the top three AI risks facing their practices

41%	34%	28%	28%	27%
Data security	Testing & Accuracy	Compliance Challenges	Legal & Ethical issues	Clarity & Explainability

Given the importance of standards and regulation in the accounting industry, it is essential that AI technology is developed in a way that adheres to the current regulatory environment and in line with the AI principles being set by the government and regulators. Through a clear regulatory framework, supported by sector specific standards for AI in accounting, we can build trust and confidence across the industry, accelerate the pace of AI adoption and add significant value to the UK economy and society.

How Sage is pioneering safe AI

Sage is committed to ensuring that AI is utilised in a safe and transparent way. Our goal is to ensure our AI systems are trusted, responsible and aligned with our values and <u>Data and AI principles</u>, while also ensuring compliance with the regulatory landscape.

That's why we're building domain-specific LLMs for the accounting and finance industry that will have a deep understanding of accounting rules and best practices. We'll train these LLMs on how to complete common accounting and finance tasks, how to analyse financial information, and how to support difficult business decisions. We're incorporating these LLMs into Sage Copilot and our entire product line to power AI that is more accurate, competent, and helpful.

Our 5 commitments to trusted AI:

1.
You'll benefit from responsible AI

This means avoiding using AI in scenarios where AI could cause harm. Our AI and data science teams work to maintain the integrity of our systems ensuring that we protect against bias and discrimination and make AI as safe and ethical as possible.

2.
You'll have confidence in our AI results

This means starting with the best off the shelf technologies and building AI to tackle the challenges specific to accounting and finance tasks. This approach yields the most accurate and capable AI and because we build the accounting AI ourselves, we're able to learn from customer activity, making the AI smarter over time.

3.
### You'll receive explanations with AI results

This means enabling customers to review AI results. For example, in Sage Copilot, we explain how the AI determines an answer and link to source data so you can verify results.

4.
You're in control, every step of the way

This means giving customers the power to review, modify, approve or dismiss AI generated responses. Those decisions are then fed back to our AI models so they learn and get smarter with every interaction.

5.
We'll be by your side ready to support you

This means building AI solutions that are easy to use and are seamlessly integrated into our products. Customers don't need to hire data scientists, AI engineers, or even programmers.
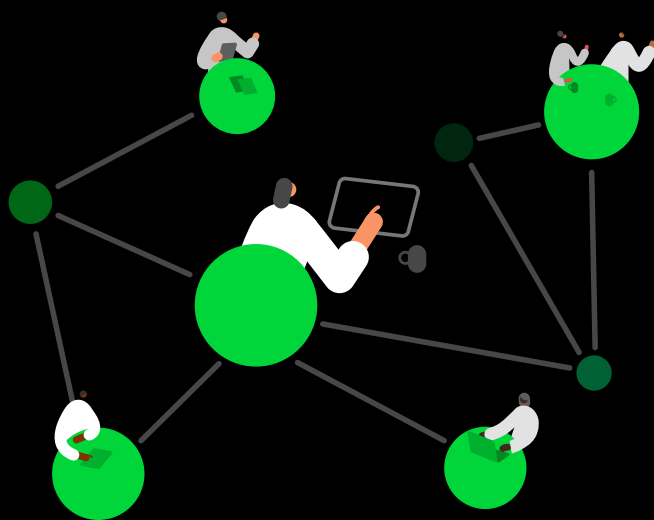
Digital Adoption

Digitalisation of the UK economy is one of the biggest drivers of productivity and could add an extra **£232bn** to the economy every year.[11] However, the UK is fast becoming a **laggard** on digital adoption rates falling behind other OECD countries. While UK companies put significant importance on management and technology adoption, we **invest less** than our G7 counterparts.[12]

Falling behind on digital adoption means falling behind on the wave of AI deployment across the economy. Unless we can correct this, economic growth, competitiveness, and the ability to become a science and technology superpower is at risk. Not only do we need to ensure that the accounting industry is digitising their processes, but we also need to ensure the businesses they support are also investing in digital tools. Unlike other countries, for example, the EU's Digital Decade programme,[13] the UK has **no robust digital adoption strategy**. The majority of business investment incentives are also targeted towards **capital investment** meaning that businesses have little incentive to invest in digital technologies.

In order to ensure the accounting industry can thrive in the twenty-first century, every business in every part of the country needs to be empowered to make the most of technology. The UK Government must take a **bolder, more proactive approach**, and signal the importance of digitalisation, needed to drive investment and growth. We need a comprehensive **Digital Adoption Plan** that provides the right incentives and regulations, like e-invoicing, to help businesses in all sectors adopt digital tools and reap the benefits of AI.

11. www.sage.com/investors/investor-downloads/press-releases/2022/06/untapped-tech-adoption-could-boost-uk-economy-by-232-billion-annually
12. Be the Business G7 Productive Business Index
13. commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/europes-digital-decade-digital-targets-2030_en

Chapter 3:

Going for growth and unlocking the £2 billion opportunity

The economic potential of an AI 'Trailblazing' accounting and bookkeeping industry

£2bn
increase in GDP

19,942
additional jobs created

£352m
increase in tax revenues

£238m
increase in accounting exports from the UK

Sage

Using our survey of 1,126 senior leaders and decision makers within accounting and bookkeeping practices, we analysed how the industry is adopting and using AI, including future plans for growth and employment, the challenges, and support needed to use AI effectively.

Faster growth through the use of AI

Our research shows a clear correlation between AI and growth. The accounting and bookkeeping practices that are most advanced in using AI (the Trailblazers) reported significantly higher growth predictions over the next three years. They expect their revenue to increase **three times faster** than those businesses that are not planning to use AI (the Traditionalists).


Figure 7.
Projected revenue growth over the next three years

9%	13%	15%	27%
Traditionalists	Cautious Observers	Strategic Adopters	Trailblazers

Furthermore, despite some fears of AI replacing certain jobs, for the accounting industry, this higher growth is not likely to come at the expense of jobs. In fact, those at the forefront of AI adoption, are likely to see an increase in their staffing levels over the next three years. **Those most advanced in the use of AI (Trailblazers) expect to hire ten times more than those that are not using AI with no plans to (Traditionalists)**.

It is difficult to directly attribute these growth projections solely to AI, as faster growing practices may be in a better position to raise their investment in AI and staffing levels. However, given that many practices report they are already seeing benefits from the use of AI – especially in new commercial opportunities and services – there is a **strong case that the use of AI could lead to faster growth and more job opportunities**.

Figure 8.
Planned increase in staff over the next three years
(average – mean per segment)

3%	6%	18%	29%
Traditionalists	Cautious Observers	Strategic Adopters	Trailblazers
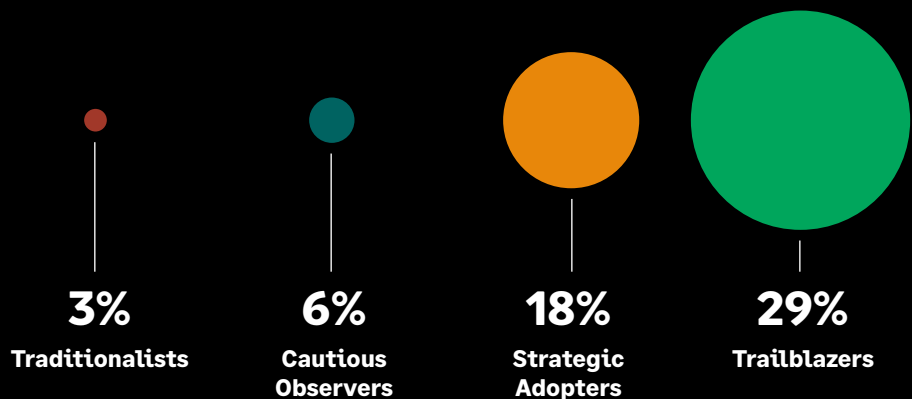
The £2bn Opportunity

Using existing data on the economic contribution of the accounting industry[14] to the UK economy, combined with our survey data, we have estimated the potential growth trajectory of the industry in the coming years.

Using data from those practices that say they have gone the furthest in implementing AI, we have created a benchmark for the economic potential of the industry if high-level AI adoption occurs across every practice.

Using this benchmark, we have modelled what the accounting and bookkeeping industry could look like if all practices achieved the same levels of performance as those that have gone the furthest in implementing AI (i.e. if all accounting practices mimicked the performance of the Trailblazers). We recognise that there are a number of important factors that influence the growth and performance of practices, not just the use of AI, and acknowledge the uncertainty around any estimates. This model estimates the maximum potential growth for the industry in a scenario where all practices were able to match the performance of AI Trailblazers. While caution should clearly be exhibited given the various assumptions, we think this provides a useful basis for considering the relative value and importance of improving the policy environment in AI for accountants and bookkeepers.

Figure 9.
Accounting industry performance (current projected, survey data) versus 'Trailblazers' performance

Demos analysis	Current projected performance from Q4 2022 to Q4 2025 (all practices)[15]	'Trailblazers' performance	Net benefit (above current projections)
Jobs created	19,350 jobs	39,292 jobs	**19,942 extra jobs**
Contribution to UK GDP[16]	£2bn	£4bn	**£2bn addition to GDP**
Tax revenues contributed	£352m	£704m	**£352m addition to tax revenues**
Exports revenue generated	£237m	£475m	**£238m additional exports generated**

Our analysis projects that, on average, the accounting and bookkeeping industry will grow by 6% between 2022 and 2025. In the 'Trailblazers' scenario (i.e. if the whole industry was performing at the rate of the trailblazers) the accounting and bookkeeping industry could grow significantly more; on average by **12% in real terms**[17]. **This is 6% larger than it is currently projected to grow**[18] and **higher than the rest of the economy is projected to grow over the same period**[19]. According to the Office for Budget Responsibility, real GDP is expected to grow 2.9% between 2022 and 2025[20]. This demonstrates a huge growth opportunity for the UK if we create a supportive policy environment that will unleash the potential of the bookkeeping and accounting industry.

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14. Accountants and bookkeeping practices that provide other services to other businesses and individuals, not in-house accountants and bookkeepers.
15. Based on size of sector in 2022
16. All figures are in 2022 prices
17. Information on the calculation is in Annex A
18. 6% growth on current projections + 6% additional trailblazers growth = 12%
19. Office for Budget Responsibility, Economic and Fiscal Outlook: March 2024, March 2024
20. Office for Budget Responsibility, March 2024 Economic and Fiscal Outlook – March 2024 Economic and fiscal outlook – detailed forecast tables: economy – Table 1.1 – Real GDP (2022 – 2025)

Characteristics of the Trailblazers

Trailblazers are a group of bookkeepers and accountants with very specific business demographics. Compared to the rest of the sample, they are much more likely to be:

Fast hiring – increased staff by 50%+ in the last year	**2.3x**
Fast growing – increased revenues by 50%+ last year	**2.1x**
Have large businesses as clients	**1.6x**
Growing their IT budget for internal tools	**1.5x**
Be based in Yorkshire and the Humber…	**2.1x**
…and London	**1.4x**
Larger – more likely to employ over 100 people	**1.8x**

The analysis above assumes that all practices can achieve the same economic performance as Trailblazers. However, this may not currently be realistic for many traditionalist firms due to several constraints, such as firm size, client type, budget, and IT infrastructure. These factors could limit the ability of some practices to adopt AI at the same pace as industry leaders. This is why it is important to reduce wider barriers to AI adoption and digitalisation more broadly. Other reports make recommendations for the steps needed to democratise access to digital technologies more broadly.[21]

21. Sage, Digital Britain Report, June 2022. Untapped tech adoption could boost UK economy by £232 billion annually (sage.com)
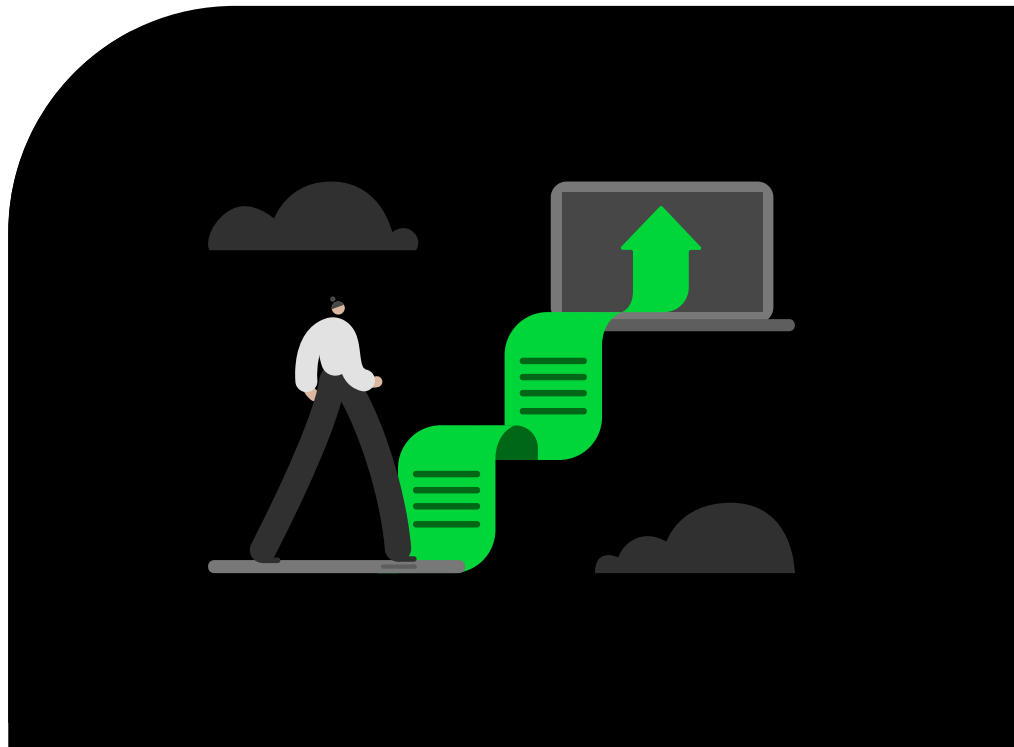
Demos analysis

In producing the above analysis we've made a number of assumptions. The five most important ones are below:

1. **AI adoption leads to faster growth:** The analysis assumes a causal link between the use of AI and increased revenue for accounting practices. While Trailblazers report higher growth projections, it is unlikely to be solely due to AI. Other factors influencing growth are likely to be present.

2. **Self-reported data:** This data is self-reported through a survey, and practices may have higher expectations than in reality.

3. **Trailblazers represent the achievable future:** The calculations assume the economic performance of Trailblazers is achievable by all accounting practices. This might not be realistic due to factors like firm size, client type, budget, or IT infrastructure.

   - It is clear that through our recommendations below, like improving AI skills or wider digital adoption, this would be more achievable.

4. **Linear economic impact:** The analysis assumes a linear scaling of economic benefits with AI adoption. This might be an oversimplification as the impact of AI might be non-linear, with diminishing returns at higher adoption rates. Moreover, if those behind on AI adoption are materially less productive on average than the industry as a whole, the boosts to GDP, tax revenues and exports could be less than assumed.

   - Further survey data would be needed to assess this, once adoption rates are high.

5. **External factors remain constant:** The report assumes the overall economic climate and regulations remain stable over the next three years. Unexpected events or policy changes could impact the projected growth of the accounting industry.

Conclusion:

Creating an AI-first future in accounting

Policy Recommendations

Based on the evidence in this report, we have set out four policy recommendations that will help prepare the accounting and bookkeeping industry for an AI ready future. As the next Government seeks to define the UK's position as a world-leader in AI safety and moves towards a tech-enabled economy through policies such as Making Tax Digital, we need to ensure the accounting industry can leverage AI technologies to boost growth and improve our competitiveness.

1.
A bigger, long term AI Skills Fund and reformed Apprenticeship Levy

The UK Government has already created a Flexible AI Upskilling Fund pilot. **We recommend that the AI Skills Fund is put on a longer-term footing, lasting five years to support the transition towards effective use of AI**. This money could be funded through departmental underspends, which was reported to be £96m in 2022/23 and totalled £2.17bn over the previous six years.[22]

The AI Skills Fund should also be expanded from £6.4m per year to £20m per year – enabling 8,000 businesses to be able to claim support through the fund – three times the levels that are currently eligible. The Department for Science, Innovation and Technology (DSIT) should work together with chartered bodies, educational institutes, AI technology developers and accountants and bookkeepers to ensure that the right skilling opportunities are available.

Alongside this, the **Apprenticeship Levy should be reformed to become a Growth and Skills Levy**, as already proposed by the Labour Party. This new levy should be used for shorter-term, accredited training programmes that upskill and reskill workers.

The Apprenticeship Levy was designed when there was little consideration to how AI would transform the world of work. In 2022-23, the levy raised £3.5bn but £418m in funding was unspent.[23] This investment would have a far greater impact if used by businesses to prepare their workforce for an AI driven future. We also recommend that businesses be allowed to pass on more of their unspent funds to their supply chain from 25% to 40% which could unlock tens of millions of pounds of investment for small businesses. Any funds remaining should be channelled into our biggest skills challenges, with at least 25% of underspent levy funds put toward the AI Skills Fund. This will ensure that funding is channelled into the areas needed to upskill the workforce.

2.
Extend full expensing of capital investment to digital technology

The UK is underperforming on the adoption and use of digital technologies compared to our international competitors. Untapped technology adoption could add £232bn to the UK economy.[24]

One in five accounting and bookkeeping practices said that greater investment incentives to buy AI software and tools would influence their decision making, but there are **no fiscal incentives** in place to drive up tech adoption currently in the UK. This is despite other countries embracing this approach, such as Australia's Small Business Technology Investment Boost.[25]

The UK should adopt a similar approach to Australia by extending the full expensing of capital to digital technology investments, not just plant and machinery. This would enable every business that invests in digital technology to cut their tax bill by 25p for every £1 that they invest. Expanding the full expensing regime would also build on an existing tax scheme and would not involve the considerable bureaucracy of designing a new tax relief or scheme from scratch.

22. feweek.co.uk/dfe-records-96m-apprenticeship-underspend-in-2022-23/
23. feweek.co.uk/apprenticeship-levy-cash-cow/
24. www.sage.com/investors/investor-downloads/press-releases/2022/06/untapped-tech-adoption-could-boost-uk-economy-by-232-billion-annually/
25. www.ato.gov.au/businesses-and-organisations/income-deductions-and-concessions/income-and-deductions-for-business/deductions/small-business-technology-investment-boost
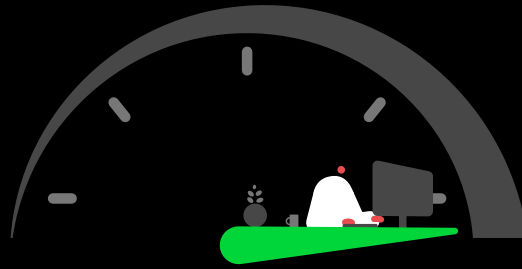
3.
Expand Making Tax Digital to include E-Invoicing

A third (31%) of accountants and bookkeepers want the UK Government to play an active role in preparing the industry for AI. One of the biggest levers is HMRC who were repeatedly referenced in our survey. HMRC's Making Tax Digital programme was first announced in 2015.[26] However, since then, technology has rapidly progressed. Consequently, the UK is now at risk of falling behind global competitors who are making use of innovative technologies, such as e-invoicing, to support business transactions and tax reporting. E-Invoicing also ensures real-time, quality data that enables better AI solutions and speeds up payment times.

We therefore recommend that e-invoicing should form part of a UK digital adoption strategy to spur the digitalisation of the economy and drive growth. This could include the phased introduction of B2B e-invoicing for larger businesses, so that there is investment in the technology to make e-invoicing a reality. Once e-invoicing is fully functioning across the UK economy, the Government should look at how to transition from Making Tax Digital to e-invoicing, using the real-time transactional data for tax reporting.

4.
Putting in place an AI regulatory framework

UK regulators play a critical role for those accounting and bookkeeping businesses that are most sceptical of AI. Those who are currently not using AI rated compliance challenges as the biggest potential risk facing their practice (33%).

As ACCA has noted, the accounting industry has a strong set of ethical principles that need to be integrated into the development of new technology. Accountants and bookkeepers are ultimately responsible for the decisions that are made using the technology, so they need to both understand how information is provided to them and to be confident that there are no biases or security risks in the process of utilising AI.[27]

Governments, regulators, professional bodies, software developers and accountants need to work together to develop and agree sector standards for AI in accounting. Additionally, software developers need to ensure that their governance frameworks adhere to the current regulatory environment, and they adopt and use the AI principles being set by the Government and regulators. Through a clear regulatory framework, supported by sector specific standards for AI in accounting, we can build trust and confidence across the industry, accelerate the pace of AI adoption, and add significant value to the UK economy and society.

26. researchbriefings.files.parliament.uk/documents/CBP-7949/CBP-7949.pdf
27. ACCA, AI (Artificial Intelligence) in the finance profession, August 2023.

ANNEX

This study was conducted by Strand Partners' research team on behalf of Sage and adheres to the guidelines set forth by the UK Market Research Society and ESOMAR. Strand Partners is a research, policy and communications advisory firm, specialising in insight-driven strategies. With expertise in conducting rigorous quantitative research, Strand helps organisations from global corporates to large charitable foundations make informed decisions.

Survey

This report is based on an online survey of 1,126 decision makers at accountants and bookkeepers with responsibility for strategic decision making and practice-wide knowledge carried out by Strand Partners.

This survey was carried out between 03/04/24 – 08/04/24 and was weighted through the use of data from the Office for National Statistics data on the number, turnover and size of accountancies and bookkeeping practices to ensure the representativeness of the sample.

Methodology

Survey respondents: 'Decision-makers' at accounting and bookkeeping firms, defined as:

- Founders
- Owners
- Senior managers with decision-making roles

Respondent Criteria:

- Participate in strategic decision-making (e.g., team leadership, technology adoption)
- Possess practice-wide knowledge (e.g. business status, future direction, key decisions)

Data Collection Method:

- Online survey
- Questionnaire length: 12 minutes
- Sample size: 1,126 respondents
- Fieldwork dates: April 3-8, 2024

Sampling: The sample's representativeness was validated using data from the Office of National Statistics on the number, turnover, and size of accountancies in the UK.

Demos economic analysis

The economic analysis was carried out by Demos in April and May 2024 based on the survey results.

The inductive analysis used data from the Office for National Statistics (UK Business, activity, size and location published 27th September 2023) to identify the size and scale of practices in the accounting industry.

This was then combined with data from Oxford Economics' "The Accountancy Profession in the UK and Ireland" – published in January 2024 – to develop economic contributions for the accounting and bookkeeping profession. Our research focused on accountant and bookkeeping practices rather than in-house accounting and bookkeeping practices.

Using these data sources, the following averages were created for GDP contribution, tax revenue and exports.

Area	Return per employee
GDP contribution	£103,032
Tax contribution	£17,939
Export contribution	£12,376

Assuming firms are motivated by marginal returns and that new employees would not be recruited unless they could maintain effective margins and finding no evidence of over supply of accounting services in the UK, we can assume that firms will target roughly similar levels of turnover growth through the addition of new employees.

Using the ONS's data on the size composition of firms in the industry (0-4, 5-9, 10-19, 20-49, 50-99, 100-249, 250+) and survey data questions on future hiring decisions over the next three years, we were able to project the total number of jobs to be created by each part of the industry based on their current plans.

To do so, we used the median number of employees per firm in each bracket (e.g. 174 employees per firm in the 100-249 bracket) and using the survey data on median job creation rate (e.g. 16.5% for 250+ firms and 5% for every other bracket) to calculate the total number of jobs created across the sector. As employment is skewed towards the largest firms (e.g. 250+), the significantly higher median job creation rate (16.5%) of these businesses creates an overall level of growth of 6% for the accounting industry as a whole.

Using this information and return per employee (see above) we were able to estimate the total growth for the accounting industry (excluding in-house accountants). We estimate 19,350 jobs will be created by the accounting industry over the next three years. Assuming a standard rate of return of £103,032 to GDP per employee added, this would lead to an additional £2bn contribution to GDP by the accounting sector. We then did the same process for tax contribution and export contribution. To avoid the distortion of inflation, figures are calculated in 2022 prices.

We then compared this with a model whereby all firms achieved the same levels of hiring growth over three years planned (median) by 'Trailblazer' accounting and bookkeeping practices using the same method.

Using our survey data on job creation plans and return per employee we were able to estimate the total growth for the accounting industry (excluding in-house accountants). We estimate an additional 19,942 jobs would be created by the accounting industry on top of the 19,350 jobs already planned to be created by the industry, leading to a total of 39,292 jobs that could be created if we were able to achieve the growth rates of Trailblazers across the accounting industry. Again, assuming a standard rate of return of £103,032 to GDP per employee added, this would lead to an additional £4bn contribution to GDP by the accounting sector (£2bn planned growth + £2bn higher 'Trailblazer Growth' = £4bn). We then did the same process for tax contribution and export contribution. Again, to avoid the distortion of inflation, figures are calculated in 2022 prices.

Firm size	Median job creation rate (current planned) over three years	Median: 'Trailblazer scenario' over three years
250+	16.5%	16.5%[28]
100-249	5.0%	16.5%
50-99	5.0%	16.5%
20-49	5.0%	16.5%
10-19	5.0%	16.5%
5-9	5.0%	16.5%
0-4	5.0%	16.5%

From this gap between the performance of the Trailblazers and the current growth plans, we were then able to calculate the potential improvement that could be achieved if all firms planned to act in the same way as trailblazing accounting and bookkeeping practices.

As employment is skewed towards the larger firms, the level of growth across the sector is not identical to the median growth, accounting for the lower figure of 12% growth for the sector as a whole.

We recognise that this model is built on a number of assumptions. Firstly, that practices are able to grow their businesses in the same way. Practices which are more focused on building clients within larger businesses compared to individuals or micro-businesses may be able to achieve faster levels of growth. Secondly, we understand that investment by accountants and bookkeepers in AI requires investment by their clients to also maximise the use of this technology which we cannot predict from our research. Thirdly, we recognise that our findings are based on the self-reported predictions of practices, which could be subject to bias and inaccuracy. However, with these caveats and as a modelling exercise, we think that this scenario provides a useful basis for considering the relative value and importance of improving the policy environment in AI.

28. It is a coincidence that the median for large practices is the same as the Trailblazers.

Sage