

## TheCityUK response to the Technology Adoption Review (February 2025)

### Introduction

TheCityUK is the industry-led body representing UK-based financial and related professional services. We champion and support the success of the ecosystem, and thereby our members, promoting policies in the UK and internationally that drive competitiveness, support job creation and enable long-term economic growth. The industry contributes 12% of the UK's total economic output and employs over 2.4 million people – with two thirds of these jobs outside London across the country's regions and nations. It pays more corporation tax than any other sector and is the largest net exporting industry. The industry plays an important role in enabling the transition to net zero and driving economic growth across the wider economy through its provision of capital, investment, professional advice and insurance. It also makes a real difference to people in their daily lives, helping them save for the future, buy a home, invest in a business and manage risk.

We welcome the opportunity to respond to the [Technology Adoption Review](#). Given our industry's significant contribution to the UK economy, it is positive to see financial and professional business services identified among the key growth-driving sectors in the government's [Industrial Strategy green paper](#). This review is a welcome signal that the government understands the importance of technology adoption in enabling our industry to deliver growth. The financial and related professional services industry is effectively a digital industry, given the central role that technology and data play across its ecosystem. Technology adoption will continue to transform the industry by driving efficiencies, enhancing security, optimising services and improving customer experiences and outcomes. This response highlights the key considerations to ensure that the industry can continue to embrace technology and innovation and secure its future international competitiveness and contribution as an enabler of growth, innovation and climate adaptation across the UK economy.

### The state of adoption

UK financial and related professional services have long been pioneers in adopting and shaping new technologies. The UK has been at the forefront of major shifts in the industry, from the evolution of digital banking to the invention of Open Banking, to Insurtech and, as of 2024, hosting 43% of all LawTech startups in Europe.<sup>1</sup> Across UK financial and related professional services, there is widespread exploration and adoption of technologies such as artificial intelligence (AI), distributed ledger technology (DLT) and digital assets.

The financial and related professional services industry is at the forefront of AI adoption in the UK. For years, the industry has successfully deployed traditional, predictive AI in areas such as operational efficiency while actively exploring newer, generative AI applications. The Bank of England and Financial Conduct Authority (FCA) 2024 survey on AI and machine learning in UK financial services found that 75% of firms are already using AI, with a further 10% planning to use it over the next three years.<sup>2</sup>

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<sup>1</sup> TheCityUK, 'Key facts about UK-based financial and related professional services 2024', (March 2024), available at [Key facts about UK-based financial and related professional services 2024 | TheCityUK](#)

<sup>2</sup> Bank of England and FCA, 'Artificial intelligence in UK financial services – 2024', (November 2025), available at: [Artificial intelligence in UK financial services - 2024 | Bank of England](#)

Equally, the continued adoption of DLT and digital assets, including digital money, is reshaping our industry. These technologies have transformative potential, and the total market for tokenised assets - i.e. assets represented in digital form using DLT - is predicted to be 10% of global GDP by 2030.<sup>3</sup>

Other technologies that are transforming our industry or have the potential to do so include: (a) cloud computing; (b) smart data and development of data-sharing frameworks - as being provided for under the Data (Access and Use) (DUA) Bill - that support Open Banking and Open Finance<sup>4</sup>; (c) digital verification services (DVS)<sup>5</sup>; (d) quantum computing and post-quantum encryption services<sup>6</sup>. The government should not consider these technologies in silo; their convergence will maximise opportunities for growth, innovation and competitive advantage. For example, AI and DLT can together enhance efficiency in post-trade processes by minimising manual interventions and streamlining operations. Combining AI with quantum computing has the potential to improve cybersecurity and enhance fraud detection by rapidly analysing large datasets to identify patterns and anomalies. The potential use cases between various technologies are vast, and their combination could unlock a much bigger scale of business transformation and innovation.

### Policy and regulatory environment

A proportionate, predictable and agile regulatory environment is key to fostering technology adoption in the UK. Regulation must keep up with the pace of technological advancements and their applications. A proportionate approach towards regulating technologies enables institutions of different sizes and business models to compete on an equal footing, protects consumers and ensures stability without impeding the pace of innovation, investment and development.

There have been positive steps to ensure an agile regulatory environment that supports technological innovation. For example, the UK's pro-innovation, sectoral approach to regulating AI is welcome and creates a strong foundation for leading growth sectors to harness the full potential of these technologies in various contexts. The government should continue to support the financial services regulators' efforts to implement a principles-based approach by regulating these technologies within existing frameworks rather than creating new AI-specific rules. We welcome that the government has signalled a similar non-statutory, 'regulation-by-application' approach to regulating quantum technologies, again to be led by sectoral regulators.

However, the UK must move more quickly to bring critical technologies, such as crypto assets, into the regulatory perimeter, allowing their potential to be realised sustainably while proportionately managing the associated risks. For example, while there have been several positive steps towards developing a UK regulatory framework for crypto assets, the FCA's regulatory regime for crypto assets is now not anticipated to take effect until 2026, despite HM Treasury (HMT) initially consulting on this regime in 2023. The UK is falling behind other jurisdictions, such as the European Union (EU) and Singapore, in implementing comprehensive crypto assets regulations that provide clarity for

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<sup>3</sup> BCG, and ADDX, 'Relevance of on-chain asset tokenization in crypto winter', (May 2022), available at: <https://web-assets.bcg.com/1e/a2/5b5f2b7e42dfad2cb3113a291222/on-chain-asset-tokenization.pdf>

<sup>4</sup> The Centre for Finance, Innovate and Technology (CFIT) estimates that Open Finance could generate over £30bn of growth in the UK economy; CFIT, 'Embracing the UK's Open Finance Opportunity' (February 2024), available at: [CFIT-Open-Finance-Blueprint.pdf](#)

<sup>5</sup> The UK government estimates that widespread adoption of DVS could generate a potential £4.8bn in added value between 2024 and 2030; The City of London Corporation, 'Vision for Economic Growth — a roadmap to prosperity' (xx), available at: [Vision for Economic Growth — a roadmap to prosperity](#)

<sup>6</sup> Quantum computing is predicted to generate up to \$2 trillion in value across four key industries including finance by 2035; McKinsey, 'Quantum Technology Monitor', (April 2024), available at: [Questionnaire on cross-border payments and data flows \(Page 1 of 12\)](#)

businesses, fostering technological innovation. Meanwhile, President Donald Trump's commitment to making the United States (US) "the crypto capital of the planet" will likely increase US competition. For further details and key recommendations on how the UK can be a leader in international digital assets adoption, please refer to our recent report [‘The digitalisation of UK capital markets: digitalised financial market infrastructure and tokenised bonds’](#).

As noted by the Chancellor in her 2024 Mansion House speech, the UK regulatory approach is often too focused on eliminating the risk of loss from the financial system. Decisive, collective action is needed to challenge the current culture of risk aversion and 'safetyism' that discourages innovation and investment. As part of this, the government needs to use its levers effectively to provide predictability from a policy and regulatory perspective, including how the government sets its own 'risk appetite', for example through the remit it sets the financial regulators. If not addressed, this will continue to have deeply negative consequences for technology adoption by the financial and related professional services industry.

The government has a facilitative role to play in ensuring that firms can adapt to and harness the full potential of key technologies. For example, in areas where the government needs to implement legislation first to enable regulation. The delay to expected secondary legislation relating to fiat-backed stablecoins is one example of this. However, the government has now announced that stablecoins will form part of a comprehensive crypto regime. While the government has announced a series of technology-related bills, a number of these address long-overdue reform and must be quickly implemented while allowing time for sufficient industry consultation. Greater pace, responsiveness and adaptability are needed to safeguard the UK's competitiveness and allow the benefits of these technologies to be realised sustainably while proportionately managing the associated risks. Likewise, despite announcing a UK Digitisation Taskforce to drive forward full dematerialisation of the UK's shareholdings framework in 2022<sup>7</sup>, this Taskforce is yet to publish its final recommendations. The UK must urgently deliver a modern UK shareholding framework that creates the right foundations to foster and leverage future innovation initiatives such as Open Finance and AI.

Consistency and clarity are key. The UK has shifted away from the planned phased approach to regulating crypto assets. In addition, while the pivot from a 'safety-first' to an 'opportunities-first' approach to AI is welcome, a consistent strategy for regulating technologies will provide confidence to firms to experiment. The [AI Opportunities Action Plan](#) is a welcome step in the right direction. Likewise, the [National Payments Vision](#), which set out the government's ambition to ensure the UK payments landscape keeps pace with technological advances, is a welcome strategy from the government. Long-term transparency of further changes to policy and regulations, as well as plans and timelines, is key to maintaining the UK's competitiveness in this area.

As acknowledged by the AI Opportunities Action Plan, firms need additional clarity on their regulatory expectations concerning the use of AI to support their confidence and accelerate adoption and innovation. In the case of AI, firms need further guidance on how these technologies fit into existing frameworks. At present, a lack of around regulators' interpretation of potential risks in certain AI contexts means that firms must take an overly cautious and burdensome approach to compliance, slowing the rate of AI adoption. Likewise, a lack of confidence in suppliers and the inability to control or have visibility over supply chains is a specific point of concern and leads to caution over the adoption of AI tools. Guidelines for model providers would enhance firms' confidence in their ability to meet

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<sup>7</sup> HM Treasury, 'Digitisation Taskforce – Terms of Reference', (July 2022), available at: [Digitisation Taskforce – Terms of Reference - GOV.UK](#)

regulatory expectations when adopting AI. The government should consider creating similar guidance to the Code of Practice for General Purpose AI model providers being drafted in the EU. We welcome the government's commitment to agile and accountable regulation in the AI Opportunities Action Plan, including the requirement for regulators to annually report on their efforts to enable AI-driven innovation and growth, including guidance publication timelines.

The government plans to introduce legislation focused on the most advanced generative AI models. Highly capable frontier models, which have the potential to impact society at a large scale, should receive increased scrutiny to identify and mitigate any systemic risks. However, generative AI has the potential to revolutionise financial services, and the industry's deployment of AI is reliant upon the large AI providers developing these technologies. Legislation must be targeted and proportionate. Moving towards a prescriptive approach like the EU AI Act or introducing undue regulatory burdens would create unnecessary complexity and cost by adding duplication with technology-neutral rules that are already in place, stifling existing operations, slowing innovation and productivity, and putting UK firms at a global competitive disadvantage. This is particularly important for small and medium-sized enterprises, which may be unable to resource their compliance with excessive regulatory complexities. Proportionate regulation will enable the identification and signposting of specific uses that pose low risks and encourage the development and adoption of these applications across the industry to foster innovation. Managing systemic risks is key. The government should use the planned AI Bill to provide clarity on the specific liabilities and levels of risk mitigation across the AI value chain to ensure that firms can deploy these technologies confidently and safely. Responsibilities should be appropriately allocated between AI providers and deployers, to avoid financial services firms having to manage this individually.

### ***International interoperability***

Many financial and related professional services firms are global companies. The international governance landscape for technologies is becoming increasingly complex and fragmented. A lack of international interoperability limits innovation and slows technology adoption. For example, while the UK's agile approach to AI regulation has created a space for innovation, in practice global firms will need to apply the 'highest watermark' set by other international regulators, limiting any adoption gains from an agile UK approach. The UK has positioned itself as a key international interlocutor on AI safety and standards through the AI Safety Institute. The government should leverage this position to promote a global governance framework for these technologies that avoids unnecessary burdens for businesses and supports technology adoption, while protecting citizens and maintaining their trust. The UK must influence and align with international standards, while not imposing additional or unnecessarily stringent requirements that could compromise its competitiveness.

### ***Digital infrastructure***

The UK's digital infrastructure must keep pace with rapid technological advances. The rise of generative AI has marked an inflexion point in the demand for data centres in the UK. Investment in digital infrastructure, alongside government intervention to support data centre planning, is key to support the financial and related professional services industry's future AI capacity needs. In the next 6 months, the government has committed to publishing a long-term plan for the UK's AI infrastructure needs, backed by a 10-year investment commitment. In making recommendations to the government, this review must address how this plan can best support the long-term adoption of AI – and other data and infrastructure-heavy technologies – across the UK.

Likewise, while the UK is currently a leader in early quantum computing developments and UK financial services firms are at the forefront of this revolution, major investment in quantum infrastructure is needed to maintain this global position in the commercialisation phase. According to research by McKinsey, quantum computing could potentially generate up to \$2 trillion in value across four key industries, including finance, by 2035<sup>8</sup>.

Given the high energy consumption and carbon emissions associated with generative AI, the government should take steps to 'green' this digital transition, for example by supporting the industry to innovate and adopt greener AI techniques, incentivising private sector investments in clean energy, and promoting responsible practices and principles for the use of AI and other energy-intensive technologies. The government should also consider how it can harness the opportunities of the twin digital and green transitions in a coherent and joined-up way across government departments.

### ***Access to skills and talent***

The next generation of UK citizens must be at the forefront of technology to ensure that the UK is seen as the preeminent global talent hub for the world's most important businesses. Technology adoption is reshaping the skills needs of key growth sectors. Financial and related professional services are at the forefront of technology adoption and use and so have become increasingly reliant on innovative technologies and associated skills. PwC's assessment is that sectors with greatest exposure to AI could see 4.8 times more labour productivity growth than others, while the Financial Services Skills Commission's (FSSC) [2024 report](#) on skills gaps identifies the particularly high impact of these technologies on financial services in comparison to other sectors. The UK must invest in its domestic talent pool, including improvements in secondary education, particularly STEM subjects and future technology skills. According to the FSSC, there is a need for strategic training, reskilling and internal mobility to fend off a widening skills gap. Closing the skills gap could boost productivity, contributing an additional £555.6m per year to the UK economy<sup>9</sup>. The government should accentuate policies for lifelong learning to reskill and upskill the population to develop and future-proof the UK's long-term domestic talent pipeline in a diverse and representative workforce. As the industry becomes increasingly reliant on technology, there is a growing demand for specialised digital talent, ranging from software engineers to data scientists and cybersecurity experts. A flexible and competitive visa system is needed to ensure the UK can attract and retain top global talent and innovation, bridge talent gaps, promote knowledge exchange, and drive the technological advancements necessary for long-term economic growth and global leadership.

### ***Fostering Innovation and Growth***

As recognised in the AI Opportunities Action Plan, homegrown technology will bolster future technology adoption and innovation across the UK by fostering a self-sustaining ecosystem of innovation. It is vital that the government creates the conditions to nurture innovative home-grown companies throughout their growth journey, leveraging the UK's world-leading research ecosystem and supporting UK university spinouts, start-ups and scale-ups. The government should consider how research and development (R&D) investment incentives can be adapted to support services companies. For example, continued funding and grants for technology R&D through initiatives like Innovate UK can foster technology innovation and adoption, particularly for small and medium sized enterprises (SMEs) that may struggle to invest in AI capabilities on their own.

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<sup>8</sup> McKinsey, 'Quantum Technology Monitor', (April 2024), available at: [mckinsey.com/~/media/mckinsey/business\\_functions/mckinsey\\_digital/our\\_insights/steady\\_progress\\_in\\_approaching\\_the\\_quantum\\_advantage/quantum-technology-monitor-april-2024.pdf](https://www.mckinsey.com/~/media/mckinsey/business_functions/mckinsey_digital/our_insights/steady_progress_in_approaching_the_quantum_advantage/quantum-technology-monitor-april-2024.pdf)

<sup>9</sup> Financial Services Skills Commission, 'Firms must act now to become skills-based, or risk a deepening workforce crisis', (November 2024), available at <https://financialservicesskills.org/news/firms-must-take-skills-based-organisation-approach-to-avoid-workforce-crisis/>.