

How will AI transform financial services?

The chair opened the panel on the transformation of the financial sector through artificial intelligence (AI), explaining that the discussion would examine how AI is currently being applied across different segments of financial services, the value it generates for institutions and clients, and the practical opportunities and challenges arising from its adoption.

1. AI adoption in the financial sector: current state and opportunities

1.1 AI uptake and impact

An industry speaker noted that a recent survey of 165 CEOs shows that 17 % of NYSE-listed companies and 16% of European respondents have achieved revenue or cost improvements of more than 10 % from AI initiatives and these leaders are five times likelier than peers to say projects exceeded return on investment expectations (25% versus 5%)¹. Many other firms, however, still struggle to measure the financial impact of AI. The gap between leaders and laggards is widening, reflecting the increasingly uneven pace of AI implementation across the sector. Compared with other regions, European financial institutions remain more compliance-driven, partly due to stricter regulation, whereas US firms generally benefit from larger technology budgets.

An official underlined the transformative economic potential of AI, which could increase productivity in advanced economies by up to 30 %, with major implications for growth and resilience. Given that the financial sector is inherently data-driven, it is particularly well suited to the deployment of AI technologies. In the UK, data collected by the Bank of England and the FCA shows that AI adoption is accelerating rapidly: over 75 % of UK financial firms now use AI at scale, up from 58 % just two years ago. Within the financial sector, insurers and international banks currently lead in AI deployment, while adoption in other market segments remains at an earlier stage but is gradually catching up.

1.2 Main use cases and benefits

An industry representative underlined that AI is a key driver of innovation and performance in their firm. The company was among the first in the financial industry to deploy machine-learning models for fraud detection in 2010, and their use was scaled by 2014 after early results demonstrated exceptional accuracy in identifying fraudulent activity. While fraud prevention remains a strong use case, the firm is now broadening its deployment of AI through large-language and generative

models, building on the safety and trust guardrails established for earlier systems.

An official highlighted that AI is becoming indispensable for securing instant payments and for strengthening cybersecurity and compliance across the financial sector. Fintechs are also playing a central role in this transformation, using AI to enhance efficiency and develop new financial services. In financial crime prevention, AI models are used to detect suspicious patterns and reinforce anti-money-laundering (AML) controls by analysing vast datasets in real time. In fraud detection, behavioural-analysis tools identify and predict irregular transaction patterns before they cause financial losses. AI is also reshaping SME financing, as credit-assessment systems now leverage e-commerce and transaction data to evaluate creditworthiness and deliver rapid, data-driven lending decisions for businesses with sufficient data histories. On the consumer side, new applications are helping individuals manage their finances more effectively, from automated budgeting tools that track spending behaviour to digital assistants that monitor investments and send reminders for key financial actions.

A second official explained that in the UK financial sector, AI adoption is growing fastest in use cases focused on efficiency improvements, including process optimisation, cybersecurity, and fraud detection. The next wave of expansion is expected in customer support, AML controls, transaction monitoring, and product marketing. More than half of UK use cases already involve some level of automated decision-making, and around one-third rely on third-party providers. For now, most initiatives concentrate on enhancing efficiency in existing processes rather than introducing new business models or new decision paradigms in areas such as algorithmic trading, credit pricing, or hedging. Nonetheless, experimentation is expanding rapidly, signalling the next stage of transformation.

A third official noted that central banks are also experimenting with multiple AI applications aimed primarily at improving efficiency, many of which are expected to evolve into routine operational tools in the near future. One important application relates to monetary policy analysis and the understanding of transmission channels, which depend on processing large volumes of granular, real-time data. Unlike traditional econometric models that often struggle to capture the non-linear nature of economic relationships, AI can handle this complexity and enhance the interpretation of key variables such as inflation, employment, and potential growth, thereby strengthening the analytical foundations of monetary policy. Another

1. Source Oliver Wyman Forum survey

important application relates to financial stability, where AI helps map the intricate interactions between banks and non-banks, providing a more comprehensive view of market dynamics and interconnections.

2. Challenges, risks and supervisory responses

2.1 Operational challenges

An official noted that while the potential benefits of AI are immense, they are accompanied by significant challenges and risks. In assessing these risks, the guiding principle should be the sector's continued ability to provide financing to the real economy.

At the level of individual firms, three areas require particular attention. First, data quality is fundamental, since poor data will inevitably undermine the effectiveness of AI models. Second, as AI models become more sophisticated, concerns increase over their explainability, predictability, and accountability. When models are too opaque for users to understand how outputs are generated, it also becomes difficult for senior executives to assume responsibility for risk decisions. Third, the management of third-party relationships with e.g. cloud and data service providers is becoming increasingly critical, as greater reliance on external providers heightens operational and vendor-risk exposure.

Another official explained that applying AI to banking supervision also presents several issues. As models become more sophisticated, their explainability and transparency tend to decrease, making it more difficult to justify supervisory decisions. Authorities must therefore ensure that human oversight is maintained, data quality continuously improved, and model performance rigorously monitored to preserve accountability and trust.

A further challenge arises in conduct supervision. Under the EU AI Act, credit-scoring models for individuals are classified as high-risk and will fall under the oversight of financial supervisors. This task is particularly demanding, as supervisors will need both to develop their own AI models for supervisory purposes and to understand and assess those used by financial institutions, in order to detect and prevent bias or discrimination in credit allocation.

2.2 Financial stability and systemic risks

An official observed that beyond micro-prudential risks relating to individual institutions, AI also introduces systemic risks that may threaten the stability of the financial system. Even a safe adoption of AI at firm level does not guarantee system-wide resilience, as certain vulnerabilities may remain unaddressed, such as concentrations of exposure or common weaknesses in models and data that can create bias, inefficiencies, mispricing of risk, or misallocation of credit to the real economy. These issues could be further amplified during periods of market stress.

Three systemic risk channels require close monitoring: market-wide dynamics, cyber risk, and supplier

concentration. Market-related risks include AI-driven herding, correlated positions, unforeseen interactions between autonomous AI agents, and heightened volatility resulting from the large-scale exploitation of arbitrage opportunities. Cyber risk represents a second channel, which AI can both mitigate and exacerbate. While AI enhances defensive capabilities, it can also enable more sophisticated cyberattacks, particularly when combined with advances in quantum computing that could compromise encryption and data security. The concentration of activity among a few major AI, data and cloud third-party service providers constitutes a third systemic risk, as disruptions at one major provider could have far-reaching consequences across the financial ecosystem.

The official noted that the UK authorities are intensifying their monitoring of AI-related risks and strengthening international cooperation, including through the FSB, to ensure that adoption proceeds safely and that any need for additional regulation is carefully assessed. The broader societal implications of AI, particularly its potential impact on employment and workforce skills, also need to be clarified, calling for a balanced and analytical approach from public authorities as they oversee this transition.

3. Future evolutions of AI

3.1 Scaling up of AI

An industry speaker highlighted that the financial sector is moving from a pilot-heavy phase, where institutions focused on numerous small, often low-impact initiatives, towards large-scale, ROI-driven cross-functional AI transformations that cut across the front office, risk management, and operations. Over the next 12 to 24 months, this shift is expected to accelerate, with AI increasingly embedded at the core of financial processes, while humans remain in the loop to define objectives and operational guidelines and to handle exceptions. The speaker also cautioned against developing AI systems in silos, stressing that firms need a holistic approach that considers both internal and client-facing uses of AI.

Lending illustrates this trajectory. Marginal lending costs are expected to fall sharply with the growing use of AI. In the SME segment, lending process costs have already declined by about 70 % through the use of transactional and point-of-sale data. This not only reduces the cost of serving SME clients but also expands the addressable client base. Allowing banks to reach customer segments that currently lack access to financing is particularly valuable in Europe's financing-constrained environment and could have a significant impact on the economy. Concepts of fully AI-run banks are even starting to emerge. While regulatory limits will inevitably restrict what such platforms can achieve, they illustrate the new types of projects and operating models that AI could make possible.

An official noted that a key remaining challenge to drive AI adoption is to ensure that traditional financial institutions fully integrate AI tools, whether by developing

capabilities in-house or by partnering with agile fintechs. Collaboration between both sides will be essential to accelerate innovation, improve efficiency, and strengthen resilience across the financial ecosystem.

3.2 Changing customer relationships and competitive dynamics

An industry representative suggested that in the future, both wholesale and retail clients will be AI-augmented, supported by intelligent agents capable of benchmarking offers and providing real-time advice. Financial institutions will therefore need to rethink how client interaction and loyalty evolve in an environment where financial services are increasingly mediated by two agents, the firm's and the customers'.

Another industry representative agreed that AI will profoundly reshape client relationships, although the direction of this evolution remains uncertain. Systems capable of delivering highly accurate and personalised recommendations could enhance customer loyalty, yet they will also intensify competition by enabling rivals to make more relevant and effective offers. In this new environment, customer trust will become an essential differentiator, requiring firms to use AI in a secure, transparent, and responsible manner. Success will ultimately depend on the ability to combine technological excellence with human capability, managing both AI agents and their users effectively, supported by cultural and organisational adaptation.

3.3 The rise of generative and agentic AI

An industry speaker explained that their firm currently has more than 100 active generative-AI use cases, particularly in customer servicing. Although clients may not see these applications directly, they enable customer service agents to resolve queries more efficiently and accurately. AI is also being applied in the travel segment, where it helps agents tailor and personalise travel experiences for clients around the world.

Responding to a question from the chair about the opportunities offered by agentic AI, the speaker described this technology as one of the most promising developments in the field. To illustrate its potential, a near future can be imagined in which customers rely on personal AI agents capable of autonomously arranging complex transactions, for example, finding the most affordable city for a concert and seamlessly booking the associated flights and hotel.

Agentic AI offers immense promise, and its momentum is strong, the speaker noted, but it also raises significant challenges that must be carefully managed to ensure responsible deployment grounded in trust and safety, notably in defining how far autonomy should extend and where human oversight remains essential. Meeting these challenges will require both clear rules on how such systems operate and an adequate infrastructure and governance to support their responsible use. Because no single actor can achieve this alone, broad and sustained collaboration across the financial ecosystem, involving banks, fintechs, payment providers, technology firms, and regulators, will be essential to establish common standards, develop the necessary safeguards and

governance frameworks, and ensure that the technology reaches its full potential while maintaining confidence and security across the ecosystem. A recent example of this collaborative approach is the launch of Google's agent payment protocol, an open protocol designed to securely initiate and transact agent-led payments, developed jointly by major payments and technology firms.

4. Conditions for an effective and responsible implementation of AI

4.1 Embedding AI in organizational culture and processes

An industry representative noted that while an MIT study found 95% of firms have yet to see a meaningful impact from AI, their bank is among the 5% that have achieved tangible results. This success stems from making AI both an operational and cultural reality, generating significant capacity gains across the organisation. Their bank has undergone a deep transformation to become "AI-native", embedding AI into its culture and processes so that almost all of its employees have access to an internal enterprise platform. Employees receive regular prompts encouraging practical adoption, with the goal of integrating AI into all aspects of work and making it accessible to everyone, everywhere, and in everything they do. Every employee is also required to complete AI training, reflecting the firm's conviction that cultural integration and upskilling are essential prerequisites for effective innovation.

A second pillar of this transformation is the creation of an AI Hub, which centralises AI capabilities and focuses on agentic AI. One in three employees, including non-technical staff, have developed their own AI agents. In addition, the bank is in the early stages of deploying "digital employees" that perform concrete tasks such as repairing code vulnerabilities or creating and correcting payment instructions. Some of these "digital employees" already have logins and will soon function as integral members of staff, with their own email and Teams accounts.

Another industry representative stressed that workforce readiness is a critical success factor for AI adoption. Simply deploying AI tools on employees' laptops is not enough; firms must invest heavily in training and cultural adaptation to empower their workforce and ensure that AI adoption is effective.

Addressing lessons learned from public authorities in adopting AI, an official explained that human capital is a key factor in scaling its use. Challenges in this area can be addressed by centralising expertise to build a critical mass of people working on AI projects, while maintaining strong links with other departments to prevent isolation. It is also important to offer an attractive value proposition, for example by enabling staff to contribute to long-term AI projects with significant economic and social impact. Communication and training also play a vital role in familiarising employees with AI tools and involving them in the development and implementation of use cases.

Employees must be supported throughout this process. At their institution, a Eurozone central bank, about one-third of the workforce already uses agentic AI through pre-programmed agents, with their progress closely monitored to assess their usefulness for different tasks.

4.2 Leadership, communication and governance

An industry representative emphasised that effective leadership and governance are decisive for the success of AI projects. Initiatives confined to IT departments rarely deliver lasting impact. Meaningful results occur when ambitions are set from the top and when the financial impact of AI projects is clearly monitored and managed.

Another industry representative added that progress in both data and AI must be driven from the top. Sustaining momentum requires strong commitment from management, continuous communication about the strategic importance of data, and clear lines of accountability.

4.3 Data and computational capacity

An industry speaker highlighted that a key driver of their bank's AI transformation has been the enhancement of its data and analytics platform, as high data quality and effective data management are essential to achieving meaningful results in AI deployment. This effort includes the use of intelligent document processing to convert unstructured data into structured formats and metadata classification to accelerate access and improve usability.

An official explained that many central banks need to expand their computational capacity to support more advanced AI applications. This can be achieved through partnerships that provide access to high-performance

computing resources. A notable example, potentially replicable in other Member States, is the memorandum of understanding signed by the Spanish central bank with an AI gigafactory in Barcelona, which offers advanced computing capabilities beyond what legacy systems can deliver. Data sharing also remains a major obstacle. Although technological solutions now make it possible to use data with sufficient anonymity and confidentiality, cultural resistance among institutions continues to hinder progress. Overcoming this barrier will require greater trust and a more collaborative approach to data sharing, enabling broader adoption of AI.

4.4 Delivering tangible customer and societal benefits

An official closed the session by emphasising the need to refocus technological innovation on tangible consumer benefits, ensuring that new technologies, such as AI, deliver visible value to those who actually use them.

The official also underlined that financial innovation is essential to Europe's long-term competitiveness, which should be pursued in a way that reflects and protects core European values such as trust, security, fairness, and consumer protection. Regulation should not be the sole driver of progress but should act as an enabler, ensuring that innovation develops within the framework of these shared values. Examples such as quantum-proof authentication technologies (security systems designed to withstand cyberattacks from quantum computers) illustrate how European firms can develop innovations that combine technological advancement with the preservation of trust and security.