From Digitalisation to Resilience: What Artificial Intelligence Brings to Banks, Staff, and EU Competitiveness

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The wave of digitalisation that has swept through the European banking industry over the past decade has already significantly reshaped business models, restructured work processes, and challenged long-held assumptions about the role and functioning of banks. Artificial intelligence is accelerating all of this, while also bringing an entirely new dimension of possibilities and risks, both for the banking system and for Europe as a whole.

From a central bank perspective, artificial intelligence is not just a technology story. It is an economic story, a story of financial stability, and it also opens a new chapter in the story of the competitiveness of the European economy. The key question is not whether artificial intelligence will transform banking. That is already clear today. The question is whether Europe will be an active participant in this transformation or merely a passive observer.

EU competitiveness will increasingly depend on digitalisation. In his report on Europe's competitiveness, Mario Draghi warns that the EU is missing opportunities to boost productivity through the digital revolution, citing the technology sector as one of the main reasons for the gap with the United States. Only a handful of leading global tech companies are European, and the European digital ecosystem remains heavily dependent on non-EU software and cloud providers, primarily US firms, creating strategic vulnerabilities.

We do not have to look far to find an example. Lately, the topic of Anthropic's new LLM model Mythos has been dominating the AI and cyber security related headlines. While the new highly advanced large language model, reportedly capable of identifying and exploiting vulnerabilities with unprecedented effectiveness across a wide range of software, has not been made public yet, the model has been shared with approximately fifty firms, all from the United States, that build or maintain critical software infrastructure. No European firms, and even more importantly, neither European supervisors nor regulators have access to the Mythos model yet, meaning we are assessing the risks without direct insight, which makes it more difficult to design appropriate measures. However, supervisory authorities worldwide, including the European Central Bank, have been examining and raising awareness of the risks linked to the use of these emerging technologies for quite some time. While Mythos might be the ice breaker, more such models will come in the future, further exacerbating the structural shift in the cyber threat environment.

This situation underscores the urgency for Europe to move beyond the static industrial structure. We must significantly strengthen our collective efforts to close the innovation gap with the US and China, especially in advanced technologies. We need to accelerate innovation cycles, both to maintain leadership in existing industries and to develop new

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technologies. Europe does not lack ideas or ambition, but the key is to take the next step and start successfully translating innovation into commercialisation. The revolution brought by artificial intelligence offers Europe a new opportunity to address existing weaknesses as well as the strategic autonomy of Europe.

Banking is among the sectors in Europe where artificial intelligence is being adopted the fastest and most extensively. Supervisory data give us a privileged insight into the actual use of these tools, which are already used by almost ninety percent of large European banks, with the trend only accelerating. The human role in the process remains crucial, as AI models currently support decisions but do not yet replace credit officers or fraud investigators. However, caution should not be mistaken for maturity. Data governance frameworks remain incomplete in many institutions, and self-assessments for compliance with the AI Act are still in early stages. The concentration of critical functions among a handful of global technology providers creates systemic interdependencies that were unimaginable a decade ago. Resilience is thus already today inseparably linked to digitalisation. Banks must adapt, transform their business models and processes, and it is crucial that this transformation is accompanied by strong governance, effective risk management, and compliance with an increasingly complex regulatory environment.

Such changes affect not only bank operations but also the people within them. It is therefore not surprising that the impact of artificial intelligence on the labour market is causing significant concern today. As views are often overly simplistic, I would like to add a few thoughts from the perspective of the banking sector. The long-term trend in European banking employment is one of steady decline: the sector lost about a fifth of jobs between 2007 and 2022. This is largely due to digitalisation, consolidation, and the rise of online banking, which have transformed banking even before the rise of artificial intelligence. Importantly, the ECB's research for the period of rapid machine learning development between 2011 and 2019 shows that occupations most exposed to AI actually saw an increase in employment share, suggesting complementarity rather than simple substitution. The fact is that AI will create new winners and losers in the labour and capital markets. These effects will shape consumption, access to credit, and ultimately how households and firms respond to monetary policy impulses. Policy must therefore go beyond regulation. Sustained investment in skills, enabling reskilling and upskilling of the existing banking workforce, is urgently needed.

The question of distributional effects is, of course, also important for monetary policy and for central banks as the guardians of macroeconomic stability. At central banks, we are not merely observers of digital transformation. We are participants in it. In European central banks, AI is already embedded into economic analyses, forecasting, and supervisory data processing. We also conduct cyber resilience stress tests and build safeguards appropriate for institutions whose credibility depends on the integrity of every data point and every decision. At the same time, we are aware of the limitations and believe that human judgment and critical thinking must remain at the forefront of central bank processes, because trust in monetary institutions ultimately means trust in the people behind them, not in the algorithms that assist them.

Let me conclude with a direct message. The transition from digitalisation to resilience is not automatic. Resilience must be built through better data governance, robust operational frameworks, investment in people, and, last but not least, an appropriate regulatory environment based on principles and proportionality. European ethical and regulatory standards represent a significant advantage in a world that is increasingly sceptical of unregulated artificial intelligence. The key is to turn this advantage into competitive strength and not allow it to become an additional barrier. The importance of AI for European banking sector and the broader economy is immense. We have the institutions, knowledge, and values to take the lead. Now we only need enough ambition and coordination to act with the determination and speed that the situation demands.