# Digitalisation trends in the financial sector and policy implications

# 1. Current market trends, future prospects and challenges

#### 1.1 State of play of digitalisation in the EU financial services sector

The Chair indicated that digitalisation is rapidly changing the world, and financial services are one of the most obvious sectors for embracing the vast range of new opportunities that technological advancement brings, given the strong data-driven nature of the sector. That has been a trend for some time, but the experience with Covid has further accelerated it and has changed how technology is used and perceived by the wider public.

An industry representative suggested that one way of looking at the progress of digitalisation in the financial sector is to take a historical perspective. While many people consider digitalisation to be something that is of the current time, it has in fact been taking place over many decades. The first ATM in Europe was introduced in 1967. Telephone banking came into effect in 1984. Mobile banking started in 2008. Digitalisation is therefore a long-standing trend of modernisation in the financial services sector aimed at removing manual processes and optimising human interaction between consumers and financial institutions.

A new wave of digitalisation has come in 15 years ago with cloud computing that was launched in 2006 and also artificial intelligence (AI), machine learning and the blockchain. The EU is still in the early days of this new phase of digital modernisation. Some other parts of the world are slightly ahead. For instance, in the US, according to Gartner, 81% of enterprises have applications in the cloud and they are using it pervasively throughout their operations. There is also rapid adoption of cloud in Asia Pacific and Latin America.

A second industry representative agreed that these technologies are the ones that are the most relevant for the financial sector. Cloud services is critical for the digitalisation process with financial players increasingly moving IT infrastructure and workloads to the cloud. Al allows banks to go to the market quicker and to develop services that are more personalised with less expense. Blockchain also has significant potential, although it is still at an experimentation stage in most cases.

## 1.2 Key trends driving digitalisation and main benefits from digitalisation

An industry representative suggested that three key trends are driving digitalisation in the financial sector. First and foremost is customer experience. Many organisations have embraced digitalisation to improve customer experience. This was already the objective of the previous wave of digitalisation with ATMs and mobile

banking. The second trend is using data and analytics for developing new revenue streams and improving risk management. Third, is the modernisation of core systems, which is necessary to change organisations and the way they operate and also to reap the full benefits of enhancements in terms of customer experience and data analytics.

A public representative suggested three types of improvements that may be provided by digitalisation. The first is that digitalisation is part of the modernisation of financial services, helping to improve customer experience and to facilitate the provision and accessibility of products. This is progressing but much still remains to be done in this area. An additional advantage of digital financial services and products is that they can be easily rolled out over the entire single market, if the underlying regulatory framework is sufficiently harmonised. The second level of enhancement is using digital tools to improve the efficiency of the processes of financial institutions and public authorities. There is also a great deal to explore in that respect, with significant room for improvement, especially on the public sector side. Anti-Money Laundering (AML) rules applied to cryptoasset transfers is a good example of an area where digital tools can significantly alleviate the administrative burden for supervisors, service providers and customers and also enhance the effectiveness of reporting and supervisory work. This is an area where more investment is needed and possibly the digital euro will be a driver in this respect. The third level is that digitalisation can potentially support product and business model innovation, helping not only to introduce new ways of providing financial services but also to create completely new services such as those that may be developed under the MiCA framework. That is the most challenging part due to the rapid pace of change. It has to be ensured that a business-friendly and innovation-friendly environment can be created and maintained in terms of regulation across the European Union with an appropriate balance with customer protection and risk mitigation aspects. The public representative added that digitalisation can also help to enhance the financial literacy of customers and entrepreneurs. A strategy should be developed by the public authorities in this respect.

The Chair agreed that digitalisation presents many opportunities in terms of enhancing supervision and developing cross-border business, but this also requires appropriate cooperation between supervisors. Digitalisation also offers many possibilities for enhancing financial literacy, which is a responsibility that should not only lie with the public sector, but to which the industry should also contribute. Digital tools can indeed facilitate the provision of information and explanations on products and product comparisons and provide information flow that may support customers in their financial decisions.

An industry representative highlighted four key trends on which their organisation, a leading fintech, is focusing for the future. The first is open finance¹ and open data, building on open banking on which Europe led the way with the payment service directive (PSD2). This is about enhancing data use and sharing, not only financial data but also data from big techs for example, and empowering customers with their data, so that they can make better financial decisions and get better services and offers.

The second key trend is instant payments. Proposals are underway at the EU level and there is already great work being done at the national level with instant payment systems such as iDEAL in the NL for example. Instant payments should be made available throughout Europe at the lowest cost possible and there should be an ambition to extend this globally.

The third trend is digital identity. The EU is making significant progress in this space, although aiming for 2025 would be better than 2030. Enhancing the way people engage with financial services and data will depend on appropriate authentication and identity verification processes and also empowering people to have control over their digital identities.

The fourth trend is Web3. Cryptoasset trading is only a small part of what can be done with the technology underlying cryptoassets, which may support further digitalisation through tokenisation in particular. Whether it is digital identity or loyalty there are also many interesting use cases for an immutable and decentralised ledger. Building on MiCA, the EU has a major opportunity to lead the way in this area.

Additionally, thanks to digitalisation, financial services providers may shift from acting mainly as intermediaries in the middle of the ecosystem to creating value for customers by helping them to get better services and deals and connecting financial services with the nonfinancial world. Financial services should be a one-stop shop providing a range of services that may improve people's lives. For example a financial app should not only allow customers to pay for their airline tickets but should also help them to solve problems e.g. receiving automatic refunds in case of delays.

#### 1.3 Challenges from digitalisation

An industry representative noted that going through a digitalisation process is a complex journey for any company. This usually comes from employee pushback, budget constraints and a lack of expert skills. For a regulated company there is an added complexity and cause of delay coming from regulatory and supervisory requirements. An additional issue for regulated entities is that digitalisation might lead them to operate in a new ecosystem with new players such as third-party technology and data providers that may not be subject to the same level of regulation.

A Central Bank official suggested there should be talk of the readiness and feasibility of all parts of society to access digital financial services. With a further move to digital, there is a risk that some parts of society will be excluded. Steps should be taken by public authorities and market participants to help customers if new technologies and digital services add complexity in some areas or create barriers to access for certain categories of customers. Business models are becoming increasingly complex, and sometimes consumers do not know who is providing the service. If something goes wrong consumers do not know where to get help from and who are the regulators in charge. Further cooperation is needed between the public authorities and the industry to address these issues. This will reinforce customer confidence which is essential for the development and credibility of these new services.

A policy-maker agreed that innovation can only succeed, in particular in financial services, if users have confidence that they do not incur disproportionate risks. Managing risks and taking care of user interests is indispensable for more and faster innovation in the financial sector.

# 2. Policy approach: key objectives, success factors and main challenges

#### 2.1 Update on the EU digital finance policy framework

A policy-maker stated that there has been significant work on a comprehensive digital finance agenda since 2020 when the Digital Finance package was presented by the European Commission. The aim is to regulate in a way that preserves the capacity to innovate. The EU will be the first major jurisdiction to have a comprehensive framework for crypto assets with the markets in cryptoassets (MiCA) regulation which is in the final stage of preparation. The Digital Operational Resilience Act (DORA) was recently finalised. It is the first supervisory framework for addressing cyber risks and Information and Communications Technology (ICT) risk management in the financial sector and takes into account changes in the value chains with the increasing role of critical thirdparty tech providers, for which an oversight framework will be implemented.

There is also close work with the European Central Bank (ECB) in view of the Commission proposal for a digital euro, where Europe is again one of the leading jurisdictions to work on a central bank digital currency (CBDC). For a digital euro to succeed a number of crucial issues have to be addressed. One is the risk of disintermediation, so the digital euro should remain mainly as a means of payment and not become a significant store of value. There are also privacy and data protection concerns that need to be looked at, as well as anti-money laundering and terrorism-financing aspects (AML-FT) that have to be addressed. The aim is to make a proposal on the digital euro in the early part of 2023.

Finally, open finance is the next step in the EU digital finance agenda. The work on open-finance builds on a thorough review of the Payment Services Directive 2

Open finance refers to third-party service providers' access to (business and consumer) customer data held by financial sector intermediaries and other data holders for the purposes of providing a wide range of financial and information services.

(PSD2) experience. It aims to foster innovation, while giving consumers and business users better control over their financial data and making sure that there is a level playing field across different sectors.

### 2.2 Challenges regulators and supervisors are facing related to digitalisation

The Chair noted that digitalisation is a significant challenge for all market stakeholders. The right skill set and resources, both in the companies trying to exploit these opportunities and in the supervisors and regulators, is key. In addition, financial regulators and supervisors need to consider many aspects in the design and implementation of digital policies such as balancing innovation and risk mitigation and also ensuring a level playing field between existing players and newcomers in the market. One question to be considered is whether financial supervision needs to evolve in the digital world in order to take these different objectives into account.

A policy-maker emphasised that, with digitalisation, regulators and supervisors are facing similar challenges in terms of skills in particular. Supervisors and regulators need to develop their technical skills and human resources to properly supervise and regulate these new developments. However many of them are still in the early stages of creating and implementing the expertise and instruments that are needed.

An industry representative observed that getting the regulation related to digitalisation right in the financial sector is going to be challenging. Disruption is coming to numerous areas of financial services and this has only started. Regulation will be essential for making sure that end users get a better deal as a result of these evolutions. From a regulatory perspective one question is also whether something is a real innovation or just a rebrand or a modification of an existing product or service. While genuine innovations may solve some problems, they will probably also create some new ones. If this is not the case, then this is probably not a real innovation.

The objectives of most EU digital regulations are appropriate, the industry speaker believed. The challenge is getting the details right, particularly in terms of keeping up with how rapidly technology is changing. When rules are written they must still be relevant several years later, which is a major challenge. In addition, while Europe is leading on many aspects of digital finance regulation, there are areas where Europe may be leapfrogged by other jurisdictions, for example with Australia moving fast on open data or the US and Gulf countries progressing in the areas of crypto and stablecoins. Europe needs to make sure it retains leadership, not just so that European citizens benefit from the potentialities of digital finance but also so that European fintechs and legacy banks can leverage these opportunities and take advantage of them to further extend their activities geographically. Accelerating digitalisation indeed requires regulations but also players able to shape the evolution of the financial system on the basis of new digitalised tools and services. A further point is that with CBDCs, central banks are going to become competitors in a way to many legacy payments entities, potentially leading to retail payments being made with no cost. This needs to be considered in the work on the digital euro.

# 2.3 The need for cross-border and cross-sector consistency and coordination in the policy approach to digital finance

A public representative suggested that digitalisation requires changing the way regulation is considered, because it is not possible to only use sector-specific regulation as was the case in the previous decade. There is now an amount of horizontal legislation being introduced on the EU level such as the Artificial Intelligence Act, Data Act and Data Governance Act, which all also have an impact on the provision of financial services. How to combine sector-specific and horizontal legislation in the most effective way still needs to be considered. An example of an area where this is particularly relevant is cybersecurity with the interaction between DORA and broader cybersecurity regulations, such as Network and Information Security (NIS2).

Secondly, the regulatory work on digital finance should be conducted with an international perspective. While it is positive that the EU moves forward on new issues such as the regulation of cryptoassets, it should be borne in mind that close cooperation will be needed on the global level to achieve an effective regulation of such activities. In addition there is an opportunity for Europe to set the standards for such an area where global standards do not exist yet. That may support the international expansion of European companies.

The Chair agreed that the interaction between cross-sectoral approaches and financial legislation needs to be closely examined. Concerning cyber-security and the implementation of the DORA regulation, this is an issue that the European Supervisory Authorities (ESAs) will be working on with the European Union Agency for Cybersecurity (ENISA) and other authorities involved in the regulation and supervision of cyber-risks.

A Central Bank official noted that the consistency of legislation in different areas relevant to the digital space and collaboration among the regulators and supervisors concerned are essential to achieve an appropriate regulation and supervision of these activities and ensure their proper implementation by market participants. Collaboration is key particularly at the cross-border level, from the early stages of any legislative initiative. This helps to define the appropriate tools for regulating these activities and also the practices needed for supervising them.

An industry representative stated that harmonisation at all levels, EU and global, is conducive to encouraging further modernisation and digitalisation in the financial sector. Fragmentation creates compliance challenges not only for the financial institutions but also for their service providers. When there are different regimes and approaches, this complicates risk management. The political agreement on DORA is encouraging because it will allow the provision of a harmonised set of rules on ICT risk management across the EU, but this level of harmonisation needs to be maintained when the rules are implemented.

Another industry representative remarked that while finding an agreement on rules among 27 different countries is a challenging process, this also generally means that the rules agreed are effective, working for

countries with different cultures and economies. Such rules then provide a sound basis on which Europe can potentially lead the way internationally.

### 2.4 Areas of improvement in the regulatory approach to digital finance

An industry representative acknowledged the efforts made to build an appropriate digital finance framework. There are however some gaps and obstacles when considering the two objectives of the framework which are (i) supporting the growing digitalisation of the finance sector and seizing opportunities associated with digitalisation, and (ii) ensuring a customer-centric approach where customers can benefit from improvements in terms of access and new services thanks to digitalisation. Regulated financial institutions, notably banks, face significant obstacles when engaging in digitalisation, related to the layers of supervision and regulation imposed on them. When banks want to move workloads to the cloud, for example, they face a number of challenges. They need to manage fragmentation of the supervisory space and requirements that are too cumbersome, such as pre-approvals from supervisors that may take months to obtain. In some other jurisdictions such as Singapore no pre-approvals are needed for moving workloads to the cloud. There are also some cybersecurity requirements that can prevent financial institutions from going into the cloud. Alleviating these requirements somewhat would be helpful for allowing the European financial sector to compete.

A second industry representative stressed that regulatory certainty is essential for enabling the adoption of new and emerging technologies. It can be challenging for organisations to move forward if regulation is not clear enough or does not take into account the latest evolutions in terms of technology. When requirements are clearly known, that creates confidence and it is possible for tech providers to move much faster to serve customers and help organisations to evolve.

A third industry representative flagged three areas for improvement concerning digital finance regulation. One is harmonisation. Europe is in theory a single market, but in reality there are many domestic rules, requiring products to be built with 27 different variations. Larger companies can build local branch structures under a core bank license in one EU member state in order to e.g. be able to offer local IBANs, which is essential for developing sufficient activity in each local market. But smaller fintechs will not have the scale to do so and that will slow their expansion and capacity to enhance innovation.

The second area of improvement would be moving towards more outcomes-based regulation. This is necessary for regulation to remain valid in areas where technological innovation is very rapid, such as cryptoassets and transfers of funds. Regulation should be designed to deliver a given level of risk and a given level of control. In additional new approaches are needed for mitigating risks and reducing fraud e.g. by embracing new technologies like behavioural biometrics.

A third issue is the speed and ambition of the EU regulatory process and whether they are sufficient to support innovation and accelerate time to market.

Europe could be more ambitious in certain areas of its policy-making, for example not just building for open finance but building for open data or bringing forward digital ID to 2025. This would help to deliver new opportunities from digitalisation faster.

A policy-maker stated, regarding the point made by the previous speaker on harmonisation, that the objective of the Commission with the Digital Finance package is to support the creation of a single market for payments and capital, which requires a harmonisation of rules. The Chair added that harmonisation requires a common implementation of rules and since much of the supervision will happen at national level, there is also a need for driving towards common outcomes in supervision on the ground.

A public representative stressed that regulatory certainty and calls for nimbleness need to be balanced. The right way forward is to develop more principle-based legislation, and setting the desired outcomes in terms of the key building blocks for the relevant sector in terms of how to manage risks and how to ensure investor protection. That should be the approach, rather than trying to address all issues through prescriptive rules in European legislation that also take a great deal of time to draft. The work of the European Commission on MiCA started in 2018 and will not be fully enforced until 2024, which is a very long time span during which the market will have significantly evolved. For example a long time was spent on categorising cryptoassets, but aspects such as initial coin offerings (ICOs) and large scale private stablecoins such as Libra are no longer as relevant. Since then decentralised finance (DeFi) and NFTs have developed but are not directly tackled in MiCA. This shows how quickly the market is changing and the need for the policy framework to be sufficiently open and flexible in order to keep up with evolutions. In addition there is a need to further adapt existing financial regulations to digitalisation and check whether regulations such as MiFID are compatible with MiCA for example.

The Chair mentioned that the adaptation of existing financial legislation to digitalisation is being worked on by the Commission as well as the consistency of these legislations with the digital finance framework. This is important to ensure that the opportunities that digitalisation brings can improve customer experience and the information that they are provided with.