Impacts of digital technologies on financial value chains

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Enabling the digital transformation of the European financial services sector

Financial institutions are facing considerable pressure to provide enriched and frictionless customer experiences, while fulfilling their regulatory mandate to ensure that the national and global financial systems that they operate in are secure and resilient. In this context, organisations are seeking alternatives to "business as usual" and legacy technologies. Cloud technology is now at the forefront as financial institutions grapple with these issues. Why? The answer is simple: cloud allows financial services firms to be more agile, protect their customers with enhanced security and get access to the most advanced analytical services, all while reducing costs.

We have seen established organisations ranging from the largest global banks, insurers, asset managers, market infrastructure and financial solution providers take a sharp shift away from the undifferentiated heavy-lifting of managing on-premises data centre infrastructure and embracing the cloud to innovate and enhance resiliency. Indeed, agility, enhanced security and resiliency, and the ability to innovate quickly are today the top drivers for financial firms' cloud programs.

In today's competitive market, financial institutions are looking for ways to differentiate themselves. Leveraging cloud technology provides three key benefits that enable innovation: extracting new insights from traditional and alternative financial data; providing the scalability and agility to respond to market and business changes; and reducing the time and resources needed to manage and maintain technology infrastructure, all while operating with the highest security standards available.

Cloud solutions provide scalability and increased resiliency and security compared to what financial institutions have previously been able to achieve. For AWS, security remains "job zero" and we take active measures to minimise the impact of potential events such as the ongoing COVID-19 crisis, and maintain our security and resiliency through a variety of ways. Our long-standing business continuity plan enables us to respond rapidly in a coordinated manner to potential events and crisis. More broadly, to diffuse the potential for systemic risk in any industry or location, we build our cloud infrastructure in diverse geographic regions with multiple availability zones per region.

Looking ahead, we expect to see increased automation in security through infrastructure and application controls that will help enforce security and compliance policies continuously while reducing human configuration errors. These improvements will allow financial institutions to maintain the data confidentiality and integrity that their customers demand, while maintaining timely and accurate reporting required by industry regulators. As we continue to innovate and roll out more services, financial institutions will see these new services and applications change the way they interact with customers and do business. For European financial services institutions looking to remain competitive in the global market, cloud is undoubtedly an enabler and driver for these organizations to innovate and become more agile.

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As the European Commission develops its Digital Finance Strategy, ensuring that financial institutions can avail themselves of modern technologies including cloud and machine learning is crucial for the future competitiveness of the sector. For future regulatory initiatives, it remains important for policy makers and regulators to carefully consider an approach that recognises the operational resilience, security and innovation benefits of cloud, and enables firms to make the most of that opportunity. ●

Sophie Heller

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New technologies are fostering new forms of cooperation between industries

First impact of new technologies is on the way the bank is acquiring and serving its clients : Banks are responding to new customer expectations as digital players set new standards, and also to increasing concern for security:

- Choice: customers want to be able to rapidly compare and subscribe to online financial solutions
- Simplicity: customers expect simple & clear journeys
- Personalization: customers expect their Bank to use the huge quantity of data it holds, for their benefit and security : take into account their personal context, demonstrate anticipation, protect them against fraud, and be relevant
- Immediacy: 24/24 7/7 becomes the new normal as well as instant payment ....
- Security : customers expect their bank to protect not only their money but also their data and privacy. This concerns becomes more and more critical as cybercriminality develops along with usage.

Customers positively react to these innovations : More clients are onboarded digitally, most of usual operations such as transfers, card limit management are done digitally - 89% of French people who have downloaded a bank app (55% of French people) check their app at least once a week.

Second, this digital transformation enhances the "human part" of advisors' role while digital channels play a big part in day to day finance management. This shift in advisor role is helped by:

- More time to focus on value-added services as some tasks are handled by customers themselves or drastically eased with RPA or AI for instance,
- A better customer knowledge through real time and comprehensive information
- New platforms for contact management that allow to understand clients requests in natural language and address them to the most relevant available person, independently of its location.

Third, Digital Transformation is about transforming skills, mindset and culture, IT architecture as well as ways of working for everyone from front to back office including functions, it implies for example :

- Fostering an end to end process culture, with a strong focus on operational excellence,
- Developping in big numbers digital and data capabilities across the organization
- Upgrading IT architecture and infrastructure to be able to fully leverage new technologies in particular Cloud and AI.
- Expand Agile ways of working across the whole organization to be able to adapt faster and better to customers' rapidly evolving expectations and have happier teams. It is the necessary shiftfrom product- to customer-oriented organizations so that teams are actually centered on understanding consumers and designing products and services around their needs.

Finally, what goes for the retail banking industry regarding digital transformation is also true for all industries. As each industry becomes centered on delivering an end to end digital experience in a specific set of needs (such as my home, my mobility , my health etc..) , the question of who are you competing or cooperating with, becomes crucial : Big techs, Fintechs but also other incumbents from various ecosystems together such as energy, retail, mobility...

New technologies change how customers use services and the nature of the services themselves thanks to new forms of cooperation.

Retail banks collaborate with Fintechs or integrate GAFA services into theirs (eg Apple Pay or Google Pay). Retail banks have specific competitive advantages:

- Strong banking expertise in all financial areas (consumer finance, investment...) and strong relationship with institutions and corporates
- Loyal customers
- Secure their customers' sensitive data

These advantages, combined with the ones of the players and incumbents from other ecosystems using digital-enabled technologies can create unrivalled propositions for consumers. This is what happened in the mobility ecosystem in Italy for instance, where BNL has created a partnership with Telepass to create a new app allowing consumers to access to all their transportation and shopping services and manage associated payments, all through a single access mobile gateway.

What we see happening for banks is new cooperation acrossindustries in order to design innovative, simple and outstanding new services. ●

Santiago Fernández de Lis

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Competition and innovation in a changing world: a key role for public policy

The steady evolution of financial services can make it easy to forget that the sector has always been shaped by the adoption of new technology. The information and communication innovations of the 20th century brought waves of digitalization: the move from paper to electronic records, credit cards, ATMs, electronic trading, and eventually wider access to internet banking at the turn of the millennium.

But the latest changes in technology have spread more quickly than those before and have transformed more rapidly the economic and social landscape. In the space of little more than a decade some 3 billion people have acquired a smartphone and always-on internet access.

One of the most striking consequences has been the supercharged growth of a new digital platform economy, with the breaking and rebuilding of value chains across almost every industry. And much of the new value has come from being able to capture, analyse and put to use the data generated by the huge increase in digital interactions.

According to an often used metaphor data is the new oil. The metaphor is misguided (among other differences oil is scarce and data grow exponentially), but in any case, data is at the heart of the digital economy and its use - and reuse - will continue to be central to innovation and value creation across industries.

The good news for the financial sector is that new digital channels, data sources and analytical techniques can offer an opportunity to better reach customers and improve services. A more complete picture of customers' needs and behaviours could allow for personalised products and more holistic financial advice. The right datasets could allow credit risk models to be refined, offering the possibility of expanding credit to underserved customers like SMEs, or the development of new green financial products, aimed at helping customers with their transition to a more sustainable economy.

However, to deliver this, firms face the challenge of a new, uneven digital playing field. One where customer relationships are shaped by and channeled through dominant platforms and ecosystems, and where useful data is not always able to flow to where it can deliver the most value for customers.

Public policy has a clear role to play here. And the European Commission has recognised this, with its digital and data strategies and AI white paper published in February 2020 forming key pillars of its support for Europe's digital transformation. The execution of this strategy is now key.

First, the Commission should take robust action to safeguard future digital competition and innovation, with new ex ante rules for significant digital platforms. This should include guaranteeing fair terms of access for other firms, including to hardware functionality, and greater control for users over their data. Individuals and firms should be able to share their platform data easily, securely, in real-time and on a recurrent basis with whom they wish. This would reduce lock-in effects and facilitate data reuse in other sectors.

Firms face the challenge of a new, uneven digital playing field.

Second, the Commission should apply this sharing principle to other valuable personal data such as data from utilities and smart home devices, by implementing its proposal for enhanced personal data portability in the forthcoming Data Act.

PSD2 has enabled this kind of sharing in the financial sector for payments data. And although it is still bedding in, it offers a useful lesson: standardised, dedicated interfaces, such as APIs, are key to secure and effective sharing.

Finally, the EU should focus on supporting the development of AI applications in Europe, as it is essential to a competitive economy. The EU regulatory framework is already comprehensive. Authorities should therefore avoid the risk of over-regulation and concentrate on solving concrete problems, such as clarifying how to meet existing requirements and supervisory expectations on unfair discrimination, explainability and interpretability.

The European financial sector will continue to build on a long history of innovation and adapting to change to deliver value for its customers. The right policy measures now can help to ensure that this is a success. ●