

The digital revolution in the French banking and insurance sectors

Overview,
strategies
and challenges



As the pace of change in the digital revolution quickens, the ACPR's FinTech Innovation Unit¹ conducted a survey on digital transformation in the French banking and insurance sectors.²

1/ The FinTech Innovation Unit was created in June 2016 to provide guidance to innovative players to help them fulfil their regulatory responsibilities and to interact with established players on their digital transformation. The Unit organises the FinTech Forum alongside the *Autorité des marchés financiers* (AMF – the French financial markets authority). The Forum brings together new and more established players, as well as public bodies such as the Banque de France, the *Agence nationale de la sécurité des systèmes d'informations* (ANSSI – the French information system security agency), the *Commission nationale de l'informatique et des libertés* (CNIL – the French data protection agency), TRACFIN (*Traitement du Renseignement et Action contre les Circuits FINANCIERS clandestins* – the French anti-money laundering unit) and the *Direction Générale du Trésor* (the French Treasury), to collectively consider the regulatory challenges of financial innovation and new business models.

2/ This cross-sectoral survey, made up of around 100 open-ended questions, was addressed to a representative sample of six banks and eleven insurance companies from the two market sectors.



The digital revolution is a structural shock sweeping the entire financial sector, characterised by...

1.
A wave of highly interconnected technological innovations that are nonetheless at varying levels of development

While the beginnings of the digital revolution were built on an accumulation of technological innovations, it is probably the boom in mobile telephones and high-speed internet that lies behind the rapid pace of change in the financial services. The explosion in uses from the enhanced connectivity sparked by mobile terminals allows financial institutions to collect exponential volumes of data in all formats (figures, texts, images, audio, geolocation, etc.) and of all types (structured and unstructured data).³ Better database performances, computer processing and storage capacities also further the development of algorithms that can be used by different financial institution functions, such as customer relations, marketing, pricing or risk management. Ano-

^{3/} Unstructured data are not stored via pre-defined data models or schema and have no embedded sequencing. The absence of a set format generally complicates data exploitation.



ther major technological innovation is blockchain, which draws on cryptographic and computing techniques to provide a secure decentralised solution. At the moment, institutions are focusing more on the development of private blockchains for internal or shared processes, but other developments are underway.⁴

2. A profound change in customer behaviour and expectations

This sociological and behavioural transformation is reflected in increasingly demanding expectations in terms of responsiveness and customer experience, the reflex to systematically search for information and compare offers before seeking out advice and the desire for greater user autonomy. However, these structural shifts do not mean that customer expectations are becoming standardised. Financial institutions feel that expectations are still extremely heterogeneous but that generational or social criteria are less and less helpful in understanding them. Against this backdrop, the distribution model built around local branches is being put under particular pressure.



3. A multifaceted competitive framework

The major financial players are also having to face up to new forms of competition, encouraged by both the technology that is lowering entry barriers and the regulatory changes that are more favourable to the arrival of new players, particularly in the payment services sector. However, the institutions questioned, rather than pointing to the young start-ups in the financial sector, highlighted competition from large retail or telecommunication companies looking for new growth opportunities in financial services, or even more so, competition from the juggernauts of the digital economy (GAFA in the United States and BAXT in China),⁵ which reap the benefits of vast financial resources, far greater user numbers and highly developed expertise in data exploitation.

4.

^{4/} Securities transactions and perhaps, in the future, functions that are currently assured by payment and market infrastructures (depository, clearing and settlement).

^{5/} GAFA and BAXT refer to “Google, Apple, Facebook and Amazon”, and “Baidu, Alibaba, Xiaomi and Tencent”, respectively.



The strategies of French financial institutions demonstrate a genuine – though sometimes recently acquired – awakening, and are based on four key levers:

1.
Shifting corporate culture towards innovation

Innovation policies require shorter decision-making processes and greater reliance on decentralisation, prompting some institutions to overhaul their governance structure. It also calls for an expansion of human resource policies to ensure that the re-training of certain employees is well handled, the skills of other employees are enhanced and the profiles that are very much in demand, such as data engineers or user experience experts, are recruited. Institutions are also introducing partnership policies in order to speed up these transformations. Although initially, institutions could be indifferent and even defensive towards young

start-ups, they are now seen more as a source of cooperation than competition. Nevertheless, strategies in this respect can differ widely, with some preferring innovations managed internally to ensure full control over the technological expertise, and others rolling out an open innovation policy that involves greater numbers of commercial or technological partnerships, participation in venture capital funds and the launch of incubators or accelerators.

2.
Modernising information systems

Information systems, which are often a progressive accumulation of application layers overlying outdated infrastructures, require rapid modernisation to meet the sometimes conflicting challenges of flexibility (development of agile methodologies, increasingly regular software updates), openness (shared databases, development of programming interfaces) and security (against the surge in cyber-risk).

3. Overhauling and dematerialising the customer experience

Financial institutions are looking at process dematerialisation in order to simplify and shorten the customer experience and boost their distance selling. Through their applications and digital tools, they are trying to give customers greater autonomy during the approach and information phases (online mortgage simulation is one such example) while also facilitating new customer contact and purchases of financial products. Institutions often prioritise the simplest products such as consumer credit or home insurance.

4. Harnessing and capturing value from customer data

All the institutions questioned insisted on the strategic challenge of data access, which is essential to their ability to maintain good customer relationships. With this in mind, the majority of the institutions believe that in theory they have an enormous wealth of data that could be better exploited – payment data, for example. There is genuine interest from financial players in new sources of information from social media, networks and telecom operator databases or even geolocation data, but this is still largely at the exploratory stage. More generally, banks and insurers are particularly sensitive to the need for a level playing field – for all players, irrespective of status – in relation to data access and exploitation, as well as data protection and security requirements.





The digital revolution creates opportunities but also leads to strategic, operational and compliance risks

1.
The digital revolution brings strategic risks that threaten business models and profit margins

The digital revolution puts the business models of banks and insurers to the test, as for many their models are based on full control of the value chain, from customer relations to product design and risk management. New competitors arriving in the sector look to capture a piece of the value chain, sometimes by offering new products but more often by acting as a new commercial intermediary. Beyond the potential losses in value that new competitors in the sector can provoke, banks and insurers stress the effects that losing customer relationships could have on pricing and risk management. Furthermore, the digital revolution makes customers more demanding in terms of prices of the simplest products, for which they feel autonomous, which could be due to the influence of GAFA service models that appear to be free and thus change customer expectations, including with respect to financial services. This particularly



applies to payment means, even though providing these facilities is extremely costly to financial institutions, or brokerage services for financial investments (unit-linked contracts or collective investment scheme units, for example).

Above all, the survey highlights financial institutions' growing dependence on technological service providers. Supplying financial services through smartphones actually makes them dependent on operating systems, such as iOS and Android, and telecommunications providers. Financial institutions could also become reliant on instant messaging applications, such as Facebook Messenger, which host chatbot-type tools. And as for information system management, financial institutions are also becoming increasingly dependent on "cloud" computing service providers, ranging from infrastructures (servers, networks, data storage) to software (applications, data). While these new partnerships, which are sometimes new outsourcing arrangements, may be necessary to meet the needs of transformation and innovation, they raise questions as to financial institutions' ability to maintain an effective system of control in respect of these partners.

2. The digital revolution increases the level of operational risks from information systems

Given the growing interconnectedness of information systems, particularly through the deployment of programme interfaces, the greater use of contractors and the increasing sophistication of cyberattacks, financial institutions stress that cyber-risks are now far more prevalent. From a commercial perspective, the resilience of information systems is even more important as customers are less patient if systems are down. In the insurance sector, the survey shows for example that cyberattacks on driverless vehicles could lead to serial claims and that connected objects are significant points of vulnerability in interconnected systems.⁶ Institutions in the banking sector are also worried by the operational risks caused by opening up data to third parties (the new entrants – bank account aggregators and payment initiators – resulting from the second European Payment Services Directive referred to as PSD2).⁷

^{6/} The Agence nationale de la sécurité des systèmes d'informations (ANSSI) considers that connected objects are still frequently affected by security flaws.

^{7/} Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market.

3. The digital revolution fuels new compliance risks, particularly in consumer protection, anti-money laundering and data protection

The answers given in the survey in regard to consumer protection show that by designing customer experience on the basis of digital interaction tools, financial institutions are confronted with choices that can sometimes prove difficult. This applies to all the phases of prospecting, selling and monitoring remote customer relations. The challenge is to create a more user-friendly and fluid customer experience that also meets security standards and complies with regulatory requirements on the disclosure of information, the duty to advise and obtaining consent.

As for anti-money laundering and counter terrorist financing (AML/CTF), the proliferation of partnerships and multiple bank accounts has resulted in increasingly complex financial circuits. A financial institution's ability to "know your client" can be further undermined as new intermediaries intercede between the customer and the account-holding institution and remote customer relations become more common, particularly given that France does not yet have a reliable and secure remote identification framework (the digital identity issue). AML/CTF could nevertheless benefit from new technologies that can make new customer contact processes more reliable and introduce innovative algorithms to improve the monitoring of transactions.

Lastly, the risks related to data exploitation appear extremely prevalent, and compliance risks in view of the new European guidelines on general data protection (GDPR)⁸ naturally form a part. While the configuration of algorithms may appear to be under control for the time being, their heightening sophistication could increase the risk of "black boxes" and the emergence of embedded unethical biases. It is clearly important to start thinking now about how digital technology will be used in the future.⁹



8/ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data.

9/ In March 2018, the ACPR created a working group to address the challenges of artificial intelligence in the financial sector.



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innovation



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