

# Towards a world without banks?

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[special issue of *Réalités Industrielles*, November 2017]

## **Abstract:**

Banks are powerful institutions – the amounts recorded on their balance sheets often exceed the GDP of the country in which they are established, their customer bases are stable and they enjoy significant revenues. They were able to adapt to the Internet revolution of the 2000s. The current digital revolution is much more thoroughgoing because it affects how the entire population behaves. The new term FinTech – a contraction of finance and technology – is a compelling reminder of this situation. FinTechs already provide 10% of the world's financing for start-ups, and this is already having a major impact on payments, data, next-generation banking services, financing and investment services, as well as transaction management and security tools.

A world without banking already exists: 95% of the population of Africa does not have access to banking services, and this rate is 50% in Asia and 20% in the United States. It goes without saying that this is not good for the security and quality of trade, and therefore not good for populations or the economy in general. However, the trend is towards development and increased penetration of banking services.

The sharp rise in banking regulation around the world (specifically to improve AML/CFT efforts) and the traceability of every banking transaction that electronic payments offer are part of a significant trend – that of a world that uses less cash. It is not only institutions that are calling for dematerialized procedures; individuals and businesses alike are increasingly in need of security and guarantees as the world opens up, the Internet becomes a place of exchange and the rate of telephone penetration approaches 90% on all continents, and even tops 130% in the most-developed countries.

Unfortunately, regulations are national, while competition is global and there are as many regulators as there are countries. There is no homogeneity in this area, unfortunately. Nevertheless, as regulated institutions, banks everywhere offer a twofold guarantee: that of the reliability of their procedures (which are audited by central banks on a regular basis) and that of the security of their clients' deposits, whether they are individuals, institutions or companies.

And yet, a paradox is unfolding this scenario: the more the world regulates itself and becomes secure (and thus as electronic transactions replace cash), the less banks are needed. Three key phenomena are disrupting banking activities.

The first of these has to do with regulation itself. A regulator, wishing to stimulate competition and bring down prices for the end consumer, opens the field to new entrants. By carving up the various professions, regulators allow new establishments to carry out certain types of activity without being bound by the due diligence and capital requirements of players who carry out a full range of activities, i.e. the banks. In Europe, the Payment Services Directive (enacted into French law in 2009) has allowed payment companies to flourish. A second directive will be applicable from 2018 onwards and will open up a much wider field of possibilities, notably thanks to instant payment, but also through defining a framework for how banking data may be used. Previously, data has been the property of banks, which have sought to protect it. Under the second directive, data can be published using APIs (application programming interfaces), allowing, for example, individuals to make a transfer directly from an aggregator, or to take advantage of third-party offers.

The second phenomenon is technological in nature. It poses the greatest threat to banks with aging infrastructures. These new technologies include artificial intelligence and robot-advisors that can predictively offer advice, design new individually-adapted products and help customers proactively decide where to place their money. Another new technology is blockchain applications, i.e. the implementation of OTC payments within a network that is distributed, secure and certified.

Artificial intelligence is becoming accessible to all. The recognition of shapes, the exponential advances in computing power, the speed of data transmission – artificial intelligence, simply put – allows everyone, in real time, to have the right diagnosis, to benefit from shared opinions and to choose simple, transparent and competitive offers. Intelligence has shifted, language has evolved, and account managers working in agencies are increasingly helpless. Millennials have been swimming in this world – a world at their service – since birth. They no longer carry out transactions at bank counters, and as a result, banks can no longer read the signals.

By making banking data available to third parties via controlled and secure gateways, APIs will give rise to a number of new uses. Private APIs are not the problem; they are designed for internal use by bank customers. Public APIs are also not an issue (such as the ones that allow Google Maps to geo-track you, or Twitter to link you to the news feed of your choice). The real concern in the future will be open APIs. Will banks be able to offer their customers new solutions through third-party applications? The regulatory framework is a work in progress. Standards for secure interfaces for accessing confidential information have not yet been defined.

Insurers, telephone operators and the global digital giants are particularly interested in Open APIs. But could this spread much wider, involving every retail outlet, every service and perhaps even government administration?

The revolution in banking data accessibility is underway. There is a major risk of disruption for banks, which could be dominated by new players offering new and better-designed services (like Google News, which is quite happy to scrape content from media everywhere for its own benefit).

In this area, England appears to have taken the lead. The UK Treasury Department created the Open Banking Working Group in late 2016, which brings together banks, consumer associations and research institutes. The idea is to make the UK a trailblazer in the area of open banking. UK banks are expected to adopt a common digital standard by 13 January 2018, the date set for the enactment of the second European Payment Services Directive (PSD2) into domestic legislation EU-wide.

Will France be ready? The Prudential Supervisory and Resolution Authority (ACPR) is working on this, together with the FinTechs and the banks. A theoretical deadline has been set for early 2018.

The third phenomenon has to do with societal changes, which bring with them a complete change in codes, method of references and values. This paradigm shift is illustrated by the fact that everyone now relies more on the advice of their peers than on that of a distant, obscure institution, however prestigious it might be. In the future, everyone will generate his or her own income, either through the rules changing, or because each individual will become a shopkeeper by renting their car on OuiCar, their apartment via Airbnb or by selling their sofa on Leboncoin...

The most important subject in the virtual world – the world of data and electronic activity – is security. Trust is the key to everything. Today, banks are reliable trusted third parties. They provide you with a bank identity, which is issued to you after numerous checks of official documents. They issue you a bank identification code, which is a unique number – to which they link another unique number, that of your bank card. Increasingly frequently, they are adding another unique number: your mobile phone number. In France, Compte Nickel and C-Zam are doing the same. After three years of existence, more than 30,000 Nickel Accounts are opened each month, double the number of accounts opened in all banks.

Today, to verify that you are indeed the originator of a transaction, the system sends you a challenge on your cellphone number: it is a code delivered by text message (which is not very secure) or a number obtained via an authentication application.

Tomorrow, other tamper-proof authentication methods linked to your unique bank identification number (BIN) will expand and enhance transaction security: they will use your voice, which is unique, the iris of your eye, your fingerprint or the shape of your face or even your ear (when you pay, you place your cellphone against your ear, an acoustic signal immediately and unmistakably recognises the shape of your ear canal, and the payment is validated).

The security of authentication systems will be strengthened with the verification of not only one, but two factors related to what a customer knows (his or her secret code), what he or she is (biometrics) and what he or she alone holds, namely an authentication token or token integrated into his or her cellphone.

Tomorrow, we may be able to pay with a simple wink or by sticking out our tongue, without cash. On the Web, everyone will become their own trusted third party thanks to an authentication certificate, possibly supplemented by a score awarded by their bank, their telecom operator or simply by their payment institution.

Looking ahead, these three phenomena will alter the value chain of financial activities. Many new entrants will position themselves with respect to data, security, transport, certificates, and APIs and their gateways. All of these elements could escape the banks.

The more that banking activities are based on very high added value (such as those aimed at large companies: structured financing, financing for projects, derivatives, and so on), the more difficult it will be for new entrants who do not have sufficient experience to access them.

On the other hand, the more that banking activity is dedicated to the general public and to small and medium sized enterprises (SMEs) thanks to the use of automated processes, the lower the value of banking *per se* in the chain.

In the future, will new arrivals be able to capture significant market share by acquiring brand franchises and successfully ascending the value chain to go after the most interesting links?

In Europe today, 10% of investments in technology are made in FinTechs; a huge number of initiatives are underway – whether by telecoms firms, large companies or the entire FinTech market – all of which are helping to create value. Contrary to the "Internet bubble", some models are becoming profitable and gaining market shares equivalent to those of small regional banks, as shown by the rapid progress of the *Compte Nickel*.

The advantage that new arrivals have is their ability to see things that more long-standing stakeholders do not. Although our initial goal with the *Compte Nickel* was to right a wrong – i.e. exclusion from banking services – we realized after the fact that our client base was actually much larger: those banned from having bank accounts, of course, but also all those who are not interested in paying high bank charges (amounting to several hundred euros per year), including overdraft fees, and who do not want to spend more than they have. Paying and being paid: this can be handled by simple and efficient technology.

The main advantage of new arrivals is also that they are starting with blank technological slates, and therefore do not have to bear the historical burden of heavy infrastructure. In France, for example, only *néobanques* (next-generation banks) offer real-time payment services to their customers.

The *Compte Nickel* is a "bank-free" bank account that can be opened at your local tobacconist. Over and beyond the social niche it appeals to, it is simple to use and offers real-time transactions. It only takes a few minutes to open an account: a person's identity papers are scanned and a customer account is created online. Additional data is entered in a playful way via a screen. The account is then activated in real time, on the electronic payment terminal, after a physical check carried out by an agent accredited by the Prudential Supervisory and Resolution Authority (ACPR), in this case the tobacconist. After this, the customer is in control. If he pays €12 at 11:22 a. m., it is registered on his personal site (with details of the merchant), which he can call up on his smartphone. This information is also accessible on non-smartphones: if customers want, they can receive a text message. The account balance is the actual balance: there are no "transactions underway" or "validity dates". You cannot spend more than you earn: therefore, no overdraft interest, no fees for incidents or interventions, in short: no penalties! Consumers always know exactly where they are, with no surprises. They control everything, and this is a welcome change.

Tomorrow, the aggregators, personal finance managers (PFMs), money collections sites, payment institutions, prepaid card and money transfer companies, mobile payment operators, major distributors, telecom companies – every one of them will have a strategy not to "Uberise" banks but to IBAN-ise them (i.e. giving consumers a bank identity, an International Bank Account Number). Since account-keeping and means of payment can be performed elsewhere than in a bank, there will be a shift towards players with multiple areas of expertise. In a wide open market, people will look for a service in a preferred location (where the customer experience is the nicest or the one that gets the highest ratings).

But the road ahead is hard, long and tedious. In France, although online banks have been in existence since 1995, they now account for only 4% of the market. But things should accelerate due to the above-mentioned factors.

So is a world without banks even possible?

Likely not. But a world with much greater competition is a certainty: banks will have to significantly lower their costs, introduce more automated processes and expect lower revenues.

What about a world without the FinTechs and new arrivals?

Certainly not. The various banking professions will be carved up, and the market shares in each segment will be redistributed. The only unknown is how fast this change will occur.

As for cash, one thing is certain: it will become less and less important in all transactions.