

# NEO

IDEAS AND INNOVATION

## **FROM THE TRADITIONAL BANKING SYSTEM TO THE CUSTOMER-CENTRIC FINANCIAL ECOSYSTEM**

Video-Research on Banking Trends  
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Financial Services  
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## **TABLE OF CONTENTS**

WHERE DOES BANKING STAND TODAY, AND HOW HAS IT REACHED THIS POINT?	<b>3</b>
THE EMERGENCE OF SHADOW BANKING AND NEW PLAYERS (NP)	<b>6</b>
BANKING IS DESTINED TO BECOME A UTILITY... IF IT DOESN'T TAKE STEPS TO REDRESS THE SITUATION	<b>12</b>
BANKING HAS THE MEANS TO CHANGE ITS DESTINY	<b>14</b>
WHAT THE BANKING BUSINESS LOOKS LIKE OVER THE NEXT DECADE	<b>22</b>

# WHERE DOES BANKING STAND TODAY AND HOW HAS IT REACHED THIS POINT?



## What has happened to the customer in those 5 years?

He has adopted the smartphone on a massive scale (penetration > 50% in developed countries), allowing him to have permanent real time access to a lot of information.

The smartphone gives him amazing powers...:

**1. ...about people** he is permanently informed of:

- Where his friends are (Wave), where they are going (Foursquare) and even their mood (Facebook).
- He knows every professional and personal detail about his contact, where he or she has studied and where he/she works, his/her tastes and friends

(LinkedIn, Facebook).

**2. ...about his environment:**

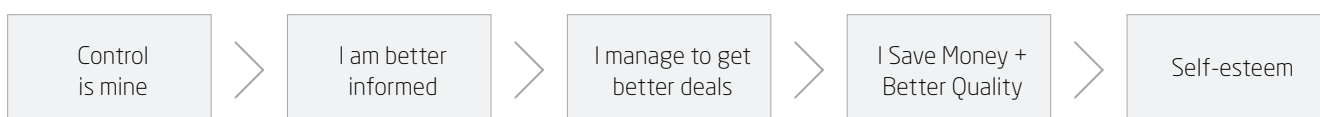
- He controls it, as he knows his location and how to get anywhere (GPS) although he hardly ever needs to move because now he can be omnipresent (Websites, Apps) and can even be in several places at the same time.
- He feels comfortable because he can predict the weather, see and listen to the content he wishes (Netflix, Spotify), etc.

**3. ...when taking purchase decisions** he can compare different products and banks and find out experience his peers have had, so he ends up taking smarter decisions.

**And when he gets home** he continues being (hyper) connected through his tablet because he feels that when performs transactions through a digital channel, the balance of power is shifting, and now he has control.

On the Internet and when using his cellphone, the user is more than a king, he is a dictator: impatient, skeptical and cynical.

Consumption of financial services is not immune to this new scenario. Consumers are reaching the 1st level of the hierarchy of human needs in Maslow's pyramid, self-esteem:



Permanent connectivity has become a hygienic factor and a *point of no return* toward digital banking. Because it is digital banking, and not traditional banking, which allows the function of this circuit, and this is what interests the consumer.

## What has happened to traditional banking in those 5 years?

It has managed to survive, but finds it difficult to resume its traditional business because the reality has changed and now it has to face unexpected problems:

- 1.** The customer, with his smartphone perpetually in hand, has changed his behavior and now steers clear of traditional banking, which traditionally had a clear advantage over him.
- 2.** The customer's dissatisfaction with banks, combined with technological breakthroughs - which are beginning to break up the traditional banking business - prompt the appearance of shadow banking by New Players (NP).
- 3.** Banking's reputation has taken a severe battering and its weak and captive customers are now much less valuable assets than the NPs' fans, who:
  - Have no reservations about sharing their data because they feel that they will be used to their benefit.
  - Recommend the use of NP vs. low credibility of banks (confusing information, small print, etc.).

Meanwhile, traditional banks are being slow to respond to this situation because of the following reasons:

- 1.** Banking regulation, which in the past has proved very useful for creating entry barriers to its business:
  - Has become tougher and very expensive to maintain.
  - It cannot be avoided, whereas the NP easily get around it.
- 2.** Is weighed down by unwieldy legacy systems which are expensive to maintain. Its heavy machinery (branches, ATMs, high headcounts) has a level of inertia (~mentality) which is difficult to change.
- 3.** Banks have lowered their IT budgets in order not to compromise their profits and so as to recover the required solvency levels more quickly.



- 4.** The banks' management hierarchies undermine changes, and in the end compliance appears and halts everything for security reasons.
- 5.** The bank is not used to dialoguing with customers, and as the gulf between it and the customers grows wider and wider the friction between the two sides is maintained.

What is the banking sector's friction in each one of the phases of the value chain?

**Certain opinions which are aired:**

**Acquisition**

1. "The bank does not pay me interest on my checking account when it uses my account as a commodity for its asset products, for which it is charging me interest"
2. "Transfers are not instant, holding up the flow of payments and my money disappears for one / two days"

**Risks**

1. "Every time I request an asset product, the bank analyzes my situation from scratch, asking me to provide a huge amount of information which it should already have and making me do all sorts of paperwork. And the process takes ages"
2. "I don't understand why the bank analyzes my risk so much and charges me a spread over Euribor<sup>1</sup> if ultimately it's going to ask me to provide all sorts of real estate and personal collateral, and even personal guarantees by family members"

**Products and Services**

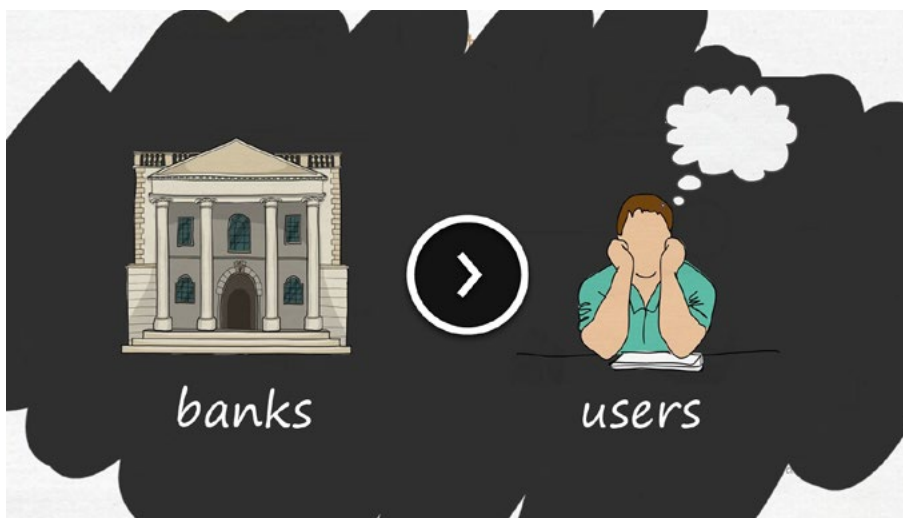
1. "Banks look at the short term, they bring out the products which interest them most and try to get me to buy them without advising me if it is really in my interests"
2. "The bank usually offers me mass products, which are not customized in any way according to my circumstances and which I cannot negotiate. Furthermore, they are difficult to understand in terms of their real cost and implications (you are forced to take out insurance policies when signing a mortgage agreement) "

**Channels**

1. "The bank asks me to go to the branch although it is not necessary, and the branches are only open during my working hours. They should work like pharmacies"
2. "I want to launch a transaction through the channel which I am using at any given time and wish to be able to continue it, when I can, through another one of the channels which at that time is more convenient for me without having to start everything from scratch again, having to say who I am and repeating the same instructions I have already given"

<sup>1</sup> The benchmark interest rate commonly used by banks in Europe

**Attitudes adopted by banks and customers:**



It is against this background that we see NP emerge: 100% technological companies, which like others before them, have been selling books, music or travel products and now wish to begin selling banking products.

These companies move extremely quickly, as they have grown up in a 100% competitive, digital and globalized environment, and deploy new competitive concepts to set themselves apart, methods which have not been used by banks so far, such as user experience (UX).

# THE EMERGENCE OF SHADOW BANKING AND NEW PLAYERS (NP)

*"Every Industry Will have its Napster Moment" Anonymous*

The bank has found its comfort zone in the mentality which sprung up with the Industrial Revolution of "creating value for shareholders", which in the short term is a zero sum game with the customer, in which the latter gets the short end of the stick. Because of the financial crisis, the customer is aware of these factors, and has lost confidence in banking, although this has not happened to Google, Amazon, etc.

Today banks and customers no longer speak the same language - it is the same story as music (mp3), films (DivX), communications (WhatsApp), taxis (Uber), etc.

In all these cases, millennials have created their own economy with parallel services, using technology.

There are two key questions:

1. Who are the NP and where are they competing with banks?
2. Are the NP going to displace / replace banks, and occupy their role in society?



## Who are the NP and where are they competing with banks?

Banks' gross margin can be more or less broken down as follows:

### A. Net Interest Income: 70%.

It is a high volume business but not without its problems:

- It is highly subject to local regulation;
- It consumes costly machinery (risks analysis, staff, branches, capital consumption, etc.)
- It is subject to the economic cycle (defaults due to bankruptcies, etc.).

What is more, banking intermediation has little opportunity of leverage in technology, at least not in the present day.

NP are not moving into this area, and as things stand today it is not really in jeopardy.

### Banking Fees: 20%.

This business has a much lower volume for banks, but it is an extremely profitable one, as it has much less risk than banking intermediation and is also much cheaper (it consumes less capital).

The NPs see it as an attractive business due to the following:

- It is highly recurrent, allowing them to interact continuously with customers, and thus allowing them to get very valuable information and so create advertising income and / or add other value added services such as advisory services.

That is why they are not concerned at the prospect of a possible erosion in margins.

- It is a more global business, and therefore is less affected by national regulations.
- It can be leveraged on technology to a much greater degree

Fees on Cards, Checks and Payment Orders account for 8% of banks' Gross Margin and around 25% of Operating Income as it is a much less demanding business in structural costs.

### Other Fees. 10%

## The emergence of Shadow Banking and the New Players (NP)

Technology allows businesses to be deconstructed, as we have already seen in other sectors (music, communications, taxis, etc.) and the NP have begun to attack the banking business, biting off various chunks in highly profitable areas beyond the reach of the feared regulators. The value proposals being made by the NP consist of the following:

### Helping consumers to make better financial decisions:

<p><b>COMPARISON ENGINES</b></p> <p>Making it easier to search for and compare different services and products which suit the customer's needs.</p>	
<p><b>PERSONAL FINANCE MANAGERS</b></p> <p>Helping customers to understand and manage their expenses and take the best short term financial decisions.</p>	
<p><b>FINANCIAL ADVISORS</b></p> <p>Helping the customer keep track of his investments and to take the best long-term financial decisions using software-based advisory services.</p>	

### Bringing down transaction costs, using the power of social media:

<p><b>SOCIAL LENDING</b></p> <p>Digital market which allows individuals to lend or to borrow to/from one another</p>	
<p><b>CROWDFUNDING</b></p> <p>Collective fundraising for financing small enterprises, charities, patronage, etc.</p>	
<p><b>SOCIAL INVESTING</b></p> <p>Community of investors which helps to exchange financial advice, allowing other investors to track and mimic each others portfolios</p>	

Source: Forrester and in-house research

highlighted video referrals

Bringing down transactions costs, using the power of social media for:

<p><b>P2P CURRENCY EXCHANGE</b></p> <p>Digital markets that let individuals exchange currencies.</p>	
<p><b>VIRTUAL CURRENCIES</b></p> <p>Virtual open-source currency which can be exchanged peer to peer.</p>	
<p><b>"SOCIAL" INSURANCE</b></p> <p>Digital market which customers share or underwrite insurance risks.</p>	

Revolutionizing payment systems:

<p><b>MOBILE POS</b></p> <p>Turning tablets and smartphones into a mobile point of sale terminal, helping small merchants to accept card payments.</p>	
<p><b>MOBILE PAYMENTS</b></p> <p>Allows payments to be made in an easy and secure way through cellphones.</p>	
<p><b>WALLETS</b></p> <p>Allows online payments to be made through the "electronic wallet", including discount coupons, points, electronic receipts, ...etc.</p>	

Displacing banks in their relationship with small enterprises:

<p><b>SME FUNDING</b></p> <p>Firms which use digital technology to find efficient ways to lend to small businesses</p>	
<p><b>CURRENCY EXCHANGE (WHOLESALEERS)</b></p> <p>Digital markets for exchanging currencies between companies.</p>	
<p><b>IMPROVING BUSINESS PROCESSES</b></p> <p>Use of technology to help small businesses improve their financial processes.</p>	

Completely replacing banks in all their functions:

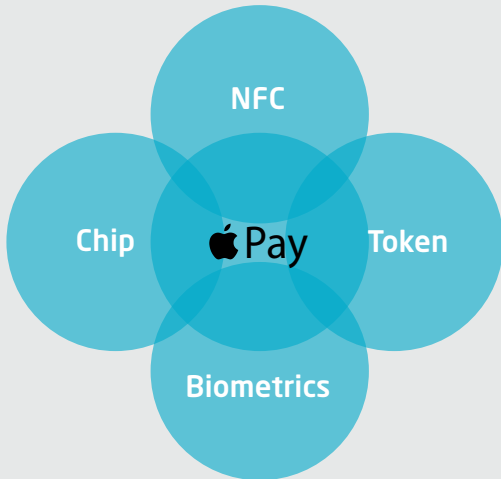
<p><b>DIGITAL BANKS</b></p> <p>They use technology to offer customers other options - exclusively digital ones - than traditional banks.</p>	
<p><b>INVESTMENT MANAGERS</b></p> <p>They use technology to offer customers exclusively digital investment management.</p>	
<p><b>EXCLUSIVELY DIGITAL INSURANCE COMPANIES</b></p> <p>They use technology to offer customers other options - exclusively digital ones - than traditional insurance.</p>	

Source: Forrester and in-house research

highlighted video referrals

**HOW DOES THE NEW APPLE PAY MOBILE PAYMENT PLATFORM WORK?**

It is a system which uses 4 technologies which have already existed on the market for over a decade. However, they are all combined to produce a differential payment system, with two key features which help it to catch on quickly amongst consumers:



**Convenience:** Everything is very easy. Initially, the user loads his cards' details in the Passbook, either by taking a photo of them or by allowing access to the information on them which is already to be found in iTunes. When the customer wishes to pay at a merchant, he chooses the card he wishes to use from the Passbook and confirms payment with his fingerprint. If using Apple Watch, the key sequence is also very simple.

By this means, Apple minimizes the friction found today with card payments. The physical action of paying has been simplified (until the point where it will vanish in the future); people are encouraged to use loyalty cards (we have dozens of them, but we use few of them, because we can't carry them all around).

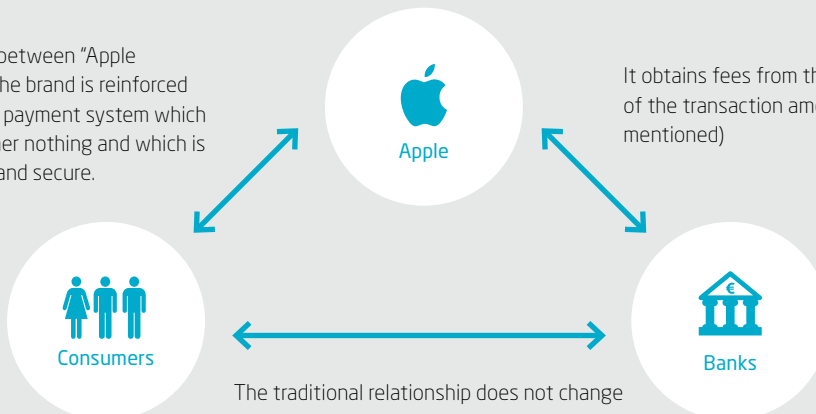
**Security:** The system has reached a level of security greater than the EMV standard (chip & PIN cards), a system, which, incidentally, has hardly been implemented at all in the US, unlike Europe. It is not just a question of biometrically checking identity; with Apple Pay, the information on the cards is only stored in the customer's telephone, and will never leave it - so it is difficult to carry out any kind of fraud. How does Apple achieve this? To carry out each payment, the iPhone creates a single-use Device Account Number (DAN) which it uses to perform the transaction. This code is stored in a dedicated chip (Secure Element) in the telephone, and is used as a security barrier, given that neither the card information nor the customer's personal details are transferred.

**IS APPLE PAY GOING TO BE SUCCESSFUL?**

We have little doubt that Apple Pay as a system is going to be one of the reasons why in 3-4 years time mobile payments will outnumber payments made with any other traditional method. There is no going back, just as we saw before with music or e-books:

It is the right moment, at least in the United States, where in 2015 PoS terminals have to be renewed in accordance with the EMV standard according to the new regulatory environment.

The relationship between "Apple customers" and the brand is reinforced through a mobile payment system which costs the customer nothing and which is very convenient and secure.



It obtains fees from the banks (0.15% of the transaction amount has been mentioned)

There is less fraud in the use of the cards (normally through accessing the information printed on the card), and this reduction more than makes up for the fee paid to Apple.

Because the system is so convenient to use, payments using this system are set to rise considerably.



**Conclusions:**

Today most NP are small, and the disruptive business (the “WhatsApp of banking”) is yet to appear, but its impact has already been felt by banks.

So far changes have been in the front-end. From now on, new income models should appear, supported by new products and services, especially cultural changes (exactly the same as with WhatsApp).

**Are the NP going to displace / replace banks, and occupy their role in society?**

It might sound surprising to hear that Google, Facebook and Apple want to become banks, bearing in mind all the regulatory conditions and the heavy costs structure required in order to access a business which is less profitable than the present one and more volatile:

	Annual Growth Revenue 2011-2013	Net Profit over Revenue	Beta (volatility index)
4 LARGEST US BANKS <sup>1</sup>	-1%	16%	1,7
APPLE + GOOGLE	26%	24%	1,0

Source: Yahoo Finance (16 Sept 2014)  
<sup>1</sup> Wells Fargo, JP Morgan, Bank of America and Citi.

The areas where the NP will be more active are those in which they leverage their technological expertise to remove the current friction caused by banks.

- **Payments.** Banks are the “natural owner” of the payments business because they are connected with customers’ accounts, and in fact 80% of a customer’s interaction with its bank is related to payments, also giving the bank the opportunity to sell other products to the customer.

Banks cannot afford to lose the digital payments battle, but, surprisingly, they have not done very much so far. Techno giants do not have more knowledge,

more scale or more data on their customers than banks have, they are simply more focused. Banks have to react by offering customers a more complete payment: convenience + economic value / advisory services

*Example: A customer goes to his car dealership and takes a photo of a car with his cellphone. The bank tells him that he has a pre-authorized loan which would cover half of the price, paying a monthly installment of 300 euros. However, the bank tells him that if he accepts this loan he would not be able to pay the rent on his normal residence, so it does not recommend him to buy the car.*

- **Marketing of banking products.** To a greater and greater extent, the banking business is becoming a “data war”, because its products are marketed digitally and through mobile channels more than ever before. Due to the huge friction which banks create with customers in the front-end, the NP are going to become part of the solution to reduce distribution costs, but at a price.

# BANKING IS DESTINED TO BECOME A UTILITY... IF IT DOESN'T TAKE STEPS TO REDRESS THE SITUATION

*"Everyone creates their own destiny" Miguel de Cervantes*

Smartphones have put customers in such a strong position that the future for banks will be closely linked with the evolution of the customer's behavior.

How is the customer's behavior going to evolve in the future?

The customer's behavior, which will end up changing retail banking, has 4 evolutionary-disruptive phases:

## INTERNET BANKING



An irreversible change in the way the customer accesses the bank and his money.

The customer acquires a degree of control and enjoys advantages which he has never enjoyed up to this point. Internet becomes the priority access point to the bank (90%) and the branch becomes less important.

## MASS ADOPTION OF SMARTPHONE



**Current phase.** Through the bank's website or an app, the customer can carry out all his banking needs except taking out or paying in cash.

## MOBILE WALLET



This is the real game changer for retail banking. This implies that the cellphone and credit/debit card converge, and the gradual disappearance of cash. If only 50% of cash transactions are replaced by electronic payments, the current branches and ATMs model becomes economically unsustainable, and people have no need to physically relate to the bank.

The telephone channels daily banking and the bank account becomes a *value-store-commodity*, while you no longer need to have a full banking license to hold a deposit (there is no difference between having a balance in a *wallet* and having a deposit in the bank).

When current bank account transactions reach cellphones, who is the bank going to be exactly?

## EVERYONE IS A BANK



The dematerialization of cash has led banks to relinquish their dominant position in retail banking, as they are relegated to: highly specialized products, investment management and fund transfers.

With this expression in mind: *Banking is no longer somewhere you go, but something you do.* Retail financial services are distributed *pervasively* where and when a customer needs to use banking services. And as banks are not ubiquitous it will be necessary to forge partnerships (telcos, etc.).

The usefulness of banking products is embedded in the buying process of the product in question, in the right place at the right time, and anyone has the opportunity of becoming a bank, without the usual friction of traditional banking:

- A travel website not only offers insurance but also a loan to pay the plane fare (instead of using the credit card).
- The retailer offers us a loan to buy a piece of furniture, by *mobile wallet*.

It is at this point that the bank has lost the customer and the banking function is split into two different businesses:

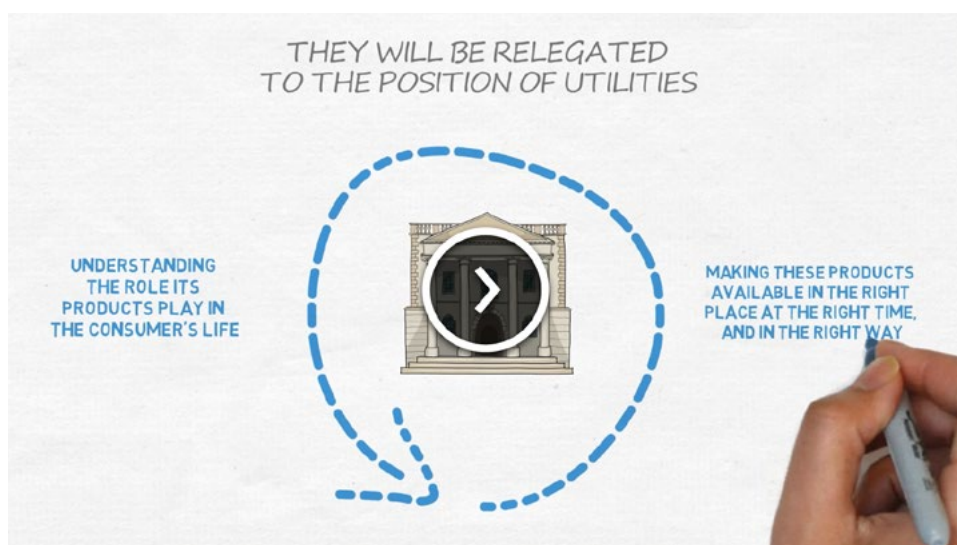
**A.** The distribution of financial products business. Essential to establish partnerships.

**B.** The banking utility support structure (creation of products, transactional platforms, etc.)

If banks do not move into the distribution business, they shall be relegated as mere utilities, where their activity is simply a part of a global buying or manufacturing process, etc. For example, the bank account will be a

commodity which simply transfers funds to our *mobile wallet* and which centralizes our receipt of funds (payroll, etc.).

Banks may have to end up paying Google, Paypal, Square, etc. to help them send their customers appropriate messages to allow them to place their financial products, even providing these companies with the data stored by the banks for them to be processed.



The age in which banks won over customers by being able to offer them a 2,000-strong branch network, by issuing cash from 1,000 ATMs or by having a Tier 1 Capital Ratio of 12%, has come to an end.

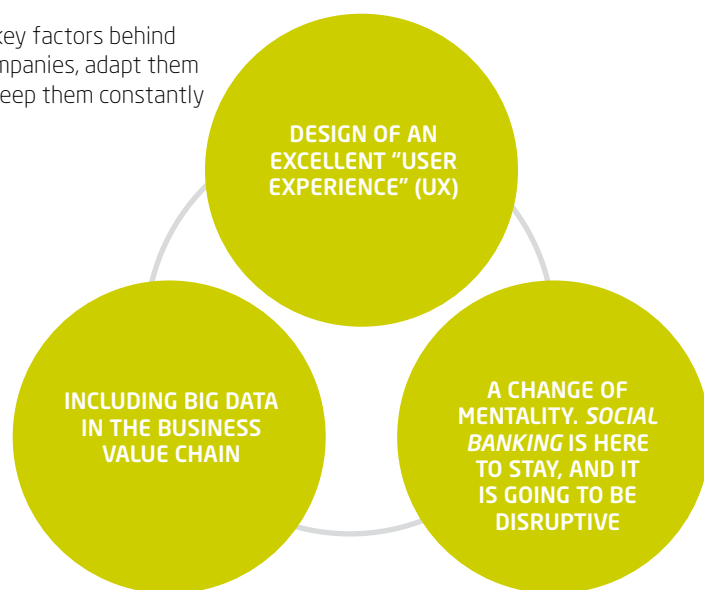
Customers will be faithful to those banks which, by using big data and social banking, are able to anticipate customers' needs and are able to accompany them when it comes down to actually buying something, by providing customers - not the bank - with more convenient financial products by using cellphones, and only 3 clicks away.

# BANKING HAS THE MEANS TO CHANGE ITS DESTINY ... ALTHOUGH IT HAS LESS AND LESS ROOM FOR MANEUVER

*"Don't live as if you had a thousand years ahead of you. Your destiny is one step away, make good while you still have life and strength" Marcus Aurelius (Roman emperor)*

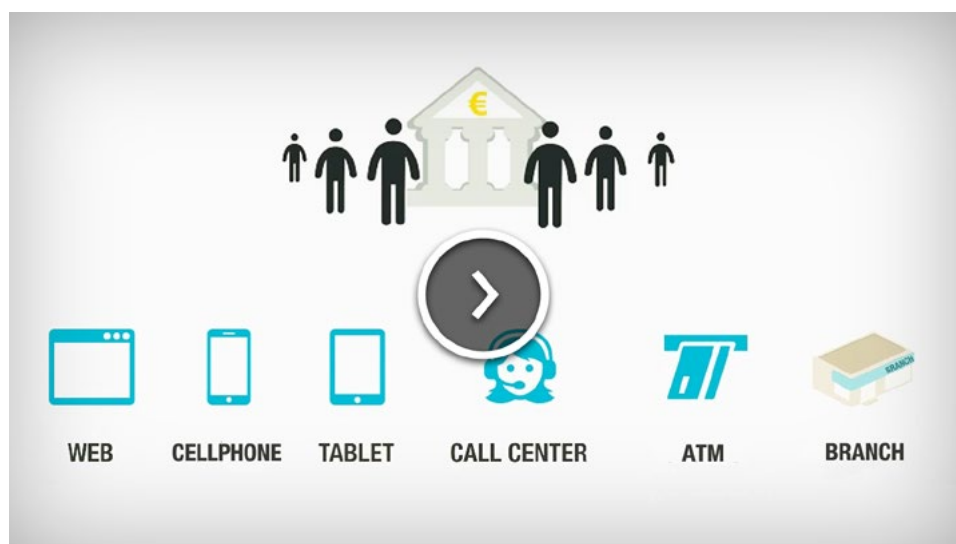
Whether they like it or not, banks are now competing with 21st century players (the NP) rooted in 1970s thinking and mentality (in their legacy systems, their marketing, their lack of dialog, etc.) which means they are not speaking the same language as their customers. Any change put forward is always too late ("banks have so many pilots that they could be airline carriers"). There is no downside to changes, when 90% of transactions are being carried out in self-service channels. Nobody would think that the use of digital channels such as YouTube, Facebook or Twitter will do anything other than grow, and the same thing will happen with the new retail banking.

Banks have to copy the key factors behind the success of these companies, adapt them to their operations and keep them constantly evolving (innovation):



## Design of an excellent "User Experience" (UX)

What is the UX customers get from their banks like today?  
First of all, we need to analyze how customers interact with their banks today:



Banks' current problems with their customers largely arise due to the poor UX these banks provide. Each service channel is a deposit with its own special objectives, because the underlying technology is a set of applications and channels added to mainframe systems which work on a centralized and batch basis.

Consumers, however, flit from one channel to another: all they want is to carry out a task as quickly as possible, so that in each particular case they choose the most suitable channel, and then continue with the task, perhaps through another channel which is more convenient, without having to repeat part of the task already done.

Some banks have attempted to improve their image by using a different UX in some branches, but this does not really instill customer loyalty, because they only turn up there 2 or 3 times a year. And this is not going to change because daily banking transactions are going to be carried out with smartphones, without having to be loyal to any one bank.

**What UX should banks provide to their customers?**

UX means giving the customer the idea that his time is being efficiently invested in an activity which will be beneficial for him.

For example, using Internet banking is a better experience for the user than going to a branch, because the customer feels that he has control and can do the transaction himself, without having to deal with a banker, and this raises his self-esteem (1st level in the Maslow pyramid).

A better UX is always "more convenient" for the customer, and convenience and price are always the most important drivers of disruption. For example: Convenience and the price of paying online are so attractive that people have been led to act illegally (downloading music, films, books, etc.).

The UX is the Holy Grail of retail banking, and in order to be successful it is essential to know and measure how our consumers behave in consuming financial services.

**How did customers use to buy any product and how do they do so now?**

In the past, buying a product involved a chain with three steps in a sequence:

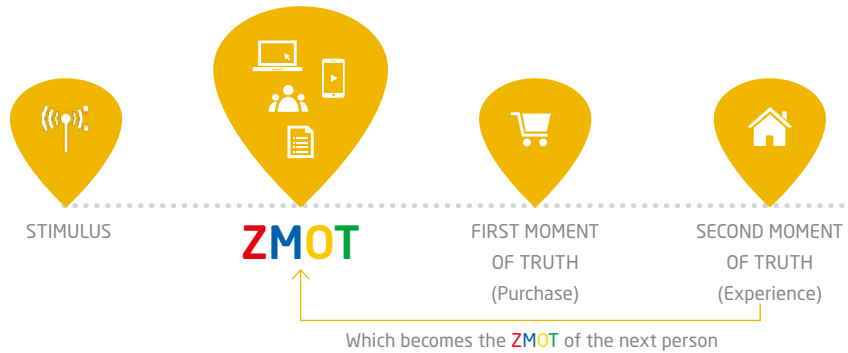
1. The potential consumer received a stimulus to buy: an advert (TV, press, etc.), a new need, replacing a broken article, etc..

2. He would go to a shop and would buy something from the range on offer following the advice of the retailer.

At which point the bank appeared on the scene, offering him a method of payment or a banking product which was more interesting for the bank than for the customer (deferred payments with credit card?).

3. After trying out the product, he would speak about his positive or negative experience with it with his inner circle.

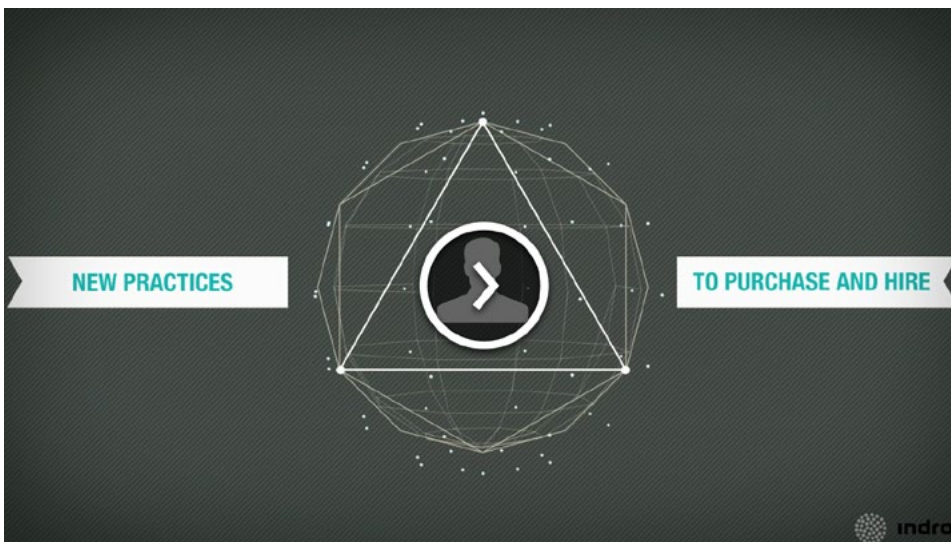
Today, there is a new step in the buying chain, what is called the **ZMOT** (Zero Moment Of Truth):



Before buying anything, the consumer accesses Internet to compare prices and to compare the experiences which his peers have had. This is the **ZMOT**, the precise moment when a customer decides to buy something. Today, banking is no longer present to be able to guide him, and this is where banks have to play a more active role.

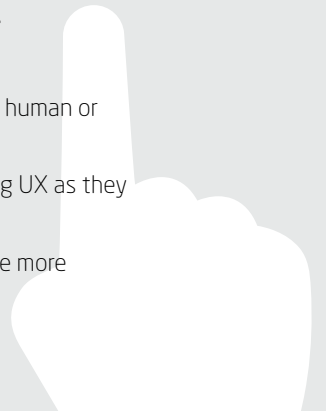
The best possible UX for the consumer is for the bank to be present at the **ZMOT**, as the bank is giving him guidance at a key moment and it is also providing him with access to the wanted product. For a bank to be in the right place at the right time, it must include Big Data in its Business process.

Consumers almost always begin their journey to buy financial products on the Internet and on the bank's website. However, 31% of the time the consumer ends up buying the product from another bank. When a customer has to renew his car insurance, he tries out a comparison website and often changes his insurance company.



**Some questions to be taken into account about UX:**

- ✓ Your UX rating is determined by your customer's worst experience in any of your channels, not the best.
- ✓ Today, the standard UX is using an iPad (which, incidentally, comes without an instruction manual).
- ✓ Today banks provide a service through human beings who often behave like machines. Desirable UX are human or quasi-human experiences which offer value, even if we are actually dealing with machines.
- ✓ Geolocation and biometrics (facial, fingerprint, or voice recognition) are very powerful tools for improving UX as they enable banks to identify their customers securely and give them a customized service.
- ✓ The consumer is going to continue adopting innovations which provide him with new UX. If banks evolve more slowly than their customers in terms of UX then they will be left behind.
- ✓ The banks' brand begins to be evaluated in terms of the UX provided by them.



**Including Big Data in the business value chain.**

*"Big Data is the oil of the twenty-first century; first it was only used to make tar, then came the plastic derivatives, the combustion engine... We are still at the tar phase" Kim Faura  
General Director of Telefónica*

The ability to extract valuable commercial information from mass amounts of data (big data) is becoming a competitive advantage across all sectors. To see how this is happening all you have to do is browse Amazon and see how the website is aware of our tests and proactively offers us products which suit our consumer profile. And nobody sells as many books and at such a profit as Amazon.

Big Data has become democratic because information storage and processing costs have fallen greatly. But the key is not to invest in technology but to turn Big Data into Smart Data which can allow us to find commercial opportunities or reduce costs. This is not an easy task, because data quickly become obsolete. Not everyone is able to do what it is important - to be able to read trends in order to predict behavior.

If banks are able to acquire this ability to manage Big Data, then this will be a game changer because they have more data than any other company from any other sector about its customers, and making use of these data is part of their way of defending themselves from the NP with the ultimate aim of safeguarding their historical position.

**CAPTURE + STORE + PROCESS + MONETIZE = SMART DATA**

Banks are machines for Capturing and Storing very valuable data on their customers, given that:

- Any transaction on any scale carried out by customers "goes through the till" and is registered in the bank (card payments, direct debits, transfers, salary or income payments, etc.).
- Banking regulation (AML, etc.) has helped to bring about the large scale registration of customers' data.

...but banks cannot wait to the future to be able to have these data and to have this capability of processing them (which for the time being is only incipient), as it is not something which can be bought with money. So this is a race against time, but one which can be won:

- Using the suppliers of these technologies, which can be more dynamic at using structured and non-structured data in order to reengineer the traditional business (for example, credit scoring through tracking in social media).
- Promoting the gathering of data about their customers' behavior. For example, making use of those which are now stored but which are not used, buying data from external suppliers to enrich internal information and even helping the consumer to provide them by paying or spending money (e.g. Google when it creates free tools), which will be easier and easier to achieve with a generation which is already used to sacrificing a certain degree of privacy.

The future for banks will not depend on a branch network with ATMs or on a physical process, but on their ability to provide access to banking utility in the right place at the right time, which means they will have to be proficient at *Real Time Analytics*. The bank needs to have intelligence in the system as far as the *next best offer / action* is concerned, so it will have to match the suitable offers to the right customers.

The great improvement in automatic banking will not be the inclusion of advanced technologies or interfaces, but the ability to anticipate customers' needs. Big data is the oil of the XXI Century.

Traditional intermediaries face the possible deconstruction of their business unless they can safeguard their place in the buying value chain using technology and innovation. For example, what will mark the difference in a mobile payment will be the context of that payment, in other words at the time he pays the customer will be informed of other alternative offers, about his available credit, the most beneficial form of payment, etc.

The new value of banking is not simply being a bank, because when its customers evaluate it they are not going to think in terms of its capital ratios, its branch network, its products or its interest rates. Instead, customers are going to look at the bank's capacity to prove them with access, without friction, to banking services when they need them, and also how much they can trust the bank at the time of execution. In other words, it is a question of whether or not it is a **contextual bank**.



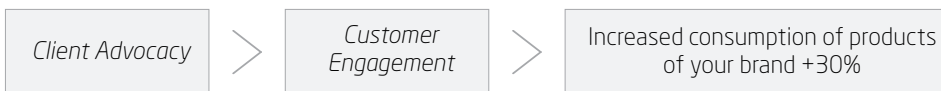
Spanish banks lobbied in the new crowdfunding act (2Q 2014) so that professional investors (NP in alternative business finance) might have an investment limit of €3,000 per project. This a further attempt of them trying to use regulation to safeguard the traditional banking business.

Why not use this lobby capacity to soften the demands of the Protection of Privacy Act and so have more freedom in using data generated by customers?

The bank has to build a digital relationship with the consumer and so achieve *customer engagement*. In order to do so, the customer has to see the bank as its *customer advocate*, i.e. that the bank has to use its customers' information in order to guide them and anticipate changes in their lifestyle, providing

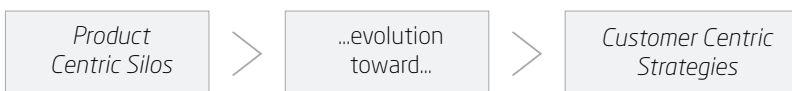
them with access in the right place at the right time to the best financial products.

Customers are no longer willing to put up with small print, or misleading or tendentious communications.



In recent years, customers have felt more abandoned than ever before, just at the time when they demanded customization (because

they know they can get it), and in order for this to happen banks have to change their technology and mentality:



This feeling of having been abandoned would explain why the group of *unbanked* – *underbanked* – *debanked* (customers who voluntarily disengage from the banking system) has grown, even though it doesn't appear to make sense. And the debanked group is made up of hyperconnected people, with a high educational level and purchasing power.

In recent years, bank Chairmen have often been heard saying things like "a bank's best asset are its professionals". This will no longer be the case, however. The bank's best asset will be its customers' data, and human tasks are going to be replaced with algorithms, so now it is more worthwhile to invest in technology than in human resources. Even *management* will no longer be intuition, to a

large degree, and will become big data.

Greater efficiency and operational excellence are going to be needed in the future, and banks are going to need to focus on their main strengths, and have to enter into partnerships for everything else. In other words, a philosophy of: *achieving more by doing less*.

### What should banks' new Marketing be like?

The customer has a growing sense that he is unique, that he doesn't belong to any segment, and he needs to perceive that this is how he treated by the bank:

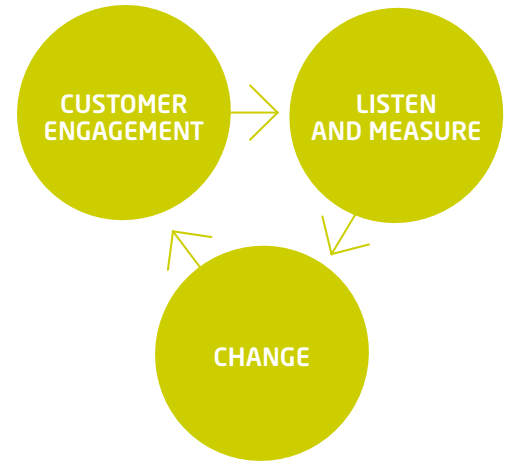
- The customer is a *moving target* and banks have to go out and find him by offering value added services which can be executed at the time. The customer will be carrying out a physical life (and can be located by GPS) or a "virtual" life (Facebook, etc.) and in this case he can also be located.
- How are customers segmented? Two issues need to be addressed:
- Segmenting customers by their purchasing power is less and less useful, and it is more and more relevant to segment them by their behavior (the way they relate to the bank, etc.).

- However, it is important to stress that not even customer segmentation by behavior is good enough, because segmenting customers is a technique for simplifying messages when not all customer data are available. Today, things have changed and a lot of data are available so that banks, if they wish, can customize offers for specific customers.

Products are going to go in two opposite directions:

- 1. Super mass products** with no differentiation, pure commodity.
- 2. Highly customized products** shaped to the customer in question.

Today, technology allows banks to deliver on this customer-centric approach, allowing them to consolidate a customer - bank relationship:



Each bank's marketing team is going to have to change dramatically in coming years, because it needs to full understand customer behavior and to be able to insert the right offer at the right time in order to achieve customer engagement. *Broadcast marketing* is dead.

The bank's marketing must go from offering 3 or 4 star products a year through costly marketing campaigns to offering 10 or 15 a month with the following characteristics:

- Higher customized offers (*tailor made*) systematically built using *customer analytics*.
- Easy to execute (by cellphone) and comprehend (simple products). The product will be considered to be simple enough if the bank can design it and spread the word as quickly as possible.

By this means the bank will begin to carry out contextual banking, which is the true Banking 3.0.

In practice, the bank would have created a list of opportunities for each customer and possible (*triggers*) which would launch the prepared offers of banking products when the specific event occurs.

In order to be able to do this, it is essential to be very familiar with the customer's behavior beforehand.



Bank's new marketing must be intelligent/smart (customized and with data), non-intrusive and offer the customers offers which can easily be executed.

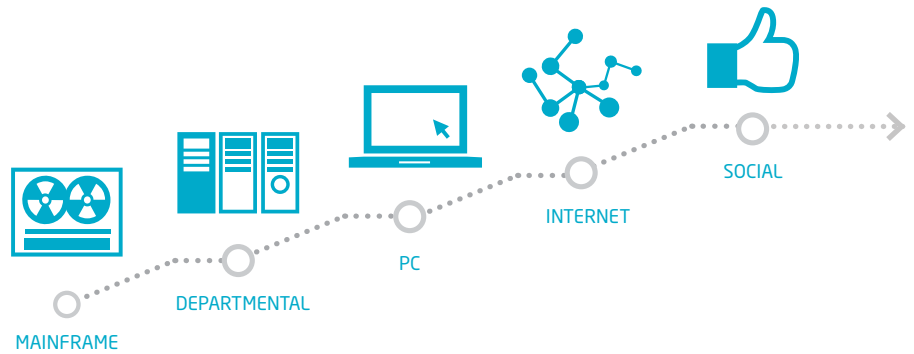
**A change of mentality. Social Banking is here to stay, and it is going to be disruptive**

*“The ROI of social media is your business will still exist in 5 years”  
Erik Qualman, writer, business advisor and speaker.*

**What is Social Business?**

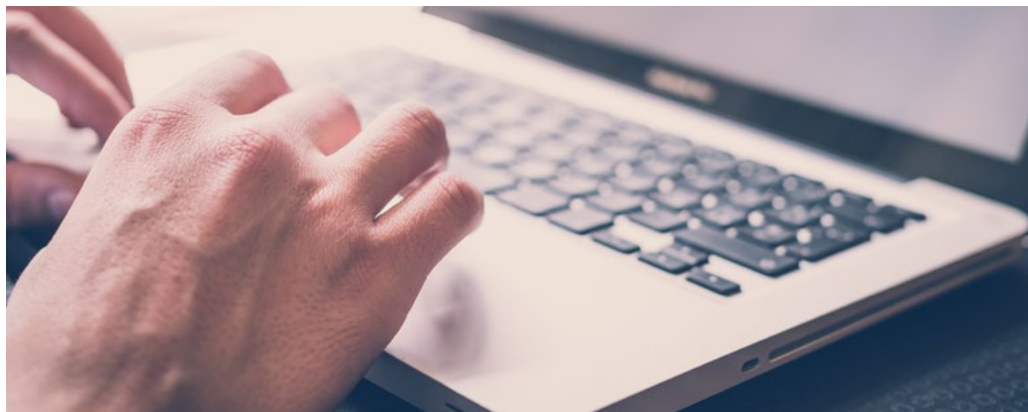
It is a community of collaborators connected in a network which, using an online platform, shares business content (images, multimedia files, reports, opinions, etc.) on a matter of common interest, and where most of the content is created by the community itself.

According to IBM, we are at the 5th evolutionary phase in computing:



These networks can be of 3 kinds:

- **Internal:** At the service of a company's employees (≈Intranets 2.0). They are intended to optimize the workforce through an "exceptional work experience".
- **External:** At the service of customers ( Extranets 2.0). They are intended to improve customer relations and to achieve the sought-after customer engagement., through an "exceptional web experience".



**What is Social Banking and why is it essential for it to be adopted by banks?**

Social Banking is the adaptation of Social Business to banking at a time in which certain pillars of the traditional banking business are changing: how the bank distributes its products; the method of working and collaboration; how products are designed (mobile first) and customer behavior.

These are the main reasons why banks have to change their mentality and should firmly decide to adopt it:

**1.** Because the customer makes greater and greater use of banking services with a do-it-yourself philosophy (because he speaks a different language from the bank and being autonomous raises the customer's self-esteem). Hence, the bank is losing the relationship with the customer, the opportunity to understand the reason for his transaction, and, in short, a large amount of very valuable information.

**2.** Because Social Banking is the best tool for getting rid of the present friction with the customer, which helps to clear the way for NP:

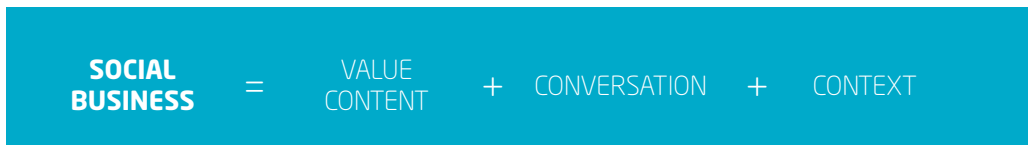
- It is a very cheap distribution platform. It "is a fix" for understanding customers' needs, to provide them with a solution through the co-creation of products or services and resolve doubts.

The bank can change from using a *push* strategy (these are the products which I, the bank, have created and I am going to foist them off on you as best I can) to a *pull* strategy

(tell me what you need so that the bank can be useful in your life, and we shall create it together).

- Because it gives customers a sense of security, they feel that if the bank doesn't treat them properly, they shall have a forum where they can complain, so that the bank will go to great lengths to provide them with a good service.

**3.** Because it is the best way to segment your customers. Customers with common interests have already divided into same interest groups. This makes it much easier to manage customers.



4. Because Social Media now have a massive presence (2014: 2.0 billion; 2017: 2.5 billion) and customers now expect to find their bank there.

5. Not only because it allows banks to better control possible conflicts with customers and limits the impact on their reputation, but because today there is no other way to manage and create your brand.

In the age of Radio and TV, communication was one-directional, and creating a brand was merely a question of spending on advertising.

In the age of Social Media, communication is bi-directional, it is the customer who has the last word and his opinion creates the brand. It is no use making a big investment in advertising if my peers, who are the people I trust, tell me that this brand does not deliver on its promises.

6. Because the technology used to support the *Social Banking* concept already exists. "All" that is needed is a change of mentality and to find new business and income models, as we can see in these examples:

<p><b>RISK AREA</b></p>	<p><b>Visual DNA</b></p>	<p>Platform which uses psychometrics (questionnaires which measure the user's knowledge, skills, attitudes and personality traits), to create databases which can be used to feed credit scoring decisions.</p> <p>Useful in the bankarization of social layers which do not have access to credit as they do not have a credit history.</p> <p><a href="https://www.youtube.com/watch?v=PA94VMoLdHo">https://www.youtube.com/watch?v=PA94VMoLdHo</a></p>
<p><b>INVESTMENT AREA</b></p>	<p><b>Motif Investing</b></p>	<p>Online platform which promotes investment in ideas or trends (3D printing, biotechnology, ecological products, etc.) generated by the connected community. These ideas are materialized through 30-share portfolios relating to the investment idea.</p> <p>JP Morgan and Goldman Sachs have invested USD80 Mn in the company.</p> <p><a href="https://www.youtube.com/watch?v=EY0cUKC3i0k">https://www.youtube.com/watch?v=EY0cUKC3i0k</a></p>
<p><b>ADVISORY AREA</b></p>	<p><b>Unience</b></p>	<p>Platform which enables individual investors to connect for them to share their vision and to be able to use information, analysis and monitoring tools for their portfolios.</p> <p><a href="https://www.youtube.com/watch?v=LePkq8b0Vil">https://www.youtube.com/watch?v=LePkq8b0Vil</a></p>

What challenges have to overcome a bank that wants to carry out *Social Banking*?



### Is Social Banking going to be truly disruptive?

The answer is yes. We are really in a *déjà vu* situation, but this time more is at stake.

In the 1930s and 1950s the appearance of radio, first, and then TV, alarmed an important part of society due to the threat that social communication posed for the morals of US society:

*"Radio broadcasting is spectacular and amusing but virtually useless. It is difficult to make out a convincing case for the value of listening to the material now served out by the American broadcasters...Is the whole radio excitement to result, then, in nothing but a further debauching [morally corrupting] of the American mind in the direction of still lazier cravings for sensationalism?"*

*E. E. Free [science editor], "Radio's Real Uses", The Forum, March 1926*

However, these devices were adopted on a massive scale, and for decades only companies which were able to finance advertising campaigns through these media became multinationals.

In the 1990s something similar happened with Internet:

*"It is no exaggeration to say that the most disgusting, repulsive pornography available is only a few clicks away from any child with a computer"*

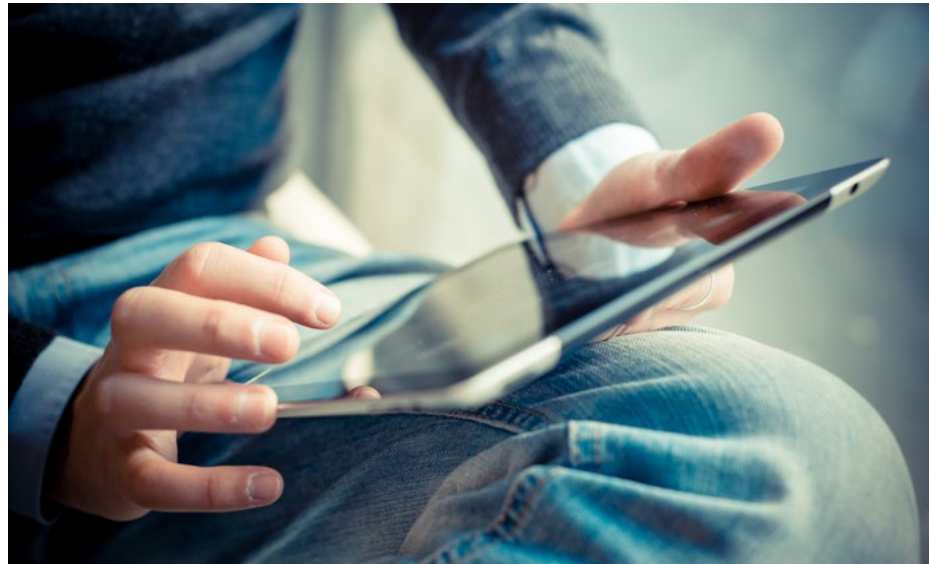
*"World Herald", interview to Senator James J. Exon.*

*"We don't think parents should just buy computer software, sit their kids in front of it and think they will be taken care of or entertained"*

*National Parenting Center's Katzner.*

...the big difference is that Internet is no longer a one-directional form of communication, like the radio or TV, but a bi-directional communication platform which thereby allows two parties to conduct business.

Banking is conceptually a social action, and the best way of carrying out banking is on an Internet platform, and that is why *social banking* is going to be disruptive.



# WHAT THE BANKING BUSINESS LOOKS LIKE OVER THE NEXT DECADE

In recent years, banking has simultaneously witnessed how banks have merged together and how their business is being deconstructed:

Traditional banking entities are gaining an international scale and presence through business consolidation processes, which, according to the *IBM Institute for Business Value*, is expected to have the following result:

## 2005

Tier 1 Banks
Cooperatives and saving and loan building societies
Mid-Tier Banking
Community Banks
Industry specialists
Non-bank banks



Mid-tier and local banking lose market share to Tier 1 players and other financial entities with more specialized value proposals.

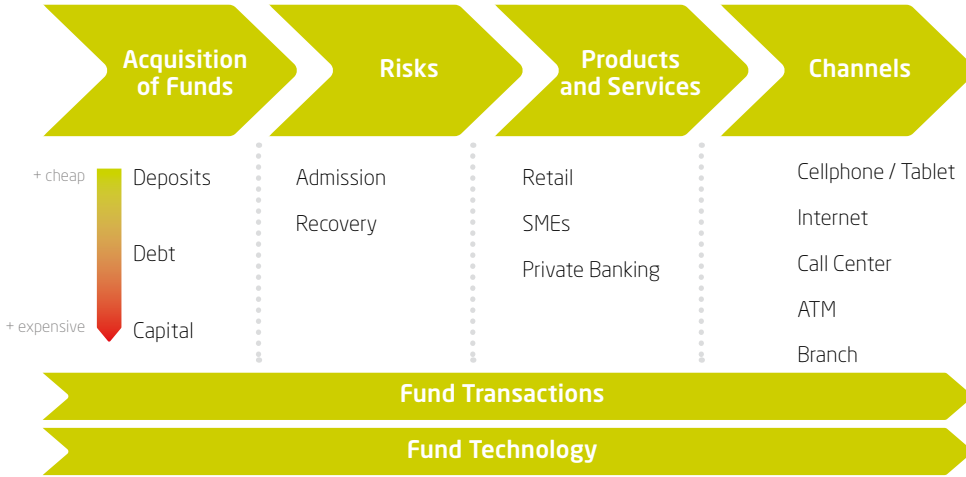
## 2015

<b>Tier 1 Banks</b>	Increased return through selective acquisitions and new ways of approaching markets through more customized offers.
<b>Local Banks</b>	Increase in market share taking advantage of local knowledge and close relationship with the consumer, with a broader range of products and services
<b>Industry specialists</b>	Increase in customer base, providing specialized products and services to niches with high growth potential
<b>Non-bank banks</b>	Growth on the current customer base with new forms of distribution and more customized products.

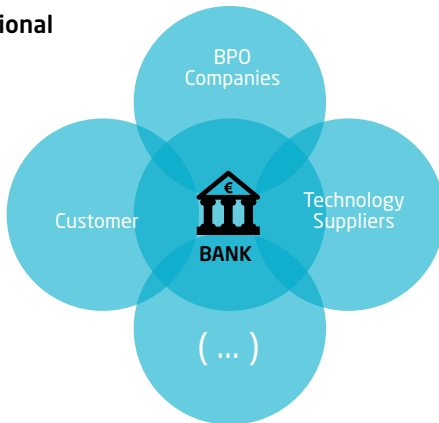


On the other hand, technology is allowing the banks' traditional value chain to be broken down into many different parts "with a mind of their own" which the NP are taking advantage of to wrest market share away from banks.

**Value Chain of Traditional Banking**

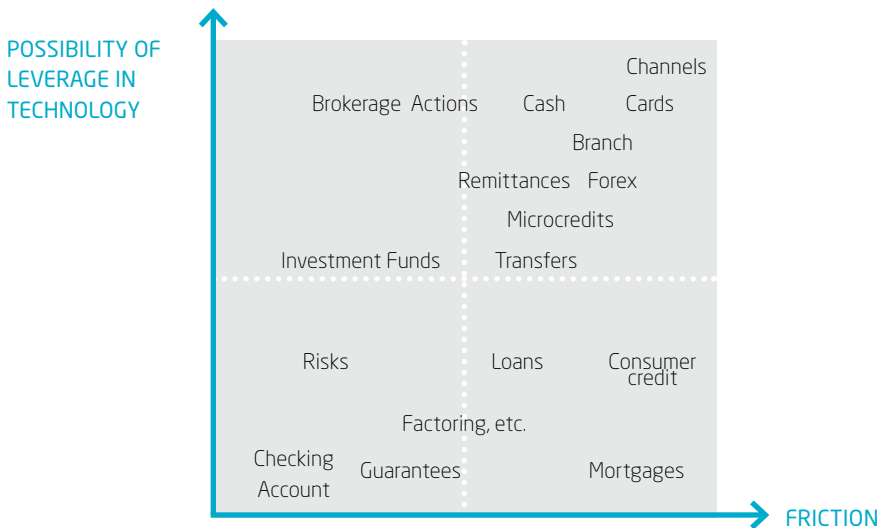


**Leading Role of traditional bank against rest of stakeholders**



The NP are going to begin to play a very important role in the parts of the value chain where there is currently most friction between the bank and the customer and

where they can offer the customer a cheaper, more convenient product through technology:



The short, mid and long term performance is expected to be as follows:

		0-3 YEARS	4-7 YEARS	8-10 YEARS
<b>Channels</b>	<b>Cellphone / Tablet</b>	Consolidated for queries. Is only transactional in payments. <i>Social Banking</i> gives it even more of a boost.	Fully functional for transactions via Apps and <i>Social Banking</i> .	Essential as it provides functionality which cannot be achieved in other channels (real time, contextual banking, etc.).
	<b>Branches</b>	The gradual reduction of branches continues. 1st downgrade of a major bank due to its unwieldy physical infrastructure.	The reduction of branches becomes a declared strategy, as it gives a "bad image".	Highly focused branches (Flagship, specialized hubs, etc.).
	<b>ATM &amp; Cash</b>	ATMs and Cash decrease at the same pace.	ATMs are an increasingly unsustainable cost center. Integration with cellphone.	Very little cash is managed and cash extraction points begin to be scarce.
	<b>Remote Contact</b>	Basically telephone. Call center for resolving incidents (reactive) coexists with commercial <i>call center</i> (proactive).	Voices gives way to images. Telepresence begins to be widespread through different devices (cellphone, tablet and smart TV).	Online and offline telepresence is the main service channel both for resolving incidents and for sales guidance.
<b>Products and Services</b>	<b>Payments</b>	P2P mobile payments replace cards. Large number of comparison tools and personal finance management tools.	Most payments are made by cellphone and bank, and NP begin to enrich the payment experience (before, during and after).	The physical action of "passing by the till" disappears. Products are monitored (Rfid, etc.) and are debited from our account, once they are accepted. Enriched payment experience.
	<b>Cloud</b>	Tier 1 banks still don't work 100% with cloud computing, though they are beginning to transform their systems. Only NP and Tier 3.	Major technological renewal projects in Tier 1 and 2 banks. Many value-added cloud services for SMEs.	All the players in the banking center use cloud computing. Externalization of many internal areas via cloud.
	<b>Analytics</b>	Pilots are beginning to come onstream. Banks are becoming aware of the "tsunami" of <i>Social Banking</i> . Many failures and money thrown out of the window.	The customer accepts the bank using his data because he understands that it will now be used to his benefit. He will penalize banks that mishandle his data.	Banks take advantage of their data also for retailers. Value-added data are "gold" because they are bought and marketed to third parties once they are processed.
	<b>Security</b>	There is no definitive / universal solution, so it is still a <i>stopper</i> .	There are different solutions which resolve the problem from the technical standpoint, so it is manageable.	New highly advanced biometric systems are developed and security problems are "definitively" overcome.
<b>Risks</b>	<b>Risk Analysis</b>	Big Data solutions begin to be introduced, though only as a test. Major <i>Risk Data Aggregation</i> projects.	Big Data is the main tool for more advanced entities and it coexists with the old system. Collateral driven loans are less common vs. <i>customer driven</i> loans.	A few benchmarks in smart risk (Banks and/or NP) provide risk analysis to the rest in the cloud ( <i>commoditization</i> ).
<b>Acquisition of Funds</b>	<b>Sources of Banking Lines</b>	Widespread narrowing in net interest income. Only Paypal and some prepaid cards win banking liabilities.	Narrowing in net interest income is consolidated. Gradual disappearance of cash. Prepaid cards become more common (de-banked philosophy) in emerging countries and amongst the middle-low class in advanced countries. More difficult to acquire liabilities "for free".	Banks fight other prestigious companies to acquire liabilities. Bank financing become more expensive.

## THE FUTURE OF BRANCHES AND ATMS AS A CHANNEL



### BRANCHES

Branches are becoming a residual channel, for the following reasons:

**A.** It is not a very convenient channel because it isn't real time and its opening hours make my money less accessible and the service less immediate. Convenience and price are always the most important drivers for disrupting the customer's behavior.

**B.** It is a face-to-face interaction with little value added and which challenges the current logic of digital natives, who are often better informed than the bank representative.

Today, branches are only useful 2 or 3 times a year, and they are no longer even essential for the sale of complex banking products, even though statistics say otherwise, and this is because:

- They do not track the complete route for buying these products, which in fact begins online (**ZMOT**).
- Customers are "forced" to go to a branch because as things stand today the bank is not ready to contract many of these products online. Questions regarding checking customer's identity are often invoked too.

It makes no sense to think that a network of physical branches can compete with a

network of cellphones, which is the largest, most advanced, quickest and cheapest existing distribution network, with the highest level of capillarity, and which is also ideal for the distribution of banking products, because just as with music, books or Apps, the products are not physical (like a car or a fridge). Questions about checking identity, income, etc. can today be resolved by using biometrics, or eliminating the silos in which the banks are organized.

Branches provide psychological support for elderly customers (although to a lesser and lesser degree) or to low profile customers (who have to be redirected), not to young or high profile customers (who have less time and prefer Internet).

Banks face the challenge of resizing and redesigning the utility of branches. Each bank will have to choose its appropriate mix: Flagship Branches; Advisory and Information Branches; Engagement Hubs (guidance about financing for education, financial advice, etc.); Transactional Branches (daily transactions and handling cash), etc.

In other words, we are not heading toward a branch-less concept but instead a less-branch, more profitable and more specialized model.



### ATM

ATMs are tied to physical money, so that they will continue to be essential insofar as cash continues to circulate, which will continue to happen over the next 10 years.

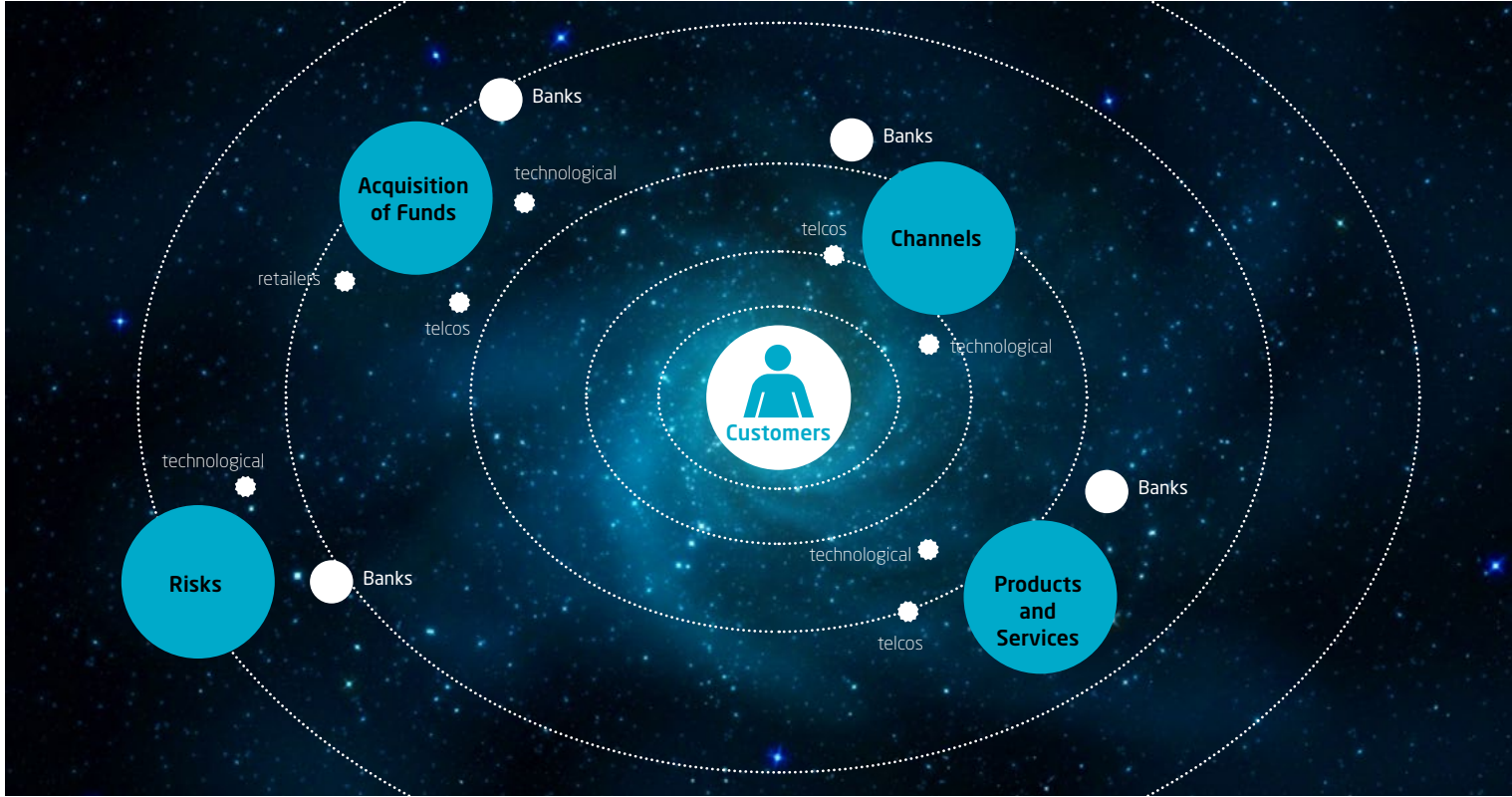
Before they disappear, they would be expected to evolve toward full integration

with cellphones (authentication with the cellphone, not with cards – and end up using the screen of the customer's cellphone instead of the ATM screen).

## What the banking business looks like over the next decade

Technology is acting like a neutron which has bombarded and disintegrated what has until now been the indestructible value chain of the banking business. A big bang has taken place, leading to a planetary system, an

ecosystem, where the "sun king" is no longer the bank but the customer and the rest of stakeholders orbit around him to provide friction-free banking utility which is very convenient and at a good price (saving):



Today banks face a huge challenge not only in terms of profitability but also, according to some people, in terms of survival. The response must be quick and firm.

The good news is that this is not a crossroads - because in our opinion it is clear which road banks have to take.

The banking sector has many highly skilled professionals, a great deal of knowledge, and a priceless amount of information. Banks will overcome this challenge, as they did with others in their history, if they are able to reinvent themselves and to create their own ecosystem of specialized collaborators to take advantage of their many capabilities and virtues.

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