ISCTE Business School
Instituto Universitário de Lisboa

CAN INNOVATION BE A SUSTAINABLE COMPETITIVE ADVANTAGE FOR A BANK?

Pedro Manuel Vaz Andrade

Work project submitted as partial requirement for the conferral of

Master of Science in Business Administration

Supervisor:

Professora Doutora Generosa do Nascimento, Professora Assistente, ISCTE Business School, Departmento de Recursos Humanos e Comportamento Organizacional

November 2019

“If you want to build a ship, don't start by telling the workers to gather wood or prepare the tools; do not start by allocating tasks or managing the activity. Instead, you should awake in them the desire of the distant and endless sea. When alive, this thirst will get them into the works of building the ship”

Antoine de Saint-Exupéry

Abstract

In recent years, organizations have experienced a fast digital and organizational revolution in their industries. The strategic long-term planning model is losing its applicability and organizations should continually seek new sources of competitive advantage if they want to stay "in-the-game".

This case study exemplifies how innovation can be used as a sustainable competitive advantage in a bank's business model and how this can be critical to its future success by helping define corporate strategy. The case is built around BNP Paribas, a leading European bank with a global presence, in order to make it possible to have a practical application and to observe tangible results. When developing the case, a descriptive research was carried out using both primary and secondary data regarding the transformation plan that BNP Paribas Bank is promoting.

As for the outcomes of the transformation plan and of the new strategy implemented, it was found that innovation is a known buzzword, but requires profound transformations throughout the organization. It is necessary to place the customer at the center of the business model, change the organization's culture, promote new ways of working, as well as the requalification of employees and also continually seek new business opportunities, so that the bank can have a business model that persistently best adapts to market trends and changes in the business environment.

The case study will contribute to the identification of key success factors of digital transformation and will seek to make the evaluation of the realization of the transformation plan, by assessing its impact in terms of obtained results.

Key words: Innovation, Strategic Management, Organizational Change, Business Environment, Strategic Analysis, and Banking Industry.

JEL Classification System: G21, M10, M19, L10

Resumo

Nos últimos anos, as organizações, têm experimentado uma rápida revolução digital e organizacional nos seus setores de atuação. O modelo de planeamento estratégico de longo prazo já não grande tem aplicabilidade e as organizações devem procurar continuamente novas fontes de vantagem competitiva, se quiserem permanecer "no jogo".

Este estudo de caso pedagógico ilustra como a inovação pode ser utilizada como uma vantagem competitiva sustentável no modelo de negócio de um banco e como isso pode ser crítico para o seu sucesso futuro, ao ajudar a definir a estratégia corporativa. O caso é construído em torno do BNP Paribas, um banco líder europeu com uma presença global, de modo a tornar possível ter uma aplicação prática e assistir a resultados tangíveis. Ao desenvolver o caso, foi feita uma pesquisa descritiva utilizando dados primários e secundários referentes ao plano de transformação que o Banco BNP Paribas se encontra a promover.

Quanto aos resultados do plano de transformação e da nova estratégia implementada, verificou-se que a inovação é um conhecido chavão, mas requer profundas transformações em toda a organização. É necessário colocar o cliente no centro do modelo de negócio, mudar a cultura organizacional, promover novas formas de trabalhar, bem como a requalificação dos colaboradores e também procurar incessantemente novas oportunidades de negócio, de modo a que o banco possa ter um modelo de negócio que continuamente melhor se adapta às tendências do mercado e às alterações no ambiente de negócios.

O caso pedagógico contribuirá para a identificação dos fatores críticos de sucesso de transformação digital e procurará concluir do sucesso do plano de transformação, avaliando o seu impacto em termos de resultados obtidos.

Palavras-chave: Inovação, Gestão Estratégica, Mudança Organizacional, Ambiente Empresarial, Análise Estratégica e Setor Bancário.

JEL Classification System: G21, M10, M19, L10

Acknowledgements

I have had the chance to be presented with the presence and support of very special people throughout my life. Their spirit, heart and intellect have made me realize that success is a journey, not a destination, and in that sense, I have learned, through them, to enjoy the journey, as much as the destination. I will be eternally grateful to them and it is why I dedicate to all of them this work:

- Firstly, my supervisor, PhD Generosa do Nascimento, for whom I have the deepest admiration. I truly thank her so much for the opportunity given to me and, above all, the constant guidance and unconditional support;
- To INDEG-ISCTE, which gave me the opportunity and privilege of attending the Executive MBA, a major step in my personal, academic and professional growth;
- To my "Inner Circle" of Executive MBA (EMBA 13 – 2016/2018), Carina Serrão, Gilberto Gonçalves and José Veracruz, for all the hours of study, laughter and companionship that we have lived through these last years and which showed me that "*alone we go faster, but together we go further*";
- To my respected colleagues in BNP Paribas Portugal, for their support and helpful hints;
- To BNP Paribas group, especially to Mrs. Véronique Georges, Mr. Jan Parys and Mr. António de Faria, who encouraged me to and gave me full opening from the first minute, my former manager Ms. Joana Monteiro, for all the support and work example, my manager Ms. Alexandra Lopes for the attentiveness provided and also to Ms. Susana Seixo, Mr. Andreas Lambroupolos, Mr. Xavier Jombart and Mr. Thierry Derungs, without whom I would not have had the opportunity to develop so much this project;
- To all my family for all the comfort and care given to me along this path;
- Lastly, a very special thanks to my parents, to my wife Liliana, and my sons, Bernardo and Gustavo, who over the years have always encouraged me to follow my dreams.

Table of Contents

Index of Tables

Index of Figures

List of Abbreviations

BMC	Business Model Canvas
CAGR	Compound Annual Growth Rate
CIB	Corporate & Institutional Banking
CEO	Chief Executive Officer
CET1	Common Equity Tier 1
CSR	Corporate Social Responsibility
EU	European Union
GAFAM	Google, Amazon, Facebook, Apple and Microsoft
GDPR	General Data Protection Regulation
IFR	International Financing Review
IFS	International Finance Services
M&A	Mergers & Acquisitions
OECD	Organization for Economic Cooperation and Development
PESTEL	Political Economical Social Technological Environmental Legal
PSD2	Payment Services Directive II
ROE	Return on Equity
SWOT	Strengths; Weaknesses; Opportunities; Threats
VRIO	Value; Rare; Imperfectly Imitable; Organization
VUCA	Volatile, Uncertain, Complex and Ambiguous
YoY	Year on Year

1 Introduction

The world is changing faster and faster and the financial system is no exception: Low interest rates and crushing margins, along with new entrants (Fintechs and Neobanks), data revolution (Big Data/ Machine Learning), platform economy, increasing regulatory pressures (e.g. Payment Services Directive II (PSD2) and General Data Protection Regulation (GDPR)), the greater convenience demanded by customers, the increasing smartphone utilization, etc., all these poses a challenge to banks. Nevertheless, this changing landscape also represents a great opportunity for players in the banking industry, as innovative business models can generate new revenue streams, and also deliver greater value and enhanced customer service.

Despite the fact that the speed of digital transformation in financial services partly depends on regulation, as well as from customer demographics and behaviors (which varies from country to country), but in order to capture this competitive advantage and to survive in the long run, banks must renew themselves, as most of them are "*heritage financial firms*", i.e. existing only formally but not competing effectively, as global digital platforms, fintech companies and other nontraditional players are gaining an increasing market share, by using technology to change the economics and business models of the industry.

In this sense, the banking industry is in a digital arms race. In 2018, and according to Delloite (2018), banks globally invested US$9.7 billion to enhance their digital banking capabilities in the front office. For many retail banks, online and mobile channels have become as important—if not more important—than branches and ATMs.

The solution for existing banks is to look within their own organizations. They need to understand their current competitive position, strengths and weaknesses, internal culture and capabilities. Banks need to consider how they can restructure their distribution models, improve their value proposition, and provide consumer-centric digital solutions that will improve customers satisfaction and increase growth.

This case focus on the last quarter of 2016, where BNP Paribas was then at a strategic crossroads: moving towards a merge with another bank that would allow it to attain a greater European and global dimension or; on the other hand continue with the strategic path previously defined in the business development plan that was ending. It is necessary to make the strategic diagnosis of the situation, assess the option that offers the best opportunities for future development and define a future strategic plan. Several multidisciplinary teams have been created for this purpose and it is up to the CEO and his team to decide what will be the future direction to take.

By exploring BNP Paribas' case, the target audience of this project can have the chance to exercise the use of strategic management concepts and tools, which can be very useful in their academic and careers' future. It is expected that they can also have the opportunity to extend the knowledge about the banking industry, that is so many times misunderstood, but also to gain more info about the bank in question.

This work is structured in nine chapters. After this introduction chapter, the following one presents an overview of the banking industry and of BNP Paribas.

The third chapter establishes the intended audience and also the learning goals of the case. Chapter four focus on the literature review and discusses how Corporate Strategy and Competitive Advantages relate with Innovation.

After it, the emphasis is on Methodology, described in chapter five, that specifies how the compiled data was collected and which steps were taken. It notices that for the completion of this case study, it was designed an interview script that had been employed during the conduction of the interviews with senior managers of BNP Paribas, and also a survey script, that resulted in a thoroughly content analysis.

The sixth chapter presents the analytical tools used, namely the PESTEL; Porter's Five Forces; VRIO; SWOT; and Business Model Canvas.

With the title Case Resolution, chapter seven provides the presentation plan; proposed questions; resolution of the proposed questions and the resolution slides.

Chapter eight presents the lessons from the case and the implications to managerial and also to the innovation field. The ninth and last chapter reviews the conclusions of the case, as well as its limitations.

2 Case study

2.1 Problem Outline

Banks, through their management bodies, face the challenge of offering and providing services with higher quality, and simultaneously need to achieve greater efficiency and competitiveness, while ensuring the future sustainability of the business and the planet. Thus, the quest for innovation is a strategic issue to banks, in order for them to improve their business models and maintain future economic sustainability.

On the basis of all this, is the fact that, the banking industry faces an enormous risk of failure if banks continue to maintain their 20th century business and operating models. Past success brought with it inertia and dynamic conservatism, but as Pete Redshaw, vice president at Gartner, says: "*The future of the financial services industry is increasingly weightless, requiring few physical assets to establish or maintain a presence. That makes the industry especially vulnerable to disruption by digital competitors*" (cited in Finextra, 2018).

In times of industry transition and in order to avoid disruption, banks must be prepared to change, adapt and reformulate their own business models, more tailored to the competitive landscape that shows an increasing Volatile, Uncertain, Complex and Ambiguous (VUCA) environment. However, and given the depth and latitude of the necessary transformation that this implies, one can easily guess that it will be a long process and not necessarily without pain.

The thesis will be carried out on the plan of transformation of a bank (BNP Paribas), that has shown full support to provide the necessary information to what is intended to be studied and presented throughout this work. The case study is available in Appendix 5.

The starting point for this work is: what innovation strategy should be implemented in BNP Paribas in order to leverage the results of the Transformation Plan?

Therefore, this study will try to answer the following questions:

1. Identify the innovation practices / initiatives / projects that had already been implemented;
2. Describe the results/perceptions of existing innovation dynamics;
3. To make an assessment of eventual initiatives of innovation improvement.

2.2 The Banking Industry – Overview

2.2.1 What are banks for?

The financial system comprises financial institutions, financial markets, clearing and settlement infrastructure systems, however this part of the work will concentrate its focus on a brief overview of financial institutions, and specifically banks (broadly defined here as deposit-taking institutions).

Banks are a service industry, and as so they do not create real goods, but instead they offer the financial means to facilitate production in other industries (Northcott, 2004). Banks satisfies financial needs of the economic agents. Theoretically, they exist to minimize a mixture of problems (namely informational asymmetries, and duration mismatches) that could prevent funds from going from savers with an excess of funds (depositors) to agents with a shortage of funds (borrowers) (Petralia *et al.*, 2019).

The most known and common services of banking currently are:

- Lending – To sell credit
- Deposits – To buy credit
- Advisory – To advise customers on their financial choices
- Investments – To manage assets of wealthy clients
- Security – To provide security of assets
- Trade/Payments – To guarantee, facilitate and act as a clearing house for international trade and payments
- Distribution and access to funds – Simple and global access to wealth based in another region

The primary source of profits for most banks is interest income earned by intermediating between borrowers (interest received) and depositors (interest paid), but banks also collect non-interest income by charging fees to their customers for a variety of financial services.

In sum, by providing liquidity to economic agents, banks can be seen as the oil that lubricates the engine of our economies. Banks have been offering this for centuries, though, does not mean that structure of the industry will always remain the same.

2.2.2 Recent evolution of the banking industry

Banks exist for centuries as banking history is entangled with the history of money and as such it presents a long and rich track. Nevertheless, the following work will focus mostly on the years after the early 2000s, because it coincides with the full establishment of BNP Paribas group as a result of the merger of BNP and Paribas in the year 2000.

Since the beginning of 21st century, and after an initial period of industry consolidation, the collapse of Lehman Brothers in September of 2008 led to a credit crunch and to a global banking crisis that caused significant financial stress on banks worldwide. This raised fears that the world economy was at risk of facing another depression similar to the Big Depression in the 1930s. As a response, central banks announced unconventional monetary policies including quantitative easing, and lower interest rates on banks' deposits with the central bank in order to ease access to credit. This led to a crushing of bank's margins (Solt, 2018) and consequently to a loss of profitability in the banking industry that it is still present nowadays. In 2017, the average Return on Equity (ROE) for banks in Europe remained below 8%, which is less than their cost of capital or the ROE of US Banks (Arnold, Jenkins and Noonan, 2018).

According to estimations for the year 2017 made by McKinsey&Company, the banking system globally stored, transferred, borrowed, invested, and managed risk in an amount of more than $260 trillion in funds. The global revenue associated with this intermediation was approximately $5 trillion in 2017 (McKinsey&Company, 2018). This represented, in aggregated terms, a profit margin little more than 1.92% in 2017, that according to the same source, is less than the 2.20% that the banking system presented in 2011.

Notwithstanding this, the biggest revenue sources continue to be interest income and fees from traditional bank activities, such as everyday commerce and transactions (e.g. deposits, payments, and loans) for corporate and retail banking that represent more than 80% of total revenue. This varies by bank size, as larger banks, when compared with smaller banks, usually do less traditional banking (as a proportion of their balance sheets or income streams). Even if the loans in larger banks represent more than 50% of assets, this proportion in 2017 is still lesser than the proportion of loans relative to their total assets evidenced by the smaller banks (Petralia *et al.*, 2019).

2.2.3 Current state of banking industry in Europe

Given that Europe's banking industry is still highly fragmented, it is therefore not surprising that European Central Bank, as the main supervisor of banks in Europe, is favoring bank mergers, especially cross-border ones within the euro area, hoping that will improve European banks' profitability and create a sector more resilient to shocks (Arnold, Jenkins and Noonan, 2018; Reid, 2019).

As so, and despite the fact that the number of M&A in the banking industry has reduced after the sub-prime crisis, it is easily noticed in Figure 1, that since 2008 until 2016 the number of credit institutions in the European Union and the eurozone kept declining, as the result of many merger operations between mid-sized domestic banks. In the EU the number of banks summed up to 6,648 in 2016, contrasting with the 8,570 banks existing in 2008 (Arnold, Jenkins and Noonan, 2018; Hassen *et al.*, 2018; Statista, 2019).

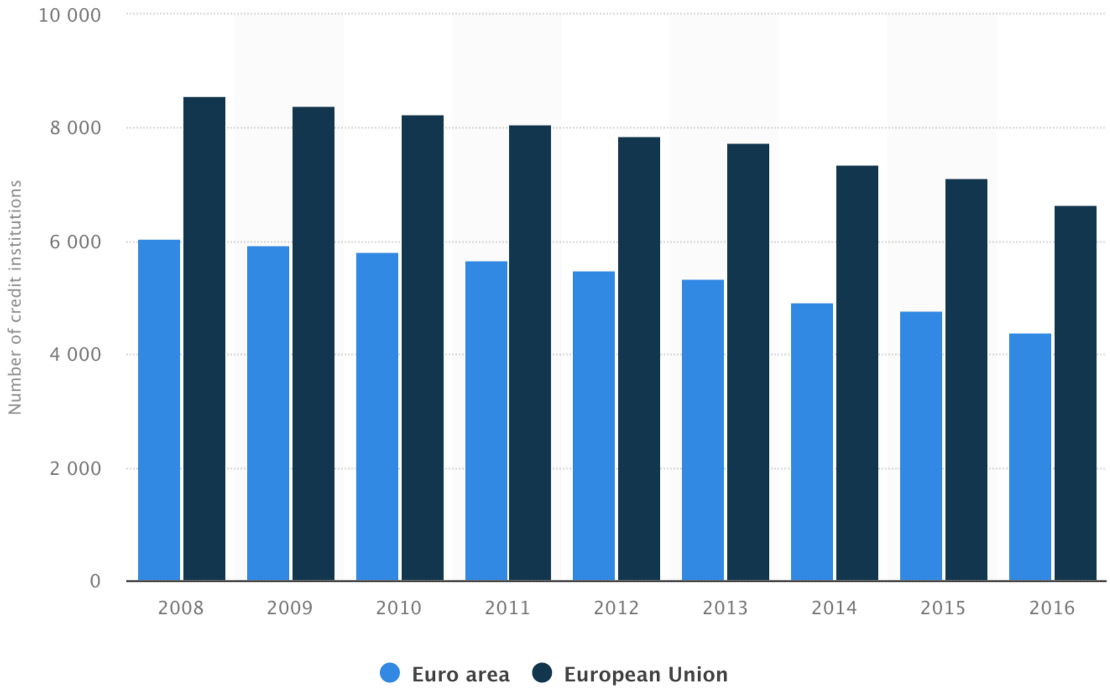


Figure 1 - Number of credit institutions in the European Union (EU) and in Eurozone countries from 2008 to 2016

Source: Statista (2019)

2.2.4 Challenges to the industry

Since the beginning of the 21st century, new entrants in the banking industry are starting to take a piece of the business. Taking advantage of the opportunities created by the new regulatory requirements, namely the new Payment Services Directive II (PSD2), which allows other companies than banks to offer financial services for bank customers

(Romanova *et al.*, 2018; Clot, 2019), and by General Data Protection Regulation (GDPR) (Jackson, 2018) they are increasing the pressure on the business model of banks. These new rivals, supported in digital technologies, come up with more efficient methods of banking services and better customer experiences. Today "*customers don't compare different banks anymore, they compare experiences*" (Backbase, 2018). These – Fintechs and Neobanks – are truly threatening the existing banks' business model and if the giants of the Silicon Valley, namely Google, Amazon, Facebook, Apple and Microsoft (GAFAM) choose to enter in banking game, the competition will be fierce or as JPMorgan's Jamie Dimon warned "*Silicon Valley is coming to eat the banks' lunch*".

Bain & Company (2018), surveyed online 151,894 people in 29 countries and find out that 54% of respondents would prefer to trust their money to a big technology company rather than to banks in general (Figure 2). However, the answers are slightly differently in the US, the EU and China. This is even more distinct in younger consumers and mostly in Asia, where more than 80% of the under 34's prefers these new-comers. Nevertheless, and although the rates of younger people in more developed countries are lower than in China or India, people of every age are becoming more used with financial products from tech-companies especially through mobile. This is particularly relevant when we look at the number of persons that select to use third-party payment and peer-to-peer payments apps rather than their bank apps (The Economist, 2019b).

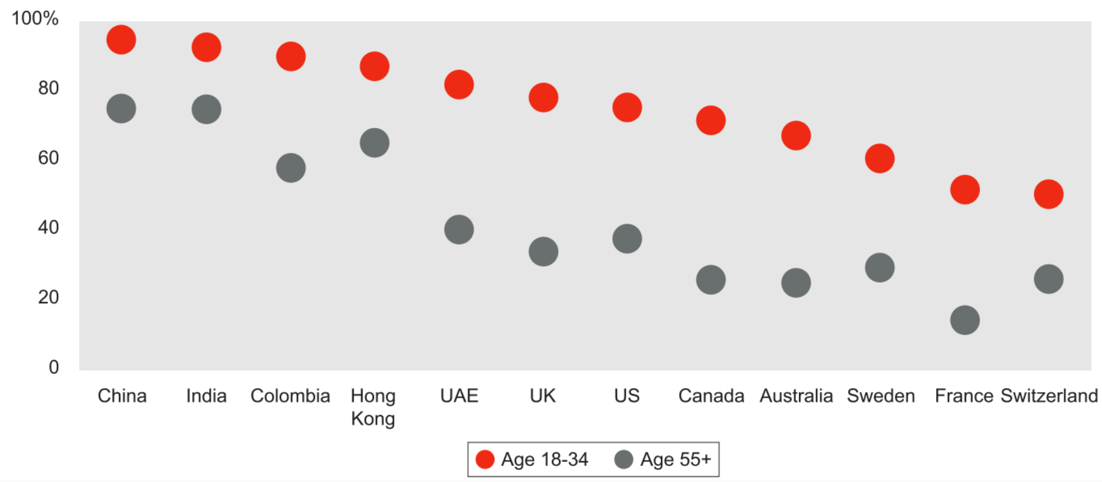


Figure 2 - Percentage of respondents open to banking with tech companies

Source: Bain & Company (2018)

Therefore, these new players have a huge structural and strategic impact for the incumbents. According to the Economist Intelligence Unit (Figure 3), the areas where banks expect new entrants to gain the most market share are Payments, Savings and deposits, and Lending/ Leasing *(The Economist Intelligence Unit Limited, 2019).*

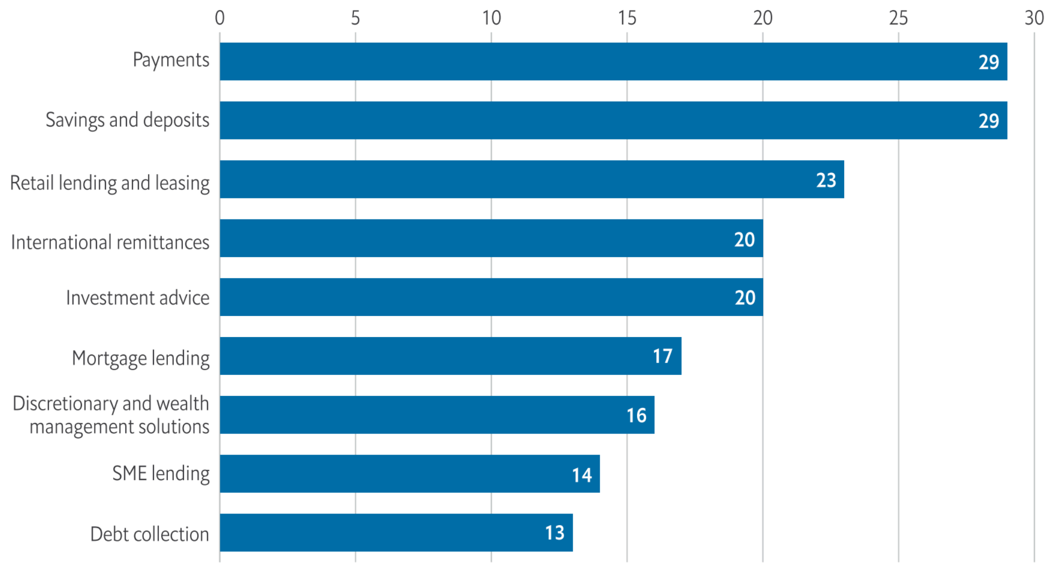


Figure 3 - What is the main area where banks expect new entrants to gain more market share

Source: The Economist Intelligence Unit Limited (2019)

These findings follow the results that Boston Consulting Group revealed in their study regarding the impact of digital giants (Figure 4), namely GAFAM in the banking business:

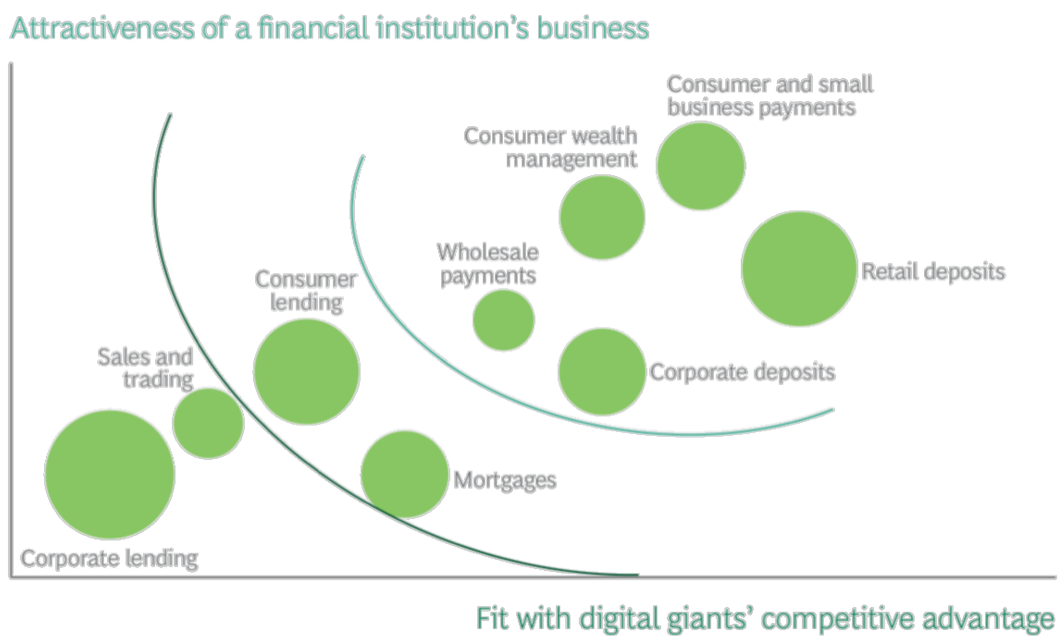


Figure 4 - Disruptive Threats to Various Banking Businesses

Source: Boston Consulting Group (2019)

The pace of change is likely to accelerate and banks seem to be having their Kodak moment (Braithwaite, 2019) as they are facing crushed margins, increasing pressure to consolidate, an ongoing digitization, the commoditization of their services, an ever increasing connectivity, mobility and the displacement of digital and physical boundaries, a greater human-machine cooperation... in sum a more volatile, uncertain, complex and ambiguous (VUCA) world.

Nevertheless and although the global financial crisis somewhat jeopardized banks' image and led to a loss of belief in financial institutions (De Bondt, 2010; Lee, Chung and Taylor, 2011), today many costumers still trust banks (confidence is still a big asset), and massive customer runaways from banks haven't yet materialized, as currently customers use Fintechs mainly for specific needs (Boston Consulting Group, 2019; Chocron, 2019). This trust capital is the banks' last defense, but one kept wondering, for how long?

Innovation hasn't been the major concern of banks until recently, as they have been more worried with repairing their balance-sheets and cost-cutting after the 2008 crisis. Until recently, traditional banks have not developed the ability to enable them to look holistically at the data they hold on customers and to present related value propositions, for example to support customers in budgeting or handling their financial wellbeing and wealth at different stages in their lives.

This is not an exclusive phenomenon of the banking industry, because and according to a webinar survey regarding Innovation Assessment conducted by Strategyzer (Figure 5), most employees do not fully agree (30%) or even strongly disagree (21%), that their company has world class innovation practices and processes in place (Strategyzer, 2019b).

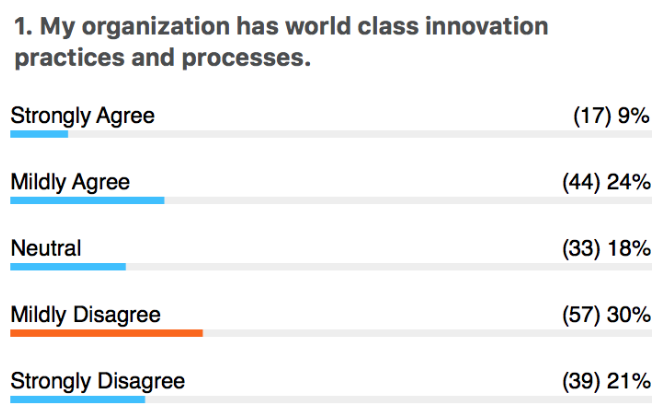


Figure 5 - Innovation Assessment Webinar Survey results

Source: Strategyzer

It’s easy to disregard the disruption movement that it is materializing at a distance, but it will very hard to get into it once it is close. Banks that are not preparing now, will suffer hard later on. Faced with competition from agile FinTech and other technology firms, banks can’t delay the IT investment, mainly in the upgrading of its core legacy banking platforms.

2.2.5 Benchmark of the competition

Some of banks are becoming aware that they are falling behind and are already realizing all these digital issues both as challenge and also as an opportunity that will support new revenues streams. While some are looking at spreadsheets with the market values of competitors, to check the size of potential merger candidates (Arnold, Jenkins and Noonan, 2018), others have launched expensive transformation plans, with the aim to transform and come up with new business models, more focused on the customer journey and on a more personalized and integrated approach, so as to meet customers’ demands, remain competitive, challenge new entrants and to seize opportunities from the new regulations. Per example, Société Générale, within the framework of its transformation plan “Transform to Grow”, has spent nearly 5 billion euros in 2018 on the renewal of its IT system and into the support of FinTechs. BBVA on its turn, has adopted an open banking strategy and it is monetizing it by marketing APIs through its BBVA API Market. In the USA, JP Morgan allows the possibility to open a bank account in 5 minutes.

Nevertheless, despite all the evolution that the banking industry is experimenting, a question arouses: Will investing in new technologies and processes alone will do the job? What other factors should come to play?

2.2.6 Key Success Factors for Digital Transformation in the Banking Industry

So far, the key success factors for competitive success of the banking industry were: *i*) bank operation management ability, *ii*) developing bank trademarks ability, *iii*) bank marketing ability, *iv*) and financial market management ability (Chen, 1999). Currently, changes in driving forces and competitive conditions, are pushing financial institutions to embrace digital transformation and to build analytics capabilities to understand and serve customers more effectively.

The previous key success factors do not seem sufficient anymore for the players of banking industry that pretend to explore digital technologies to become more efficient, to increase business into new markets, and to offer new products for a global consumer base comprised by an increasing number of digital natives (Prensky, 2001).

It is then necessary to find key success factors for digital transformation in banking. For the identification of them, several interviews were conducted with BNP Paribas' senior management and the respective content analysis was performed.

Hence, to ensure future competitive success, business models design must also take in consideration the following:

v. Client-centric: the focus must be on customer needs. Clients want a faultless experience across every channel; highly personalized products and services; strong security; business transparency and ethics; and, very importantly, reasonable pricing;

vi. Fully Integrated Technology: A critical part of digital transformation is the upgrading of legacy systems to keep pace with digital. Despite the fact that digital technologies can improve efficiency within firms, they still depend on data and information flows that reside across legacy systems. It is therefore necessary to upgrade and promote the full integration of IT systems;

vii. Faster Product Innovation: banks must conceive an innovation delivery pipeline based on agile practices – benchmark of market trends, co-creation of products, testing of innovative products, and then fast feedback to iterate products for continuous improvement. Such an agile innovation pipeline will help banks to decrease customer churn;

viii. Requalification of the Workforce: As automation replaces routine tasks, 56% of the financial services industry workforce will require new skills, and 29% will be employed in new roles by 2022 (World Economic Forum, 2018). Therefore, it is necessary to upskills the workforces so they can "buy" the change to digital, better cooperate with younger generations that are "digital natives" and take the most value of technology.

2.3 BNP Paribas

2.3.1 History of BNP Paribas

The history of BNP Paribas dates back to the 19th century, when the banks that would later form the Group, first opened doors and expanded their businesses leveraged on a period of industrial growth in Europe.

By the mid of the 19th century, French authorities created by decree the Comptoir National d'Escompte de Paris (CNEP) along with the Comptoir National d'Escompte de Mulhouse in March 1848. These "*comptoirs d'escompte*" (discounting houses) are two of the forerunners of BNP Paribas and were created with the intention of easing credit circuits in response to the financial shock caused by the revolution of February 1848 that established the French Second Republic (Stoskopf, 2002). These firms have set an innovative way of fund raising for launch by combining private and public funds. In 1853 CNEP bought back the shares from the French State, therefore freeing itself from State control (BNP Paribas, 2019c).

Later in that century, Banque de Paris et des Pays-Bas (later known as Paribas) was established in 1872, through the merger of Banque de Crédit et de Dépôt des Pays-Bas, which had been founded in 1820 in Amsterdam, and Banque de Paris, established in 1869, in a context of banking concentration (BNP Paribas, 2019a). It developed a strong investment banking business both domestically and internationally, by raising funds for the French and other governments to support public works contracts, as well for large corporations' businesses through a large number of bond issues.

The period after the First World War that broke out in Europe, was a time of strategic reorientation for all the banks that later made up BNP Paribas, as inflation, economic instability and lately the Depression of the 1930s led to the collapse in 1932 of Comptoir d'Escompte de Mulhouse, as a result of excessive commitment to loans to vulnerable companies. It re-emerged in the same year as Banque Nationale pour le Commerce et l'Industrie (BNCI).

After the Second World War, the CNEP and the BNCI were nationalized in 1945 and helped in the reconstruction of the French economy, and at the same time Paribas specialized in financing large-scale projects and supporting large French companies in their international businesses.

In 1966, the French government decided to merge Comptoir National d'Escompte de Paris with Banque Nationale pour le Commerce et l'Industrie, to create the Banque Nationale de Paris (BNP). This fusion was a part of a program to stimulate the economy and the banking sector and was followed by the launch of many innovations to the banking industry, such as the introduction of computers to manage sales portfolio, or the launch of the credit card system (*carte bleue*) in 1967 (BNP Paribas, 2019c).

As for Paribas, it was nationalized in 1982 by the French government as part of a law that nationalized many major industrial companies and banks. It was then re-privatized in January 1986, following the shift in politics in France and implemented in the following years an active strategy of acquisitions and reorganization of its investment participations.

BNP was fully privatized in 1993 and began to build a group projected to become the leader in the European banking industry. In that sense, it launched in 1999 a double PEO (Public Exchange Offer) for Société Générale and Paribas. This led to a notable stock market battle that lasted until May 2000, with Société Générale bidding for Paribas and BNP bidding for Société Générale and counterbidding for Paribas. BNP's bid for Société Générale was unsuccessful, but its bid for Paribas was accepted, and BNP acquired then a controlling stake in Paribas and thereby established the BNP Paribas Group as a result of the merger of BNP and Paribas as illustrated in Figure 6.

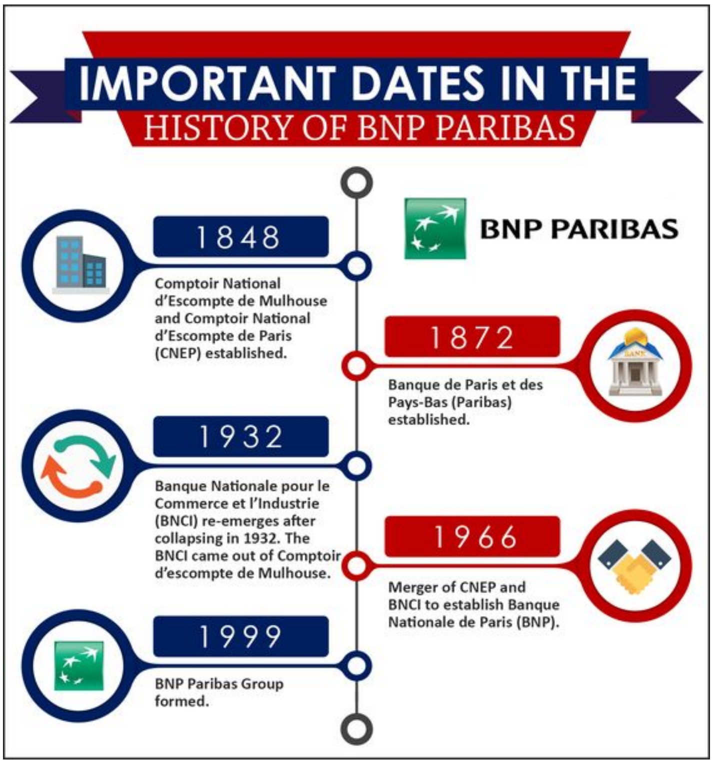


Figure 6 - Milestones in BNP Paribas' history

This was the beginning of the implementation of the strategy to construct a European banking group with a global vocation. The following acquisitions have enhanced its European presence: TEB in Turkey in 2005, BNL in Italy in 2006, Fortis in Belgium and BGL in Luxembourg in 2009, BGZ in Poland, Laser Cofinoga in consumer loans and Dab Bank in Germany in 2014.

In 2012, BNP Paribas was granted with the Bank of the Year award by The International Financing Review (IFR). The IFR awards are a key industry benchmark and Bank of the Year is the top honor awarded (International Financing Review, 2013).

But the arrival of the 21st century also posed a digital challenge for banking industry. BNP Paribas had pioneered since its inception, by firstly combining public and private funding, and throughout its history the bank had promoted and supported innovations in the banking industry, like establishing multi-channel banking and an international branch network, supporting the launch of credit cards, or the introduction of the first consumer loan in France. Although all these initiatives are breakthrough milestones, the current increasing pace of digitization worldwide, the growing mobility in client usage with an accelerated pace of on-line banking and the emergence of new players, requires a bank that can react to all this, by transforming itself for a new world, “a bank for a changing world”.

2.3.2 Organizational Structure

BNP Paribas is a European bank, headquartered in France, with an international reach. It has a presence in 72 countries, with more than 202,000 employees. The Group BNP Paribas serves nearly 32 million individual customers and 850,000 professionals, entrepreneurs, small and medium-sized enterprises and large corporate clients in its retail-banking networks.

The Group BNP Paribas comprises two main divisions: *i*) Retail Banking & Services; and *ii*) Corporate & Institutional Banking. A more detailed view can be found in Appendix 1.

The overall coordination of all these Group’s divisions is made by the Executive Committee and the CEO of the Group that have the top management functions of the BNP Paribas Group.

There are also Transversal departments within the Group of BNP Paribas that are responsible for providing support, and advisory to operational activities as well as in controlling them.

Below is a greater detail of each division's business line (a more detailed geographical presence can be found in the Appendix 2).

2.3.2.1 Retail Banking & Services

This division includes the Group's retail banking networks and specialized financial services in France and around the world (Figure 7). It is divided into: a) Domestic Markets; and b) International Financial Services

a) Domestic Markets - comprises the Group's 4 retail banking networks in the Eurozone: France (BDDF); Italy (BNL bc); Belgium (BNP Paribas Fortis); and Luxembourg (BGL BNP Paribas).

   There are also 3 specialized businesses: Arval (long-term corporate vehicle leasing); BNP Paribas Leasing Solutions (rental and financing solutions); and BNP Paribas Personal Investors (digital banking and investment services)

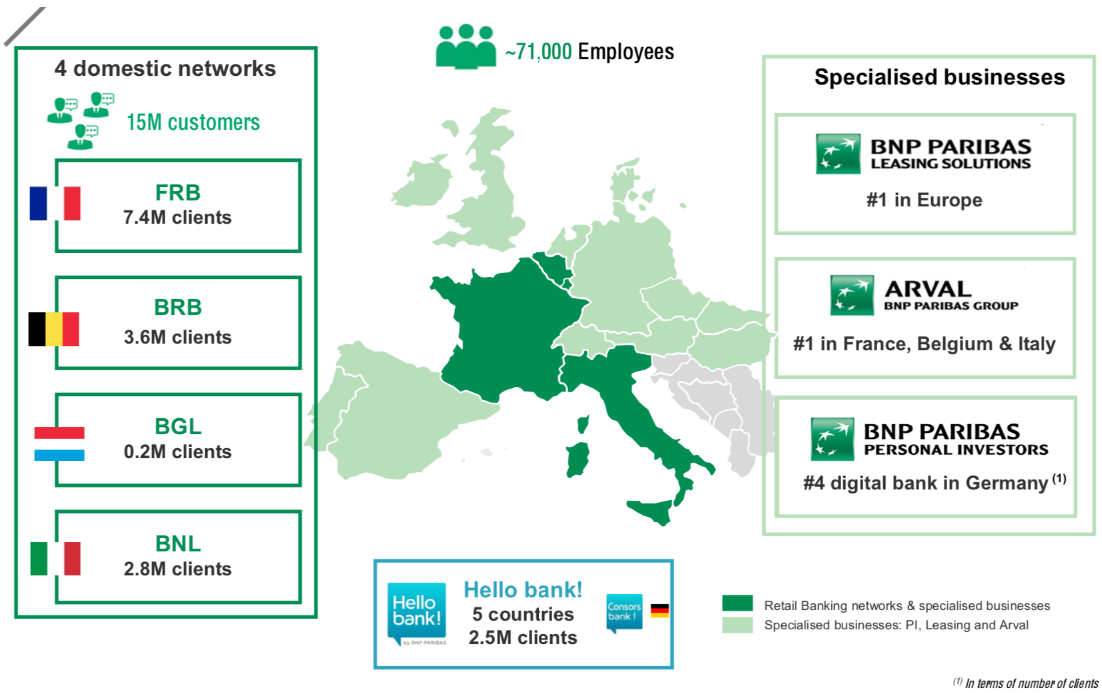


Figure 7 - Domestic Markets key figures (2016)

Source: BNP Paribas

b) International Financial Services (IFS) - comprises the following business lines: International Retail Banking (all retail banks in 15 non-eurozone countries – including the United States, Turkey and Poland); BNP Paribas Personal Finance (credit solutions to individuals in around 28 countries through brands such as Cetelem, Cofinoga and Findomestic); and BNP Paribas Cardif (savings and protection solutions in 36 countries, insuring individuals, their personal projects and assets).

And also 3 specialized business lines: BNP Paribas Real Estate (real estate services); BNP Paribas Investment Partners; BNP Paribas Wealth Management (private banking).

International Financial Services key figures for the year 2016:

- € 15,5 billion in revenues (Personal Finance: € 4.7bn; IRB: € 5.4bn; Insurance: €2.4bn; Wealth & Asset Management: € 3.0bn) (Figure 8);
- Nearly 80,000 employees;
- Presence in more than 60 countries.

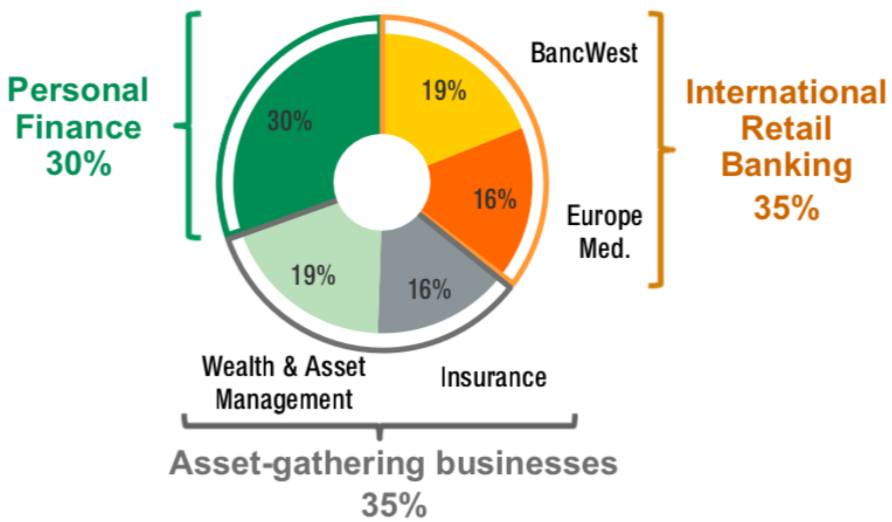


Figure 8 - Breakdown of IFS revenues

Source: BNP Paribas

2.3.2.2 Corporate & Institutional Banking

BNP Paribas Corporate & Institutional Banking (CIB) is a global provider of financial solutions to corporate and institutional clients. With almost 30,000 people in 57 countries across EMEA (Europe, Middle East and Africa), Asia-Pacific and the Americas (Figure 9), CIB offers solutions to its clients across capital markets, securities services, financing, treasury and financial advisory. CIB has expertise across multiple disciplines, including structured financing, derivatives, risk management, liquidity management (cash management, trade finance, forex), among others. CIB also acts as a bridge between corporate and institutional clients as it aims to connect the financing needs of corporate clients with the investment needs of institutional investors. By the year end of 2016 it served 7,000 Corporate clients and 12,000 Institutional investors.

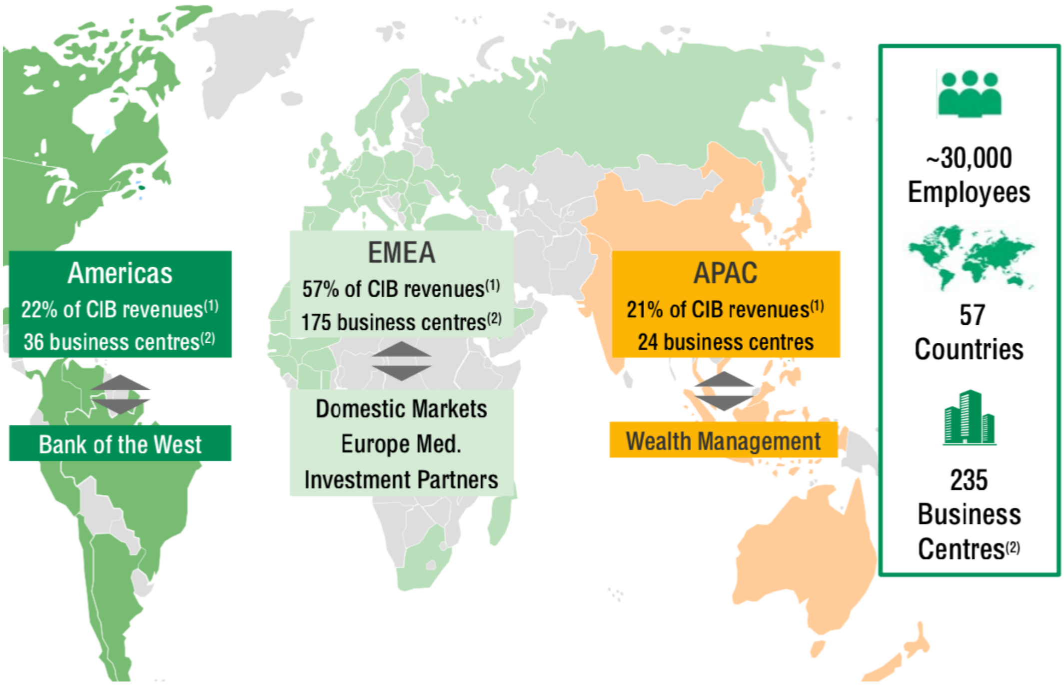


Figure 9 - Corporate & Institutional Banking key figures (2016)

Source: BNP Paribas

2.3.3 Business Model

BNP Paribas is a leading European bank with a global reach, that provides a range of services to its diverse client base. These include payments, cash management, traditional and specialized financing, savings, protection insurance, wealth and asset management, as well as real-estate services. Also, in the area of corporate and institutional banking, the Group offers clients solutions to capital markets, securities services, financing, treasury and financial advisory.

The BNP Paribas' integrated business model (Figure 10) is based on cooperation among the Group's businesses and in the diversification of risks. A successful cooperation between the different business lines is promoted in order to lead to stronger market positions and also to allow the reduction of the overall risk through diversification. The business model is diversified by country and business, in order to avoid country, business or industry concentration. As for example, no business unit has more than 20% of allocated equity.

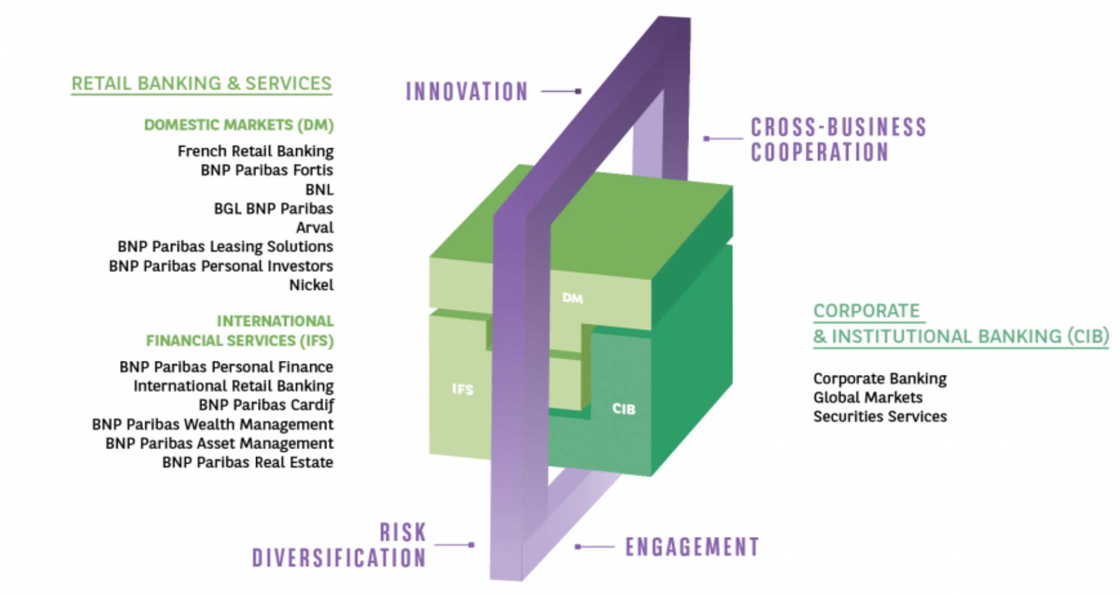


Figure 10 - BNP Paribas' Business Model

Source: BNP Paribas

The purpose of the business model is, through the four fundamental drivers: Innovation; Risk Diversification; Cross-Business Cooperation; and Engagement, to focus activities on the customers' needs, gain economies of scale, increase revenues from cross-selling, and limit volatility of earnings.

In a changing world, this business model creates value for clients, encourages a sustainable growth for the economy, and ultimately allows for a steadier value creation for shareholders.

The Executive Committee believes that this model it's the model that better allows the bank to offer its clients a pack of integrated solutions and additionally provides the Group with the necessary conditions to adapt to change.

2.3.4 Vision, Mission and Values

The world is changing and therefore the lifestyles and ways of thinking are changing. Digital communications, the sharing economy, longer life expectancies, the relationship with money and scarcer natural resources are revolutionizing the behavior of clients. These transformations that are taking place in most developed societies, require the bank to experiment with new relationships and imagine new services for clients.

For the BNP Paribas Group, being the bank for a changing world means that the bank needs to: understand the evolution of the world; develop and progress its own methods; act to serve its clients; and participate in the initiatives that inspire.

In this context of transformation, BNP Paribas believes it is more important than ever to re-affirm its purpose, what it stands for and what it aspires to be. The bank's vision, mission and values aim at inspiring its own decisions and actions to lead the bank for a changing world.

BNP Paribas wants to have a positive impact on stakeholders - customers, employees, shareholders - and on society. On customers, by delivering services and solutions that better fit their needs. To employees, by offering them an inspiring and stimulating place to work. As for society, BNP Paribas wants to be among the most trustworthy players of the industry, by anchoring values and ethics in its everyday behaviors.

The bank strongly defends that supporting these values is essential for pursuing its growth and in that sense publicly affirms the "BNP Paribas Way" (Figure 11) organized around its driving forces (agility; client satisfaction; compliance culture; and openness) and strengths (stability; expertise; responsibility; and good place to work).

Figure 11 - BNP Paribas' Way

Source: BNP Paribas

2.3.5 Analysis of Consolidated Results

By the end of 2016, as it can be seen on the Figure 12 below, that global revenue of BNP Paribas was EUR 43,411 million, up by 1.1% when compared to the same period of 2015.

However, this growth was uneven throughout the different divisions of the bank. Revenues were down by 0.5% in Domestic Markets due to the low interest rate environment, rose by 1.2% at International Financial Services and decreased by 0.3% at CIB despite a particularly challenging market environment in 2016. At constant scope and exchange rates the figures would be the following: -1.2% for Domestic Markets, +2.7% for IFS, and +1.2% for CIB.

Operating expenses, which amounted to EUR 29,378 million in 2016, were well contained (+0.4% compared to 2015). They included acquisitions' restructuring costs and transformation costs resulting from the impact of new regulations and of the reinforcement of compliance. By division level, it was +2.3% for Domestic Markets, +2.3% for International Financial Services and -1.8% for CIB. At constant scope and exchange rates, they rose by 0.5% for Domestic Markets, by 3.6% for International Financial Services and 0.1% for CIB.

The combined result of the above aggregates is the positive evolution of the group's gross operating income by 2.6%, up to EUR 14,033 million. As so and given the reduction of the cost of risk, resulting from the low interest rate environment and good control of risk at loan origination, the Operating Income rose to EUR 10,771 million from EUR 9,787 million in 2015 (+10.1%). Therefore, and despite a lower level of Non-Operating Items, Pre-Tax Income amounted EUR 11,210 million, that compares well (+8.0%) with EUR 10,379 million in 2015. After deducting taxes, this resulted in a Net Income of EUR 7,702 million, up by 15.1% compared to 2015.

In millions of euros	2016	2015	2016/2015
Revenues	**43,411**	**42,938**	**+1.1%**
Operating Expenses and Dep.	(29,378)	(29,254)	+0.4%
Gross Operating Income	**14,033**	**13,684**	**+2.6%**
Cost of Risk	(3,262)	(3,797)	-14.1%
Costs related to the comprehensive settlement with US authorities	0	(100)	n.s.
Operating Income	**10,771**	**9,787**	**+10.1%**
Share of Earnings of Equity-Method Entities	633	589	+7.5%
Other Non Operating Items	(194)	3	n.s.
Non Operating Items	**439**	**592**	**-25.8%**
Pre-Tax Income	**11,210**	**10,379**	**+8.0%**
Corporate Income Tax	(3,095)	(3,335)	-7.2%
Net Income Attributable to Minority Interests	(413)	(350)	+18.0%
Net Income Attributable to Equity Holders	**7,702**	**6,694**	**+15.1%**
Cost/Income	**67.7%**	**68.1%**	**-0.4 pt**

Figure 12 - BNP Paribas 2016 Consolidated Results

Source: BNP Paribas

2.3.6 2014-2016 Business Development Plan

This plan was created with five major strategic priorities: Enhance client focus and services; simplify the organization and processes; continue improving operating efficiency; successfully implement Business Development Initiatives; and adapt certain businesses to the economic and regulatory environment.

During the period, the Group made progresses on all the major strategic priorities defined in the plan. To prepare itself for the transformations in the Domestic Markets division, the Group has i) launched Hello bank! in Germany, Belgium, France and Italy, reaching 2.5 million customers, ii) continued to adapt the branch network, by offering differentiated and complementary branch formats to support the expansion of the customer relation, and iii) also extended Private Banking in all the networks, by developing relationship with entrepreneurs. As for International Financial Services division it developed digital banks in International Retail Banking. When it comes to the CIB division, it gained market share on large corporate and institutional clients supported by the implementation of a more coordinated approach by BNP Paribas Securities Services, developed transaction banking and grouped together its market businesses in Global Markets in order to leverage BNP Paribas' European and global organization.

Despite an anemic environment with very low interest rates during the period of 2014-2016, the implementation of the program allowed the Group to present an average revenue growth of 2.2% per year (although this rises to 4% after stripping out exceptional items). As for expenses, operating costs were well contained and the plan, helped to generate EUR 2.5 billion in recurring savings since it was launched in 2014, which represented EUR 500 million above the initial objective, and allowed to reduce the cost-to-income ratio to 67.7% (although less than the expected 63%, due to extraordinary items, namely taxes and contributions, that dented the results).

During the period of implementation of the plan, the Group also developed its Corporate Social Responsibility policy (CSR), financing socially responsible businesses, and played an active role in energy transition by restraining loans to industries that have a bigger carbon footprint and successfully launched a green bond.

2.3.7 Challenges and Choices for the future

BNP Paribas was facing crossroads in the end of the 2016, a fork in the road that splits it into two paths and having to opt for one of the existing directions. Should it go for the merger with Commerzbank and become the largest player in Europe, or should it go for an internal transformation embracing innovation and abandon the idea of merging?

By the year of 2016, there was the possibility of BNP Paribas to acquire Commerzbank, Germany's second largest bank in Germany by the total value of its balance sheet (CNBC, 2019), to leverage BNP Paribas. Being the French bank the biggest by market capitalization in the old continent, this would allow to create the largest Bank in Europe. However, it is a risky operation, that requires the computation of the right price, hard negotiations with regulators in France and Germany and other potential suitors.

The rationale for the operation of merger would be to allow BNP Paribas to gain more market share and gain more corporate customers, especially in Germany, where BNP Paribas is still a 2nd tier bank in Corporate Banking (Robinson and Valentini, 2018). This could represent a huge opportunity to gain market share and to further cross-selling and increase up-selling to existing customers, without having to compromise profitability.

This potential merger, that can redraw the financial map of Europe, it is something not new to Mr. Bonnafé, BNP Paribas' CEO, as he had been the head of the assimilation of BNL in 2006 and three years later of Fortis in Belgium and Luxembourg.

Nonetheless, the picture is not all rosy. This operation as some drawbacks, as it will require the fusion of two different working cultures and IT systems. Moreover, such consolidation with a competitor that is facing difficulties, might jeopardize BNP Paribas current situation and future prospects, as the CEO of BNP Paribas adverted: "*It sounds very easy in theory. But in practice, it is very difficult to merge banks. Integration swallows up time and money that are then lacking elsewhere, especially in a new cycle with a huge digital transformation*" (Euro Finance, 2018).

Following this reasoning, it has decided that the bank should go through a different path. For BNP Paribas, the vision of being the bank for a changing world means that it must conduct anticipating changes in the environment and transforming them into opportunities. In order to so, BNP Paribas choose to let Innovation guide the way it should act, so it can design the bank of tomorrow. The purpose is to offer the best of physical and digital technology (also known as "*phygital*"), so it can better offer products and services that meet the new needs of its clients. To empower this choice, it is promoting a dynamic culture of innovation, while rewarding intrapreneurship, stimulating creativity and accompanying the digital transformation of business.

The main guidelines of this choice are: to innovate to serve its customers; and to support the actors of innovation.

To better serve its customers, BNP Paribas is involving everyone in innovation, because innovation gives great support to the new development plan. The main priority is to simplify banking operations, so it can offer secure and more personalized experiences built on digital applications, new payment methods and more.

For that to succeed, BNP Paribas is forging partnerships with startups, FinTechs, and major corporations, to build up a comprehensive ecosystem to support innovation. The rationale for this is best explained by Mr. Bonnafé: "*These players represent an opportunity if you know how to view them, and it is up to us to know how to capitalise on them*" (BNP Paribas, 2017).

This led BNP Paribas to develop new working methods and to create five in-house startups, located in Belgium, Turkey, Italy, Luxembourg and France, where its teams co-create new technologies with FinTech developers, digital operators and other startups. By opening to external players, incubating and developing new players, BNP Paribas will also be better positioned to attract talent.

One example is the International Hackathon initiative to identify the tech entrepreneurs who might contribute to improve the customer experience in banking, consumer lending and insurance. Another example is Cardif Lab', the laboratory of BNP Paribas Cardif Insurance, where innovations developed across 37 countries are identified and that contribute to push new product and service offerings to insurance customers.

BNP Paribas' ecosystem also includes networking bodies, such as the L'Atelier BNP Paribas Lab, which mission is to bring together startups and major corporations to design new digital products and services. It is a win-win partnership for BNP Paribas and for startups, because BNP Paribas finds a way to fulfill an operational need, while tapping the resources of partner companies working at the vanguard of digital technology. As for startups, it also provides an opportunity to demonstrate the value of their service or technology by applying it to a concrete market need.

BNP Paribas is also developing its digital presence, and teamed up in 2015 with Google, Facebook, Twitter and LinkedIn to become the first European bank to launch a strategic management plan and develop a presence across these digital media.

In what respects supporting the actors of innovation, since 2007, BNP Paribas has been internally promoting the Innovation Awards. These are awards made to encourage employees that have developed innovative projects to serve customers or internal organizations.

As for 2015 the key figures for BNP Paribas Innovation Awards were: *i*) 1,000 initiatives collected across the group; *ii*) 42 applications pre-selected by an internal and external selection committee; *iii*) 10 Award-winners, 1 transversal special prize, 10 nominees.

BNP Paribas also sponsors, a variety of awards and major events like the Grands Prix de l'Innovation de la Mairie de Paris, which recognizes the work of innovative companies from the greater Paris region working in high-growth sectors. Other awards include the MIT Innovators Under 35 Europe, which distinguishes innovation and the development of new technologies in Europe.

2.3.8 2017-2020 Business Development Plan

Following the success of the 2014-216 Business Development Plan, evidenced by the good performance of the Group in the end of 2016 and leveraging on innovative strategy, a broad range of digital initiatives already and to be launched by all business lines, BNP Paribas unveiled, in February 2017, a new program for the improvement of its business, the 2017-2020 Business Development Plan.

In a changing world, with new technologies, new customer needs and expectations, this new plan aims to be an ambitious program of: *i*) New Customer Experience; *ii*) Digital Transformation; and *iii*) Savings. According to Chief Operating Officer Philippe Bordenave, this new plan puts technology at its core. Also, and similarly to the previous plan, it involves cutting costs, but on the capital front the focus is on transformation (Baker, 2017)

The 2017-2020 plan has a budget, that is estimated, to cost EUR 3.0 billion in transformation initiatives between 2017 and 2019, but is expectable that it will be self-financed by roughly € 3.4 billion in savings during the same period and will allow to generate around € 2.7 billion in recurrent annual savings starting from 2020. It is targeted an average revenue growth of 2.5% (more than the achieved 2,2% of the previous 3 years), while net income is targeted to grow by at least 6.5% per year. As for Cost to Income ratio the goal is to improve the ratio from the reported 67.7% in 2016 to 63% in 2020.

To "*build the bank of the future*", this new transformation plan works in 5 main priorities (Figure 13) to offer a new customer experience and attain a more effective and digital bank, namely: *i*) Implement new customer journeys; *ii*) Upgrade the operational model; *iii*) Adapt information systems; *iv*) Make better use of data to serve clients; and *v*) Work differently.

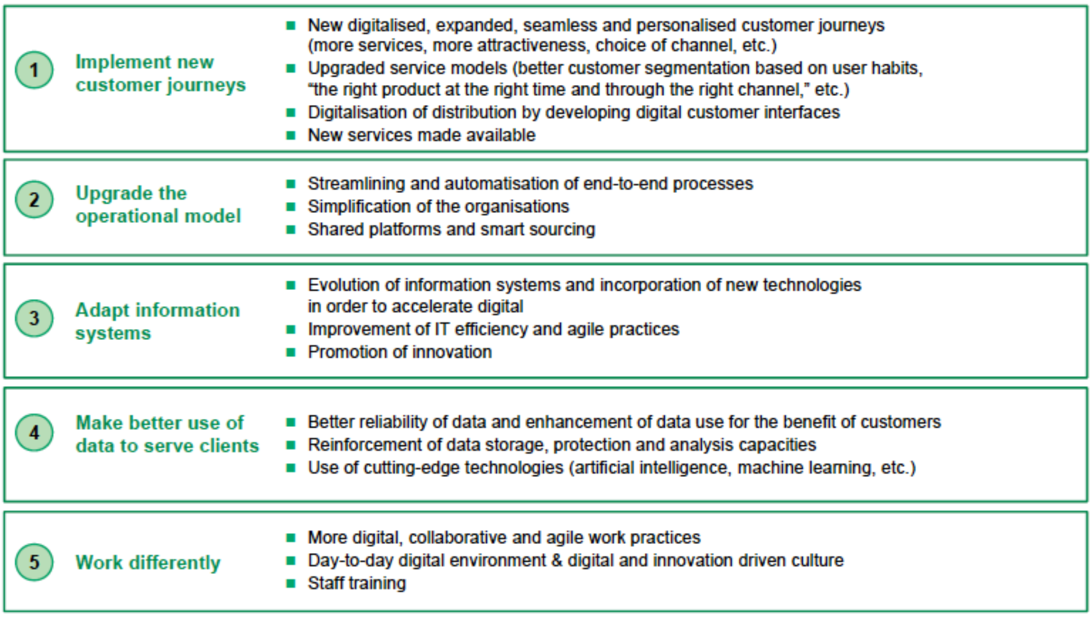


Figure 13 - 5 Top priorities for 2017-2020 business development plan

Source: BNP Paribas

The transformation strategy will be differentiated by division (Figure 14), so it can better leverage the strength of the integrated and diversified business model.

Domestic Markets division will reinforce the development of new customer experiences in order to adjust to new customers' habits, to take advantage from a risk environment that continues to be favorable, in order to consolidate the leading positions of its businesses, to adapt the branch networks, and to transform the operating model and accelerating digitalization to improve its operating efficiency.

As for International Financial Services, it will strengthen the sales and marketing by accelerating the development of the attractiveness of the existing services while proposing new offers and continuing to expand Retail Banking outside of the euro zone. This division will also continue to improve its operating efficiency and to adapt to future regulations (MIFiD2, GDPR, etc.), by accelerating digital transformation, streamlining processes and developing cooperation with other business units in the Group.

Regarding CIB, it will take advantage of the good results of its plan in 2016, to attain resource optimization, cost reduction and revenue growth, by extending to 2020 all the actions under way and accelerate the operating and digital transformation. This division is looking forward to expanding its client base in Europe, namely in the countries of Northern Europe (Germany, Netherlands, etc.), and will continue to develop cross-selling with other businesses in the Group.

Implement new customer journeys	▪ DM: develop the new digitalised, value-added & seamless customer journey for home purchases allowing new enriched customer experience ▪ IFS: digitalize and redesign customer journeys in Cardif and innovate on claims management through artificial intelligence; launch digital banks in Personal Finance leveraging on the large customer base ▪ CIB: roll out digital tools for clients in Global Markets (Cortex, Smart Derivatives, etc.)	BuyMyHome Hello bank! CORTEX
Upgrade the operational model	▪ DM: transform mortgages end-to-end processes (new distribution model & automatized process) ▪ IFS: development of a global Front to Back investment operational model for Investment Partners ▪ CIB: automatize end-to-end processes, productivity increase through harmonization of process and standardisation of workstations	
Adapt information systems	▪ DM: rationalize the existing applications ▪ IFS: accelerate digitalization in BancWest to improve cost base ▪ CIB: leaning and industrialization of the front-to-finance IT value chain	PLUGANDPLAY FiNLABS
Make better use of data to serve clients	▪ DM: modernisation of data repositories, data governance, data management and data usage by building a new data architecture and new data analytics apps ▪ IFS: using enriched dynamic data in Personal Finance to automate marketing and reporting ▪ CIB: implement artificial intelligence alerting sales & clients on risks and opportunities in real-time	Usage Data analysis Data management
Work differently	▪ DM, IFS and CIB: ▪ Promote new ways of working & behaviours: continuous feedback (fostering empowerment) with simplification of the appraisal process, transversal collaboration, internal partnership, mixed team (e.g. digital talents & seasoned experts), flex office & mobile work	

Figure 14 - Examples of Programs to be implemented by division

Source: BNP Paribas

The global target is thus to achieve more than 6.5% average annual growth of net income and 2.5% CAGR revenue growth until 2020, the accomplishment of a Solvency Ratio (Common Equity Tier 1 - CET1 - ratio) of 12%, a cost to income ratio of 63% and a 10% ROE in 2020.

3 Pedagogical Note

3.1 Intended audience

"*[T]eaching and writing are all about creating the "Aha!" moment. That occurs when people realise that an idea the teacher or writer has advanced is both useful and something they already knew but had not articulated*" – Charles Handy in The Economist (2019a)

Being the banking industry one of the most vital sectors to the overall economy, this work respectfully intends to be a constructive and heartening contribution to a culture of continuous adaptation/ innovation and operational efficiency of banks, by encouraging the target audience to critically and strategically analyze the surrounding environment and also to relate it with the inner circumstances of the organization, to reflect on potential solutions and to apply strategic methodologies in order to assure the survival of a long standing financial institution in the market.

The case here presented is addressed to mainly to management students, namely in the field studies specialized in strategy and management of financial institutions (banks). It is intended to be lectured to undergraduate, master or post-graduate students.

The case is suitable to be taught in an undergraduate management course, for the discipline of strategy and/or banking business, especially in later years.

For masters or post-graduate students, it is suggested that the case should be presented in courses/disciplines related to strategy (services), general management or related to the financial or banking area.

After the completion of the case-study's analysis, students will be able to acquire general knowledge about the banking system, and they also should be able to understand the present market changes, the dynamics occurring in the financial markets and to evaluate differentiated strategies of growth.

Furthermore, they should critically characterize the role of BNP Paribas in the market and develop their own future expectations towards banking institutions.

3.2 Learning goals

The case here presented describes the 2017-2020 Business Development Plan implemented at BNP Paribas as a strategic decision of adaption and evolution.

The main goal of this case is to analyze the rationale behind the strategic decision to digitally transform the bank and to analyze the impacts of that strategic decision on the current position that the bank holds today. It is also intended to discuss in this case, the advantages and disadvantages of the strategy adopted in the light of the situation and the outcome of the strategy in adverse scenarios.

Given the provided data and the large scale of the bank, there may be several approaches and focus on different problems, all of which are valid and relevant for the resolution of the case. More than the results, it is intended that the target audience exercises the critical sense in the analysis of information to support the decision-making process, to present suggestions of possible solutions, with the proper justification of the options presented, to enrich an open discussion of these themes.

The resolution of this case will allow students to develop skills and concepts related to:

- Understand the challenges the banking market was facing and its recent evolution;
- Learn the strategies of innovation that can be applied generically by companies and what are their expected impacts and risks;
- Realize the importance of strategic decision making in a company and relate these choices with the company's own sustainability in the market;
- Understand how strategies are related and especially dependent on the context where the company is (economic, social, political and competitive).

So, the purpose of the case is that those who work on it, evaluate BNP Paribas in a strategic manner, taking in consideration all the changes that its facing and, to discover and to describe what should be the bank’s future strategy, in order to better adapt itself to the new business environment and acquire a sustainable competitive advantage that ensure it a successful market position in the long-term.

4 Theoretical Framework – Literature Review

This chapter intends to present the theoretical framework that will support the questions to be studied in the document.

The literature review has been built around the bank's strategic choice to foster innovation at the global scale of its operations, as a response to the changes affecting the environment in which it operates. In short, to tackle the growing globalization, the fast of pace technological change, and a greater organizational complexity, BNP Paribas relies on innovation and self-renewal to achieve a sustainable competitive advantage and to survive in the long run.

Academic literature has been attentive to the theme of innovation, but mainly on data from the productive sector and essentially in terms of product innovation. However, and despite the lesser number, scholars have been increasingly dedicating their studies to the theme of innovation in services and other types of innovation that best sustain competitive advantages in the financial industry.

4.1 Corporate Strategy and Competitive Advantage

"*The essence of strategy is choosing what not to do*" – Michael Porter

"*Efforts and courage are not enough without purpose and direction*" – John F. Kennedy

To define corporate strategy first it is necessary to understand the concept of strategy.

To do so, one can begin by the epistemology of strategy, that is a word derived from the Greek word stratégia, used to define the "*art of the general*" or in other words the "*art of the arrangement of troops*", as generals (strategos) have full responsibility for their armies, namely by defining their mission, vision, and resources allocation (Van Genderen, 2013).

This original concept, more associated to the military science, has evolved from its Greek roots and currently there is a more comprehensive concept of strategy, by defining it as: "*a detailed plan for achieving success in situations such as war, politics, business, industry, or sport, or the skill of planning for such situations*" (*Cambridge Advanced Learner's Dictionary & Thesaurus*, 2019).

It is know that the practice of strategy in corporate management is certainly aged, however the concept of strategy in corporate world dates only from the 1960s, with the works of Chandler (Strategy and Structure), Learned *et al*. (Business Policy, Text and Cases) and Ansoff (Corporate strategy) (Mintzberg, 1978; Rumelt, Schendel and Teece, 1994).

Despite the insights of what the concept of strategy can give when applied to the corporate world, and notwithstanding the old practice and the somewhat recent age of this academic field, currently there is no simple and clear concept of corporate strategy. It begins by the denomination itself, initially termed as business policy, but currently the most commonly used word is simply strategy (Rumelt, Schendel and Teece, 1994) and it that sense shall be the term used from this point forward.

As to the concept of strategy, it can be found in the literature in many different ways, often divergent, and reflecting the evolution of the theoretical approach about corporate management, companies and their industries.

The initial work by Chandler, that studied the development of the major industrial organizations in USA, describes strategy as the result of a deliberate and rational analysis performed by Top Management (Mintzberg, 1978; Fredrickson *et al.*, 1986; Ridwan, 2017).

Later on, by assuming the decision stream as an observable and tangible fact, and by defining a proper research methodology, this stream of decisions could be studied in order to find patterns. This led Mintzberg to express strategy as "*a pattern in a stream of decisions*" (Mintzberg, 1978, p. 934). To him the central theme of strategy is to design a set of explicit guidelines regarding the position of the organization, defined in a purposefully and conscious manner by managers, and that will determine decisions into the future (Mintzberg, 1978).

Further developments, particularly in the perspective of strategic positioning, defined strategy as the choice of activities that a firm does and that are different from rivals and how this can create an unique and valuable position to the organization (Porter, 1996; Porter, Guerreiro and Ramos, 2007). The rationale for this singular setup of activities is the internal capability for competitiveness of a firm, also known as value chain. In order to thrive in the market, the firm has to ensure that all value-chain's activities link together and fit well to each other, as the chain is as strong as its strongest link.

To Porter, corporate strategy, in essence, is about choosing the activities to perform differently than rivals do, or inversely saying, is choosing what not to do (Porter, 1996).

These choices have critical influence on the firms' fate, has they have the potential power to significantly impact shareholder value, operating performance, and cause major organizational consequences on companies.

Another possible definition of strategy, defined more recently by Crespo de Carvalho and Cruz Filipe (2014) is that "*strategy is about creating a vision of a possible and desirable future and seeking to make it reality, by generating value*".

The central notion of strategy is, imperfect as it may be, the choices that the organization has to do and that are related to the risks and opportunities in the environment of the firm, but also to the capabilities (and weakness) it has and the future goals it wants to achieve, in a continuing search for rent.

This quest for economic rent is essential for companies, because a strong performance ensures the organization the necessary flow of income. Therefore and taking in consideration the strong link between organization performance and a firm's competitive advantage (O'Shannassy, 2008), when formulating their strategies, organizations must make their strategic choices in order to lead them to acquire and/or sustain competitive advantages.

Michael Porter pioneered in this field (1980, cited in O'Shannassy, 2008, p.171), by stating that "*competitive advantage grows fundamentally out of value a firm is able to create for its buyers that exceeds the firm's cost of creating it*", where it is fundamental, to make trade-offs (as there are incompatible activities within the firm) and to forge the strategic fit among the many activities.

In this view, also known as structural approach, a firm can attain a competitive advantage through one of following ways: cost leadership, differentiation or focus (Porter, 1985). A very similar conclusion is withdraw by von Hippel (1988, as cited by McGrath *et al.*, 1996) that defines efficiency advantage or value advantage as the paths a firm must choose to overcome competition and gain above normal economic results.

Top Management must then bear in mind that when choosing the new strategic positioning of the company, the choice must be made taking in consideration the firm's capacity to find new trade-offs and to leverage a new value chain into a sustainable advantage (Porter, 1996).

It should also be noteworthy the fact that, employees might have an important role in the successful definition and implementation of an organization's strategy, especially if positively focused on possibilities on what the organization could be – Appreciative Inquiry – by developing ideas in a bottom-up manner (Davis, 2018).

The construct of competitive advantage had also been developed in the literature by Barney (1991) and Wernerfelt (1995) and their Resource-Based View approach, that studies the resources capital (i.e. physical capital, human capital and organizational capital resources) of firms that enable them to gain above-normal rates of return and a sustainable competitive advantage (as cited in Oliver, 1997; O'Shannassy, 2008). In their sense, the process of resources selection has a major importance on the organizations' sustainable competitive advantage, as rare and valuable resources can be found in firms that display strong financial performance.

Oliver (1997) in her research also found that an organization has to take into account the context and process of resources' selection, because for a firm to maintain its competitive advantage in a sustainable way, it must mobilize the necessary political and cultural support within the firm for the use of value-generating resources, i.e. both resource capital and institutional capital.

In sum, it can be seen above that the topic of competitive advantage generates considerable debate, particularly among the two major views: the structural approach and the resource-based view approach.

Still, as O'Shannassy (2008) well noticed, maintaining a permanent competitive advantage is no easy task, because competitive advantage is a dynamic bargain, whilst some firms are able to achieve a sustained competitive advantage, others, achieve mostly only temporary competitive advantage. Therefore, creating a sustainable competitive advantage it is of major importance in order for a firm to be successful in the long run.

Competitive advantage is linked to innovation and both approaches enhance such fact. In the structural approach, innovation facilitates and sustains competitive advantage, through the way innovation fits the configuration of the firm in order to complement and exploit its distinct competences (Lengnick-Hall, 1992). For this to happen, the same study mentions four factors that shape the relationship between innovation and sustainable competitive advantage: i) imitability; ii) accurate reflection of market realities; iii) timing; iv) requisites capabilities for exploitation of innovation.

In the specific case of the technological innovation, this is not important per se, but it is important the impact technology has in the organization's value chain. Consequently, technology affects competitive advantage only if it has an important role in the determination of cost leadership or differentiation (Porter, Guerreiro and Ramos, 2007).

To the Resource-Based view, innovation always represent change, and this can have considerable benefit for the firm when superior resource combinations are discovered, or in other words (McGrath *et al*, 1996), innovation is one mechanism through which a firm gains superior insight about, and access to firm-specific resources with positive future value. In the same study, the author advises that despite the correlation between innovation and competitive advantage that both views share, innovation can only be a source of competitive advantage when there are four antecedents: i) causal understanding, ii) innovation team proficiency, iii) emergence and mobilization of new competences, iv) creation of competitive advantages.

Innovation represents most of times an event of major structural changes in the industry, and any organization will, most likely, have to change its strategic positioning if it wants to successfully challenge new entrants and thrive. In that sense, when implementing the new corporate strategy it is necessary to ensure the alignment of the strategy to the organization's structure and verify that this structure is flexible enough to adapt itself to the way the business evolves (Crespo de Carvalho and Cruz Filipe, 2014).

Furthermore, and despite the common intent of investors to drive Top Management's efforts only to the economic goals of strategy, academic research evidences that it would be a better strategy for the firm if Top Management pursued economic goals along with social goals (Corporate Social Responsibility) and that is particularly true for corporations engaging in innovation (Cook *et al.*, 2019; Stephan, Andries and Daou, 2019), as firms with higher levels of CSR tend to innovate better and more. This is so, because the equal importance of economic and social goals extends the number of stakeholders to whom management must report, and such fact improves the monitoring and efficiency of manager's decision-making process. CSR also permits firms to increase their information environment, thus allowing them to contact with more external knowledge and improve their innovation implementation. CSR is already part of the expectations of banking customers (Pérez and Bosque, 2014), however as Porter and Kramer (2006) point out, for CSR to be most effective in innovation terms, it must be well incorporated in the company's strategy in order to better leverage the resources of the firm.

4.2 Innovation

"*Old ways won't open new doors*" - Old saying

"*Innovation is the only way to win*" - Steve Jobs

The origin of the word innovation derives from the Latin word "*innovationem*", noun of action from the verb *"innovare*", which means to renew or to make changes in something already existing (and not necessarily making something new), especially by introducing new methods, ideas, or products (*Online Etymology Dictionary*, 2019).

Innovation is key to the progress of any organization, as it allows the firm to renew itself. In order for any firm to remain successful over long periods, managers must be able to implement both incremental and revolutionary change (Tushman and O'Reilly, 1996), so they can avoid the pitfall of being victim of their own success and stop growing over time.

Nevertheless, innovation is commonly confused with invention and first of all it is necessary to distinguish them.

Invention can be defined as the development of an idea for a new product or process, while innovation is the commercialization of this same idea (Castellaci et al., 2005).

As for innovation, a first definition was drawn by Schumpeter that designated it as "new combinations" of resources. This lays down on the concept of "creative destruction", and hence innovation can be expressed as the introduction of new goods, new technical methods, sources of supply, and forms of industrial organization (Schumpeter, Opie and Elliott, 1983, p.66). To this author, the innovation process could be divided into four dimensions: invention, innovation, diffusion and imitation.

It was only much later that the concept of innovation was further developed by Peter Drucker. This author contribution to the construct of innovation is that this is not a random process or inspiration, it is rather a process similar to any other business process, because it depends on a set of routines and procedures (i.e. innovation it is systematic which implies that the organization must be prepared to generate innovation), and relies heavily on resources (Drucker and Pereira, 1986). In sum, to Drucker innovation is not a random process, or is a product from an inspirational status. Instead, innovation is a deliberated choice from the organization and can therefore be considered as a strategic option.

This view of innovation as a strategic option, bridges his work to later authors, namely Porter. On its article "What Is Strategy?", Porter does not explicitly mention innovation, but indirectly he states that there are many companies that do not innovate by strategic option, because those that do not innovate are investing their resources in operational efficiency (incremental change).

This brings out the debate of choosing not to innovate and the consequences that it may have. That is, if the company wants to innovate it will have to choose to do it, because innovation will not happen by chance. Then, this raises the question what kind of processes will the company have to launch so that innovation can happen?

Porter remarks that the company can make the strategic choice to differentiate, and to do so he enumerates a set of elements that have to exist in the firm for creating strategic differentiation, where, implicitly, innovation is the basis that allows the firm to gain a competitive advantage. So, not seeking for differentiation (and tacitly) not choosing innovation, would be in Porter's view the strategy of non-strategy, or not to have strategy.

Freire (2000) broadens the traditional concept of innovation with the introduction of new products, services and processes, but also through the implementation of new management practices. Innovation to him can be either incremental, or revolutionary, but in order to better promote the company’s competitive advantage, it is important that the firm develops both innovations in a balanced way.

O’Sullivan and Dooley further evolved the notion of innovation to a wider concept, by considering innovation small or large, radical or incremental changes that brings something new to the firm, explicitly products, services or processes, and simultaneously brings value to customers and the organization (2009, cited in Kuratko, Covin and Hornsby, 2014, pp. 648-9).

Currently, innovation can be defined, in the OECD opinion, as “*a new or improved product or process (or combination thereof) that differs significantly from the unit’s previous products or processes and that has been made available to potential users (product) or brought into use by the unit (process)*” (OCDE/Eurostat, 2018 p.20).

One can conclude that to according to the Oslo Manual, innovation is everything that, when introduced, allows to reinforce the competitive position of the organization, because innovation goes beyond the traditional product view and is in the organization at all levels, such as product, business processes, developmental, financial and commercial activities. In this sense, the minimum required to designate something as Innovation, it is anything that is different, improved and has an impact on the company's competitive position.

Consequently, and also taking in consideration structural changes that the world is currently experiencing, firms who try to adapt to discontinuities only through incremental change are unlikely to succeed. Thus, in order to succeed in the long-term, organizations have to embrace changes and adopt new strategies (Tushman and O'Reilly, 1996). Innovation is then paramount nowadays, and although this is no easy task, only the firms who are able to effectively manage short-term demands and the introduction of new technologies, are those who are able to transform and re-create themselves.

Although innovation brings many advantages to companies, as many studies have revealed that innovative firms tend to demonstrate higher profitability, greater market value and greater chances of survival (Volberda, Van Den Bosch and Heij, 2013) and it is understood that innovation requires continuous organizational renewal, for an effective innovation strategy to be implemented, ancient norms, practices and firm's beliefs may have to be questioned (Calantone, Cavusgil and Zhao, 2002).

Taken to an extreme, organizations must be prepared to cannibalize their own business at times of industry transitions. While this is easy in theory, organizational transitions are quite difficult in practice, as the firm becomes victim of their own past success, that brings with it inertia and dogmatism (Tushman and O'Reilly, 1996).

When implementing an innovative strategy, firms tend to put aside old ways of doing things for new processes and procedures, but this leads them to discover that the spirit of the original organization has changed radically. This generates resistance, raising barriers to innovation and to the necessary changes that the firm has to implement to be successful. Thus, to be successfully, an innovation strategy must be carefully integrated into the organization's overall strategies as pointed by Kuratko, Covin and Hornsby (2014). Their conclusion results from the evidence that only a few corporations can successfully implement a complete corporate innovation strategy. In such findings, they are of the opinion that in order to a company successfully implement an innovation strategy, there are key issues that need to be addressed by the firm: i) understanding what type of innovation is being sought, ii) coordinating managerial roles (effectively using operating controls), iii) and properly training and preparing individuals.

When it comes to type of innovation sought, it should noticed here that the research on innovation has been largely devoted to technological innovation, because it is the old paradigm of industrial innovation that is based on technological inventions (Volberda, Van Den Bosch and Heij, 2013; Heyden, Sidhu and Volberda, 2018). It was only more recently that scholars have been turning their attention to other fields of innovation, namely non-technological innovations, or as often referred, management innovation. The reason for this academic interest, both as an independent phenomenon and as a complement to technological innovation, lies on the increasingly role that innovation has on explaining the competitiveness of organizations. This is especially true in the services industry (e.g. financial institutions), due to, and by contrast to manufacturing industries, product innovations in the services area can be easily copied (Nieves, 2016; Heyden, Sidhu and Volberda, 2018) and in that sense, as management innovations are more difficult to be replicated, they provide more competitive advantages than the introduction of product innovation in the services industry. In the same article, the author also emphasizes the fact that, to the services industry (characterized by interaction, collaboration and communication with clients), management innovations, that are more related to the human factor, are exceptionally appropriated with getting competitive advantages.

In this sense, some scholars, namely Khazanchi, Lewis and Boyer (2007) point out another key aspect to manage innovation: organizational culture. An innovative culture within the company is key to support the success of any innovation strategy (Flamholtz and Randle, 2012; Kuratko, Covin and Hornsby, 2014) and it helps to keep creating more innovative solutions. Also, the greater the perception by employees of how much an innovative culture is, the greater shall be the worker's job satisfaction and perception of company’s dynamism (Wei *et al.*, 2013), but this requires that managers must ensure that they correctly communicate what is the mission and what are goals of the organization.

Management innovation can be summarized into all that involves the introduction of new-to-the-firm changes in management structures, processes, and practices intended to develop organizational performance (Volberda, Van Den Bosch and Heij, 2013; Heyden, Sidhu and Volberda, 2018).

As managers are central actors in the completion of new organizational methods, their entailment is a prerequisite to a successfully implementation of management innovation (Nieves, 2016), therefore it is necessary to understand the role of managers in management innovation, particularly the influence that different echelons of Managers have in it, namely Top Management and Middle Management. The research that Heyden, Sidhu and Volberda (2018) conducted a survey on the influence of behavioral characteristics of Top Management and Middle Management on the supporting (or restraining) of Management Innovation, that led them to conclude that firms are better able to introduce management innovation when, there is a greater resemblance of characteristics between different levels of management. This is because a greater similarity eases a better alignment among Top Management and Middle Management, and thus enhancing the support of Middle Management to the Top Management's intent to apply a management innovation strategy.

This is particularly enhanced in Multinational Corporations as evidenced by Boone *et al.*, (2019), that verified a "globalization penalty" in many of these firms in terms of adaption and innovation. Given the vital role of Top Managers in corporate headquarters in fostering innovation, their study shows that the home country in which multinational firm is located, strongly affects the way Top Managers drive innovation. This results from the vertical differentiation and national power distance at the multinational company home-country, where those who display a higher acceptance of inequality of power in their social hierarchies, tend to show a negative impact in terms of innovation.

In an increasingly complex and continuously changing global economy, this fact assumes an even greater importance, because Top Managers have to be prepared to surprising events that might disrupt the existing business model of their organizations, and therefore any organizational change that Top Managers might want to implement, will need to have the motivation of their teams to be successfully executed. Taken to an extreme, the more uncertain the environment, but with more aptitude and ability to innovate organizations have, the better they can tackle a volatile, uncertain, complex and ambiguous (VUCA) world (Nieves, 2016; Schoemaker, Heaton and Teece, 2018).

Thus, both product and management innovation are important because those companies that focus on developing new capabilities (dynamic capabilities), such as new product and process developments, as well as implementing innovation in their business models, are those who are better prepared to handle any environment (Schoemaker, Heaton and Teece, 2018). In this sense, firms must combine strong ordinary capabilities with dynamic capabilities, because this last helps to identify profitable configurations of competencies and assets, assemble and orchestrate, and then exploit them within an innovative and agile organization. In short, dynamic capabilities links the company's present to the future, by allowing the firm's business model renewal and through that avoiding the company to be disrupted by change.

Although, there is no one-size-fits-all innovation model, as the innovation process is specific to the inherent characteristics of each organization, industry and their environment, it is almost conclusive that a successfully implemented innovation strategy allows the firm to build today the foundations of its future development. On the other hand, and for the firms without any innovation strategy, Gary Hamel as a prediction: "*Out there in some garage is an entrepreneur who's forging a bullet with your company's name on it. You've got one option now – to shoot first. You've got to out-innovate the innovators*" (cited in Kelley and Littman, 2001).

5 Methodology

“All theory must be made in order to be put into practice and all practice must obey a theory. Only superficial spirits turn off the theory from practice, not looking at what the theory is but a theory of practice and practice is nothing but the practice of a theory. (...) In the higher life theory and practice complement each other. They were made for each other” – Fernando Pessoa in Teoria e Prática, *Revista de Comércio e Contabilidade*

5.1 Research strategy

The method of teaching through the use of case studies, emerged at Harvard Law School in the decade of 1870, with the goal of letting students strengthen their comprehension of basic science by linking it to real problems (Garvin, 2003). It has been latter adopted by Harvard Business School in the years of 1920 and further on by many Universities around the world.

There are many advantages of using this teaching method. First of all, the case study approach requires student’s dedication to the study because it is supported in the basis of self-taught training and the research. Another of the advantages is that case studies allow for students to acquire and improve diagnostic and problem-solving skills and these are becoming more and more relevant in a world where markets and technologies are changing at a faster pace and where more than truths, students need to have the ability to think in the presence of new situations. Another advantage of case studies for management students, as to do with the development of persuasive skills, because case studies constantly requires working with and through others, thus generating and promoting the debate of different points of view and nurturing a strong component of group work (Garvin, 2003).

The three most common case study types are: exploratory, descriptive and explanatory (Yin, 1994). According to this author, the exploratory case study describes the phenomenon investigated within its own context, the descriptive is about investigating phenomena less known in order to define hypotheses for future investigations and, the explanatory case study that has the goal to explain cause-and-effect relationships from a theory. In this sense, as this thesis is based on the study of a real case, the Transformation Plan of BNP Paribas, that tries to understand how things, taking into account their natural environment and also taking into account the advantages for students for using case studies, the methodological option that seems to be more appropriate is the case study approach, via exploratory investigation.

The case study methodology has the following stages: *i*) design the case study, *ii*) conduct the case study, *iii*) analyze the case study evidence, and *iv*) develop the conclusions, recommendations and implications. Therefore, the making of a case study requires, in order for its results to be satisfactory, that the works must be based on careful planning and supported by existing knowledge and solid conceptual reflections, incorporating best practices for case study research, to allow a better understanding of the issue of investigation (Eco *et al.*, 2005; Goffin *et al.*, 2019). In this sense, this chapter aims to propose and explain the methodology for the elaboration of the case study.

5.2 Source of data in research

Firstly, it had been used a research procedure to construct the literature review, based essentially on the specialized literature. This had been performed so as to construct the theoretical foundation used to search and compile the concepts that served as a basis and reference for the development of the case study, from its initial conception to what could be learned from the case and its conclusion.

After this, it has been gathered data focused on the analysis of the Bank's documentation (financial and operational reports, presentations, database and other internal documents) to be provided for this purpose. For data processing, it has been employed quantitative analysis (simple descriptive statistics).

On a further stage and with the purpose to capture the richness and intricacy of a corporation’s strategic planning practices, a qualitative analysis has been used in the development of the case study to take account of the theories and perspectives of participants (Yin, 1994).

5.3 Data collection methods

Taking in consideration that data in qualitative methods can assume many forms, namely documents, journals, surveys, e-mails messages, etc., and also in order to gain a genuine and rich explanation in terms of organizational change and managerial process in this specific strategic planning practice, it has been used Content Analysis for the organization of data, its categorization and inference of results (Davies and Hughes, 2014). Content analysis is not a solo instrument, but rather a range of instruments adaptable to the type of communication in study. This means, although there are different methods of analyzing qualitative data, there are no better ways than others. Given the situation, there are those methods that are more appropriate than others (Philippe Wanlin, 2007). Content Analysis is organized around three chronological phases: 1) pre-analysis; 2) the exploitation of the material and 3) the processing of results as well as, inferences and interpretation. Supported on the results obtained, it can then be proposed inferences and draw conclusions regarding the objectives initially foreseen, as well as describe unexpected discoveries and suggest other guidelines for further analysis. It should be noticed that, inference as a process is not at all uncommon in science, since it is also present in other scientific areas, such as medicine or archaeology, and its purpose is to achieve the deeper meaning of communication, as well as the inferred variables existing in the document and allow to highlight the sense that is in the background (Bardin, Reto and Pinheiro, 2004).

5.3.1 Interviews

For a greater support to the production of the case study, it had been planned to conduct, a number of semi-structured interviews to managers directly related to the transformation plan and a focus group for the teams directly related with innovation within the bank. The focus on managers was made in the assumption that they play a central role in the process of fostering innovation (Tushman and O'Reilly, 1996; Nieves, 2016). The respondents to the interviews have been invited through e-mail and telephone, with some time advance, in order for them to arrange a free time in their agendas, so they can participate in a single interview.

Research interviews can be defined as systematic way of talking and listening to people, in order to seek personal experiences, viewpoints, feelings and thoughts as a method to gather data in qualitative research (Galindo-rueda and Van Cruysen, 2016; de la Croix, Barrett and Stenfors, 2018; Szutowski, Szulczewska-Remi and Ratajczak, 2019). To obtain the right data to help answer the research question, it was also necessary to align the interview's questions with the research goal and the theoretical framework (Bradnburn, 2004). The semi-structured type of interview, that is a mix of structured and open type of interviews, uses a few questions to address predetermined themes, but that leaves room for the interviewee to follow its own line of thought and for possible follow-up questions. This semi-structured type of interview is commonly used in many fields of investigation, as it ensures that the same topic is analyzed in every interview and at the same time. By doing so, it leaves space for the respondent to express its own personal interpretations and associations (de la Croix, Barrett and Stenfors, 2018; Szutowski, Szulczewska-Remi and Ratajczak, 2019).

Regarding the questionnaire, it had been prepared an interview script (Appendix 4), with a number of issues to be discussed during meetings. Firstly, the interviewees were asked to talk about their professional lives and previous work experiences, and after those warm-up questions, the remaining were linked to which is the main competitive advantage that BNP Paribas has; to which extent is the company interested in innovation; what is the most important innovation type that the company depends on to get new product ideas and propose new products and services; how important is to have a good relation with Fintechs; the significance of having a customer-centric proposition value; the importance of the knowledge and experience Human Resources, and in addition, the most important challenges and constraints for the Business Development Plan. Moreover, the interviewees gave a description of what else could be done in Innovation terms within the Group BNP Paribas.

References to the connection between strategy and innovation showed up naturally in most of the interviews, and in the cases where the topic of innovation was not fully developed, the interviewees were asked to expose their visions on the rationale for concrete practices, as well as general ideas about ways of innovation.

Table 1 - Respondents to the Questionnaire Description Summary

Respondent Position	Gender	Date	Length of interview
Head of Strategic Initiatives – International Financial Services	Male	16.07.2019	00:30:00
Sales Manager Director - BNP Paribas Personal Finance Cetelem	Male	03.07.2019	00:42:00
New Business Models Product Manager - CIB	Female	21.05.2019	00:21:00
Chief Digital Officer – Wealth Management	Male	23.07.2019	00:27:00
Senior Innovation Manager - CIB Portugal	Female	27.08.2019	00:41:00
Head of Change Management - CIB Portugal	Male	27.08.2019	00:37:00

Three interviews were held in Portugal, where two interviewees had Portuguese nationality and one had French nationality. The remaining three interviews took place in France, where two interviewees had French nationality, and one had Greek nationality. It was tried to obtain a certain gender balance, as well as some homogeneity regarding the position (mostly senior managers).

After the transcription of all the interviews, the data was coded and analyzed.

It also had been used some interviews of Mr. Jean-Laurent Bonnafé, CEO of the BNP Paribas Group to the media, namely the Bloomberg site, to the newspaper Les Echos and also to an external publication of the Group BNP Paribas.

5.3.1.1 Sample size

The main issue with interviews is that, unlike quantitative studies, content analysis research has a difficulty in what refers to sample size (N) (Rego, Cunha and Meyer Jr, 2018). A commonly used criterion is the theoretical saturation one. Saturation is achieved when, after a certain number of interviews, the realization of new interviews does not add new information, therefore reaching the saturation point, i.e. a strong correspondence is obtained between the data, the literature and the theory (McDonald and Eisenhardt, 2017 cited by Rego, Cunha and Meyer Jr, 2018). This greatly depends on the informational power of participants.

The greater the informational power (relevant information) of respondents/participants, the more quickly the saturation point will be reached, and a minor sample will be necessary (Malterud, Siersma and Guassora, 2016; de la Croix, Barrett and Stenfors, 2018; Rego, Cunha and Meyer Jr, 2018).

These authors using the idea of 'information power' suggest that the number of respondents needed for the study is based on: 1) the aim of the research, 2) the sample specificity, 3) the use of established theory, 4) the quality of the data provided by the dialogue and 5) the analysis strategy that will be used. To better understand the proposed mechanics, a summary is drawn in the following Figure 15.

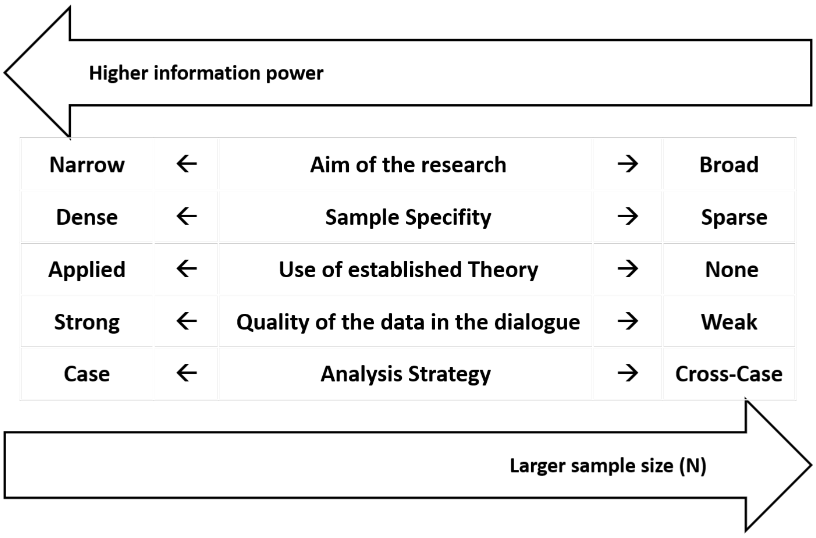


Figure 15 - Information power—Items and dimensions

Source: adaptation from Malterud et al. (2016, p. 1756)

Nevertheless, and although commonly used, the concept of 'saturation' is not always applicable, and the researcher must always bear in mind if its work allows for the advance of scientific knowledge. Therefore, it is up to the author to justify the reason why the sample size is adequate to answer the research question, but it is better for him/her to previously build solid theoretical foundations, and preferable by benchmarking using other similar studies.

5.3.1.2 Interview type

There are many ways to conduct interviews but, taking into account the tone of change of the business development plan, so that the bank better answers to the challenges posed by a different environment, the methodology chosen for the design of the interview script was Appreciative Inquiry. This was because Appreciative Inquiry it is a constructive mode of action research, that can unleash a positive revolution of conversation and change in organizations by unseating existing patterns of discourse, creating space for new voices and new discoveries, and expanding circles of dialogue to provide a community of support for innovative action (Ludema, Cooperrider and Barrett, 2006). In this sense, Cooperrider and Srivastva have constructed Appreciative Inquiry as a method of organizational intervention (Grieten *et al.*, 2018), done in 4 phases after topic choice: (1) discovery, (2) dream, (3) design, and (4) destiny (see below Figure 16 for a diagram of the appreciative inquiry 4-D model).

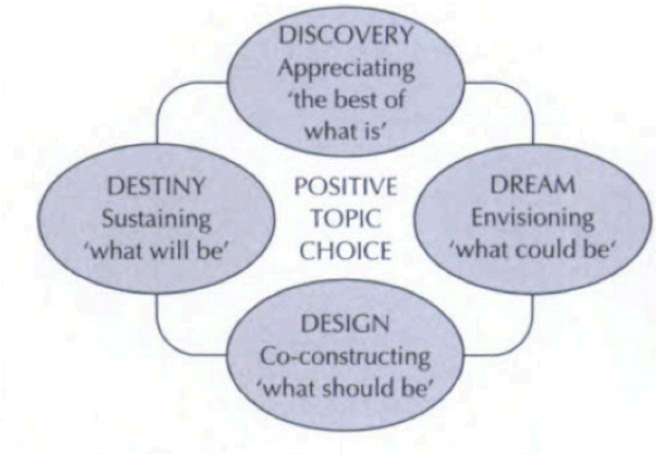


Figure 16 - 4-D Model

Source: Ludema, Cooperrider and Barrett (2006); Cooperrider (2012)

In conclusion, Appreciative Inquiry, recognizes that inquiry and change are not truly separate moments, instead they are admitting that inquiry and change are simultaneous. Inquiry is change, because the questions we ask, set the stage for what we 'find', and what we find becomes the knowledge out of which the future is conceived, conversed about, and constructed, i.e. the seeds of change are implicit in questions we ask.

For the present work, interviews allowed to broadly identify the Key Success Factors for Digital Transformation in the BNP Paribas and in the banking industry.

5.3.2 Surveys

Interviews are an important way to gather data in qualitative research, especially if combined with surveys (de la Croix, Barrett and Stenfors, 2018), because this mixed-method of interviews and questionnaire allows 1) interviews to identify themes around which to construct the survey (exploratory design) or alternatively 2) it may be used to provide a deeper understanding of survey's results (explanatory design). In that sense, it has also been prepared an organizational culture survey script (Appendix 3), adapted from the work of Tidd and Bessant (2013). The purpose of the survey was, to carry an innovation organizational diagnosis, by assessing the teams' perception of the innovation practices and processes using a Likert scale. The higher the score on any of the five dimensions studied (Strategy; Learning; Linkages; Processes; Innovative Organization), the better BNP would be evaluated in its readiness to innovate.

However, and despite the best efforts taken, it was not possible to conduct a survey with the teams that are designing and implementing innovation within BNP Paribas. Nevertheless, it has been utilized the results of a webinar survey ("Innovation Readiness

Assessment") made by Strategyzer on the 23rd of May 2019 (Strategyzer, 2019b), to illustrate the current perception of the participants of the webinar regarding the innovation practices and processes of their companies.

5.3.3 Coding

In order to summarize for all this language-based data resulting from interviews and the webinar survey, it has been used coding as a word or a short-phrase that salient and captures the essence of the message. Although somewhat subjective, coding was done to classify, by arranging things in a logical order and make it part of a classification (Saldaña, 2013). Coding was not used simply to reduce data into codes, but also to add value to the research story, by distilling the data, its main goal. Coding was therefore an initial step in the direction of a more rigorous and suggestive analysis and interpretation for a research, linking and clustering the essence-capturing qualitative codes in order to facilitate the developments of categories and thus analysis of their connections into themes, towards the assembly of a theory.

5.4 Methodology goals

In terms of methodological framework, at the end of the research it is intended to obtain 3 major views / assessments of the case:

1) AS WAS – At the time of the project to transform the bank was undertaken and which will be the framework of content for pedagogical case;

2) AS IS – Which serves as a basis for assessing the impacts and outcomes of the options taken by the Bank's transformation project team, and which will be demonstrated in the resolution of the case;

3) TO BE – Critical analysis of what could still be done in the scope of the project under the light of the methodologies and tools of innovation analyzed in the bibliographic review.

6 Analytical Tools

Taking in consideration the singularity of the banking context and the diversity of challenges that the banking industry faces, it is possible to present very different approaches when resolving the case.

Nevertheless, it is expected that the student is able to identify and analyze the information available in order to develop its work in a quantitative and qualitative methodology, by doing an analysis of the bank and of the business environment in which it operates, and by formulating its comprehension of the case with the core elements of a decision-making process.

Thus, the quantitative analysis expected in the resolution of this case may pass, among other points, by:

- Understanding the financial and economic performance of the Bank (P&L, Balance Sheet);
- Comprehending the financial and economic situation that other large banks are experiencing;
- Having a notion of the necessary investments that players in the banking industry will have to make in the coming years in order to digitalize their businesses.

Regarding qualitative analysis and in order to better answer the questions of case, the use of strategic analysis tools is requested, as they can be useful handling rationally with the uncertainties associated with strategy making. Strategic tools support the situation's analysis and also the evaluation of strategic choices. This allows a structuring and systematization of the situation diagnosis, as well as a visualization of critical areas of action (Jarzabkowski and Kaplan, 2015), in order to allow organizations to reallocate resources internally and/or align the organization with its environment (Jarratt and Stiles, 2010).

The most commonly strategic tools used are: SWOT and/or PEST to define internal and external environments, but also Value Chain Analysis, BCG Matrix, McKinsey's 7Ss and Ansoff's matrix to help forming the intelligence for the strategic analysis. Most recently, it has been developed the Business Model Canvas (Osterwalder, Pigneur and Rocha, 2011), a more graphical tool for strategic analysis, used mostly by startups, but that it is experiencing a growing importance in more mature companies, due to the ease and visually appealing way it provides to understand business.

As so, the utilization of strategic tools may focus on:

- Characterization of BNP’s strategy and business model and of its competitors;
- Understand the industry dynamics and market trends;
- Identification of Key Success Factors for digital transformation in the banking industry;
- The use of PESTEL analysis (to comprehend the impact of external factors, such as political, economic, social and environmental), Porter's 5 forces model, the SWOT matrix and of Business Model Canvas, is highly recommended, since these are tools that are applicable to most of the situations presented and to any other strategic reflection tasks.

7 Case Resolution

7.1 Presentation Plan

"*I love learning, but hate being taught*" – Winston Churchill

The purpose of this case is, to provide students the application of their theoretical knowledge to a real case and also, by encouraging the process of "learning by doing", to teach them how to (better) think and act when faced with new situations in an safe environment. Furthermore, it is intended that the students bring new ways of resolving the case, and to provide fresh insights, ideas and even constructive criticism to the resolution of the case.

The present case study presumes that students already have knowledge of general management concepts and strategic analysis tools. Given the complexity and length of the case, it is suggested that the resolution shall be made in a group. It is advisable that the group has a maximum of 5/6 elements. The case should be discussed and resolved by the group for later presentation in the class.

There are two key points that this case pretends to create: 1) systematization of the information received and application of the strategic analysis tools; 2) debate session regarding the various possible solutions proposed.

In the first session, the last 60 minutes of the first class shall be used, for the presentation of the case by the teacher, and for the configuration of the various working groups (if they do not already exist).

The case may be emailed to the spokesperson of each group or placed on an electronic platform, where all students will have access to the document.

The interpretation of the case and further discussion will be made and managed among the students of each group, that shall prepare it as homework. This will include research on the banking industry and also on strategic management frameworks. Until the next session, students shall start drafting the presentation, by resolving questions 1 and 2, and collectively prepare a list of doubts that may arise.

At session two, students shall start present to the teacher the doubts that they might have of the case and resolve question 3. After it, the group shall start finishing its presentation of the case study, by resolving questions 4 and 5 and if deemed necessary, it should dig deeper in the investigation in order to better understand any theoretical concepts.

All groups must send their presentations to the teacher, preferably by e-mail, until 24 hours of the day before the presentation. Until the time of delivery, the teacher, according to his/her availability, shall be available for clarification of any doubts, mostly by directing students to relate the case study with the relevant management theory.

Finally, in session three, it is recommended that students present the case in the classroom. The presentation should be in computer support (preferably PowerPoint) and the duration of each presentation should not be more than 20 minutes length.

During the presentation, each group shall present their conclusions and, which were the strategic analysis tools they have used for the resolution of the case.

At the end of the presentation, the remaining groups should put questions and teacher will encourage the debate of ideas and of the different points of view.

As a conclusion and synthesis, the teacher will present his own resolution of the case for the class.

On the day of presentation and if the teacher shall understand so, it should be mandatory to deliver a printed copy of the work/presentation.

The Table 2summarizes the schedule of the presentation plan.

Table 2 - Schedule of Presentation Plan

Session	Goals	Methods	Time
1st session	- Strategic Management theory overview; - Introduction to the case study; - Introduction to the banking industry and its challenges; - Presentation and availability of the case; - Draw attention to the added value of additional research, including similar cases of domestic banks facing similar challenges; - Definition of groups.	- Case study available to students in PDF format; - Teacher's PowerPoint slides of case study, summarizing the case study's subject and scope, namely by briefly describing the bank's situation and characterizing the banking industry	90 minutes

Session	Goals	Methods	Time
Homework	- Read and understand the case; - Discuss the case among the elements of the group; - Resolution of questions 1, 2 - List any doubts that may arise after reading and discussing the case.	- Reading of the documentation provided; - If necessary, further research; - Drafting of the presentation	1 week
2nd session	- Clarify doubts raised by groups for a better case study comprehension; - Resolution of question 3	- Debate on the case study main issues - Brief presentation of BMC and Dynamic SWOT matrix - Preparation of the groups to answer the questions	90 minutes
Homework	- Resolution of question 4 and 5 - Preparation of presentation (maximum of 20 minutes)	- Further investigation if necessary; - Preparation of presentation.	1 week
3rd session	- Presentation of the resolution by each group, in PowerPoint; - Presentation of a possible case resolution by the teacher (20 minutes); - Open debate of opinions and suggestions; - Final considerations by the teacher	- PowerPoint presentation by each workgroup; - PowerPoint presentation by the teacher; - Open discussion guided by the teacher	180 minutes (estimation for 20 minutes presentation of 6 groups + 10 minutes debate for each group)

Figure 17 proposes a sequence of events (and respective time dedication in percentage).

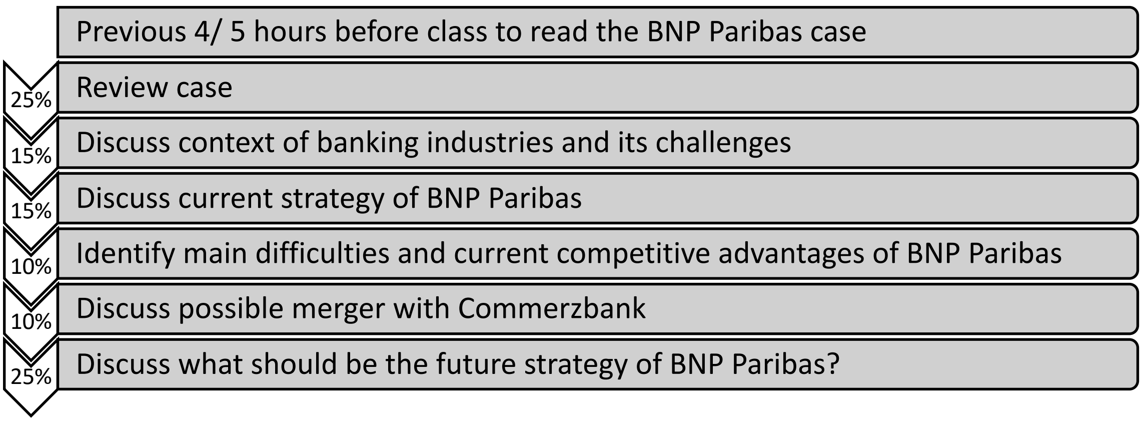


Figure 17 - Suggested time dedication (in %) for each of the sequence of events

A Gantt Chart is also proposed below (Figure 18) in order to help students manage their work schedule.

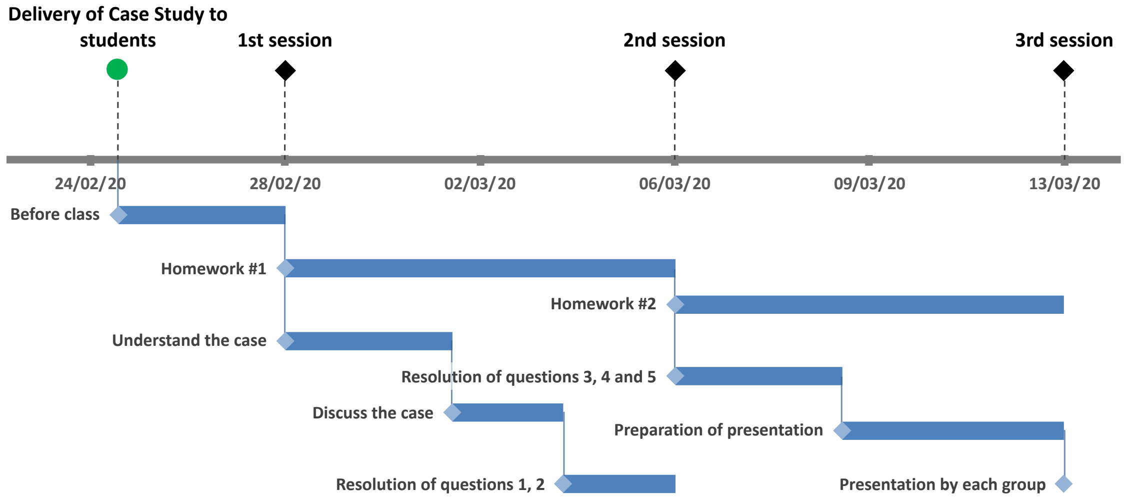


Figure 18 - Example of a Gantt chart type for the resolution of the case

7.2 Proposed Questions

This chapter presents the questions recommended to the students so they can reach the proposed pedagogical objectives of this case study.

Question 1. What is the current context of the banking industry nowadays and what do you believe to be the future of it? In that sense, please develop an external analysis to BNP Paribas. What are the bank's opportunities and threats?

Question 2. What is BNP Paribas's main strategy? List the strategies adopted by BNP Paribas with the difficulties or competitive advantages that the bank currently presents?

Question 3. What elements should we consider when performing an internal analysis of BNP Paribas? What strengths and weaknesses you can identify?

Question 4. Supported on the elements identified above, please provide a SWOT analysis

Question 5. What strategy should the bank put in place? Draw up some possible strategies using a Dynamic SWOT.

Regarding the case study, there are also some questions that can be posed, namely:

Question 6. Can this case study be applied to other banks?

Question 7. What were the main difficulties and challenges that you had to deal with when resolving the case?

Question 8. What features of the case you found most valuable to your learning (or contributed more to your learning)?

Question 9. If you had the chance, would you like to be part of an innovation project in your professional context? If yes, in what areas?

7.3 Proposed Resolution

7.3.1 Question 1

It is suggested that the group when analyzing the context of the business environment of BNP Paribas, shall try to answer the below questions:

- What is the effect of the economic environment in the business?

- What future consumer trends can we expect? How can they be predicted?

- What are the perceptions and expectations of consumers regarding our products and services?

- How will the banking market be like in the future?

To do so, there are some tools that can prove be useful:

- **PESTEL**: The PEST analysis represents the typical categories in the external environment that should be analyzed allowing to identify threats and opportunities in the external context: political, economic, socio-cultural and technological context. Additionally, and giving its increasing importance this analysis if often complemented by a legal and environmental analysis.

- **Porter's 5 forces model**: It represents a theoretical framework and strategic development of a sector that analyzes the attractiveness of a market. This model may frame and understand the reasons for the option for a given strategy;
- **Value net (Brandenburger & Nalebuff Model)**: This model is somewhat similar to (and complements) the 5 forces model, but instead of focusing in the value capture, it focuses on the value creation, through synergies, between the market players that regularly collaborate so as to change the game and increase value;
- **Determination of Key Success Factors**: key elements which are required for an organization to accomplish or exceed its desired business goals in the market. It is mandatory what is the linkage of the strategy to these factors in order to attain the desired objective;
- **Competitor analysis**: First it is necessary to identify the market structure, the number of competitors and their market share (according to targeted clients). Assessment of the strengths and weaknesses of current and potential competitors. Anticipation of strategies and movements of competitors in the market.

When wrapping up all this, the students will be able to construct the Opportunities and Threats Map for BNP Paribas.

7.3.2 Question 2

Possible topics to take into account when answering question 2:

a) Revitalize and ensure the future of a traditional bank;

b) Maintain and increase the number of customers (whether in retail, corporate banking or private banking) preference, that are preferring to use fintech applications and shifting their operations to these new players in the banking market;

c) Other major competitors of the bank are already taking initiatives to transform their legacy structures and requalifying their workforce to become more adapted to the digital landscape;

d) Strategy based on the maintenance of trust in BNP Paribas (confidence in banks is considered an important factor that ensures a successful commercial banking operations and development) aligned with the benefits of the modern era.

To answer this question, it can be used one or more of the following tools:

- **Ansoff Matrix**: classic tool to consider how should an organization grow;
- **BCG Matrix**: tool that assesses the business portfolio of a company, by combining the market growth rate with the relative market share;
- **McKinsey/ General Electric Matrix**: this tool links the external analysis (industry attractiveness) to the internal analysis (inner strengths of business);
- **A.D. Little Matrix**: adds the perspective of the industry lifecycle to the company's inner forces;
- **Model of 7 S from Mckinsey**: this model helps identifying the relations between strategic issues and remembers on a constant basis about the need to constantly monitor where the organization wants to go, and much has already been done and how much it will take to reach strategic goals. The point is to reduce risks, while maximizing strengths and by doing so, reinforcing the competitive advantages;
- **VRIO model**: this is an alternative model to help identifying competitive advantages in an organization, through four tests: Value, Rarity, Imitability, and Organization. This strategic analysis tool is therefore designed to help organizations uncover and protect the resources and capabilities that give them a long-term competitive advantage.

By combining the observations of one or more (preferably) of the tools above, students can gain the necessary insights to understand the difficulties and competitive advantages that the bank presently has.

7.3.3 Question 3

To better answer this question, it is proposed that the students should consider utilizing the following tools:

- **Mission, Values and Culture**: These elements define the purpose and soul of an organization and act as a glue to the all system. They can, when well defined, be a key element in the strategy development and implementation;
- **Organizational Structure**: A company's organizational structure determines how it approaches operating the business. Studying the different characteristics of the company and determining how it is organized, allows to compare structures,

examine weaknesses and identify strengths a clearly. A well-defined efficient structure and workflow organization is a vital component for corporate success;

- **Indicators**: Comparison of the historical indicators presented by the Bank (e.g. indicators of profitability and efficiency or market valuation). It uses historical data to expose trends and identify upcoming major shifts;
- **Value chain Analysis**: This model introduced by Porter in 1985, divides the various activities of the any business in primary and support activities and by analyzing them, keeping in mind, their contribution towards value creation to the final product. To do so, inputs consumed by the activity and outputs generated are studied, so as to decrease costs and increase differentiation. Value chain analysis therefore helps a company to understand where and how it adds value to something, by identifying the sources of value creation and subsequently how it can sell its product or service for more than the cost of adding the value, thereby generating a profit margin;
- **Business Model Canvas (BMC)**: This newer tool developed by Alexander Osterwalder, and Yves Pigneur (2011), is a strategic tool to rapidly and easily describe and explain a business idea or concept. It is generally a one-page document which goes through nine fundamental elements of a business or product, constructing an idea in a comprehensible and articulated way. The right side of the BMC emphasis is on the customer (external), while, the left side of the canvas attentions goes to the business (internal). Both external and internal factors congregate around the value proposition, which is the exchange of value between the business and the customer. BMC draws a picture of what the idea involves, allowing its users to get a clear idea of what the business will be like and a go-through of the process of making connections between what the idea is and how to make it into a business.

By summing up the above, one can be able to identify the bank's mains strengths (in order to level up its competitive position) and weaknesses (to overcome or mitigate).

7.3.4 Question 4

By combining the external elements and the internal features found in the previous questions, the student should now be able to construct the SWOT table. This tool enables us to better answer four assessment questions: i) where are we? ii) how have we got here? iii) where are we better? and iv) what should be done to improve?

As opportunities and threats are elements external to the organization, it cannot control them. Nevertheless, it is possible to better potentiate opportunities and also to mitigate threats, by taking in consideration the internal situation of the firm.

7.3.5 Question 5

At corporate level it is necessary to define which the best path is the best, and in that sense, several questions arise, namely:

- Which activities should the organization pursuit and which not, by investing or divesting them?
- How much should the company diversify its businesses?
- Vertical integration of activities or outsourcing?
- The geographic scope of activities and the internationalization strategy?
- Should the bank merge or acquire other banks?
- Which alliances and strategic partnerships should the organization establish?
- Is the organizational structure adapted to the strategy?

To better answer these questions, students can use the combination of the Opportunities in the market with Strengths and Weaknesses of the firm, and also Threats posed to the company with the Strengths and Weaknesses it has. By doing so, it is possible to find possible solutions to transform inner Weaknesses into Strengths and to convert Threats into Opportunities.

One good tool to do so is the Dynamic SWOT, developed by Dealtry (1992, as cited by Helms and Nixon, 2010). By constructing one, students can be able to come up with some strategic options for further consideration.

One simple mechanism for students to make the Dynamic SWOT matrix is as follows:

1. Move across the matrix from left to right, starting with the column Opportunity 1 (O1).
2. Having column Opportunity 1 (O1) locked, assign for the different internal options (strengths and weaknesses) a score of 3 to the best one, a score of 2 to the

next best option, and a score of 1 to the next best option. All other options receive a score of 0.

3. Repeat the process for the remaining columns to the right of the matrix until you have completed the column for the final threat.

This will lead to something similar to the Figure 19:

			External							
			Opportunities				Threats			
			O1	O2	O3	O4	T1	T2	T3	T4
Internal	Strengths	S1	3			1	2			
		S2		1	2	3		3	1	
		S3	2		3		1	1		3
		S4							3	
	Weaknesses	W1				2				
		W2	1	3			3		2	2
		W3		2						1
		W4			1			2		

Figure 19 - Example of Dynamic SWOT

As strategy should not be decided in isolation (Jarzabkowski and Kaplan, 2015), through a brainstorm session, each member of the group shall build their own matrix and give their values. So, for example, in a group of 5 people this will result in a total of 30 points to distribute per column (= n*i = 5*3 + 5*2 + 5*1 = 30 points).

From this stage, the next step is, for each cell in the matrix, to add up all the points from all group members and that will result in a matrix like the one in the following Figure 20:

			External							
			Opportunities				Threats			
			O1	O2	O3	O4	T1	T2	T3	T4
Internal	Strengths	S1	6	-	5	3	7	3	1	2
		S2	9	9	4	12	5	10	7	7
		S3	9	6	6	4	4	1	2	7
		S4	-	-	7	5	3	5	8	-
	Weaknesses	W1	1	3	-	5	-	1	-	-
		W2	1	7	3	1	9	-	7	9
		W3	4	3	-	-	-	-	5	5
		W4	-	2	5	-	2	10	-	-

Figure 20 - Possible Group's Dynamic SWOT

The higher the score a cell has, the more attention that cell should have. In the above example, we could consider the O4-S2 the most important as it has received the highest result in the team's table.

Generally, the actions that come up from Dynamic SWOT can be classified as follows:

- **S-O**: the possibilities from combining the strengths of the firm to the opportunities provided by the markets, allows the company to do what it is good at, when the opportunity shows up. These are the actions with greater chances of success;
- **W-T**: these are the selections that pool an organization’s weaknesses with the external threats. A firm should avoid doing business in areas where it faces its larger external threats, and simultaneously it doesn’t have the competencies to compete. Nevertheless, a firm should try to develop new skills, so it can lower its weaknesses, and at the same time, soften outside threats;
- **W-O**: this is a risky option, but if successful it will allow an organization to seize an opportunity if in the between it acquires the necessary competencies. Possibilities to obtain the competencies include buying them or developing them internally (but this will take time);
- **S-T**: Threats can limit the full exploitation of a firm’s strengths potential, thus the actions here proposed, should capitalize the company’s strengths to change threats into opportunities. Some examples of this type of strategy are multiple channel promotions and price wars.

Once the possible strategic options are defined, the bank should adopt those who best suit the type of change in management sought (disruptive/ incremental/ transformation/ realignment).

For a successful change management (Collyer, 2000), it is necessary the definition of some key issues such as:

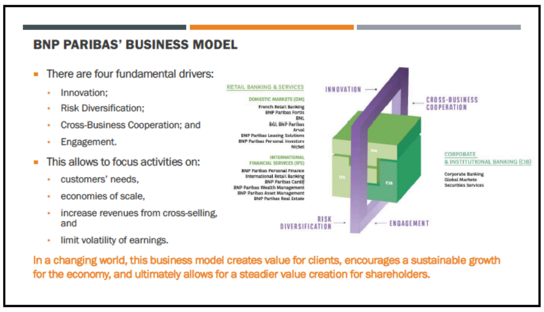
i. Recognize the need to change;

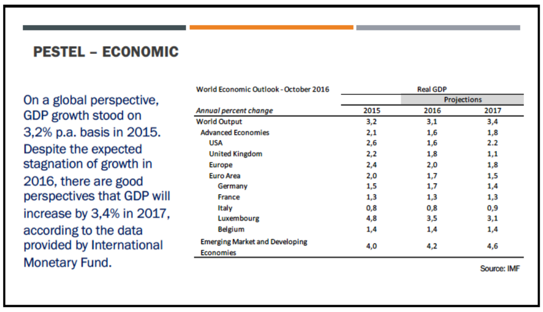
ii. Manage to share the vision throughout the entire organization;

iii. Obtain, develop and manage the skills and know-how;

iv. Action planning.

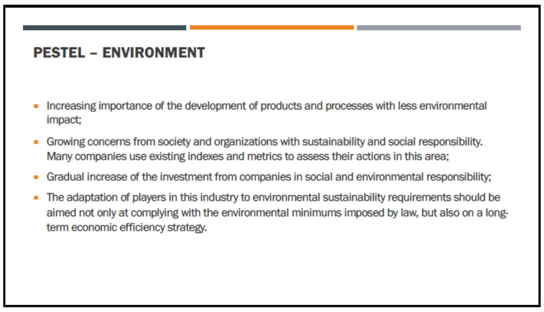
7.4 Resolution Slides





World Economic Outlook - October 2016	Real GDP		
		Projections	
Annual percent change	2015	2016	2017
World Output	3,2	3,1	3,4
Advanced Economies	2,1	1,6	1,8
USA	2,6	1,6	2.2
United Kingdom	2,2	1,8	1,1
Europe	2,4	2,0	1,8
Euro Area	2,0	1,7	1,5
Germany	1,5	1,7	1,4
France	1,3	1,3	1,3
Italy	0,8	0,8	0,9
Luxembourg	4,8	3,5	3,1
Belgium	1,4	1,4	1,4
Emerging Market and Developing Economies	4,0	4,2	4,6

Source: IMF



BARGAINING POWER OF BUYERS

MEDIUM

The greater the financial inclusion in a society the greater the number of people to use banking services, such as deposits, time deposits, mortgage, loan, investment, insurance and currency exchange. This might reduce bargaining power of customers.

Internet is changing people's life and currently customers can easily obtain information to easily compare the price and service.

Price sensitivity: Interest Rate and service fees charge is a sensitive indicator for customers in bank industry. If perceived as to high for services provided, customer may draw out all or a large amount of capital from bank to another bank/other financial institution.

The banking sector is evolving from a seller to a buyer's perspective, as market transparency is greatly increased by the Internet and the change of habits of customers that have an improved knowledge of products and services which strengthens their position.

BARGAINING POWER OF SUPPLIERS

MEDIUM / HIGH

Generally speaking, the smaller the market/competition for the supplier's products, the greater the power of suppliers.

Depositors as capital supplier of banks, through funding, have reasonable power because they are constantly comparing with other banks and/or financial products to see where they should apply their capital.

International monetary institutions and similar (such as BCE or EIB) as funding providers also have some reasonable bargaining power.

To some extent, employees of banks and suppliers in the field of information and communication technology (e.g. Bloomberg) also have some bargaining power.

Banks' core software suppliers have a high bargaining power because there is big dependency of the bank towards them.

Facilities suppliers have a low bargaining power because there is a high number of suppliers

THREAT OF NEW ENTRANTS

MEDIUM

Although competition in the European market (and in the USA) is open to the entry of new players, there are some regulatory constraints that end up being dissuasive for possible entrants, because they will have to undergo a very rigorous evaluation phase. The stronger the regulatory authorities are, the greater the barriers to entry and consequently the lower the risk.

There are high entry costs due to the large capital requirements. Also setting up a physical network of branches requires a high investment in bricks and mortars. Banking requires large economies of scale, as the greater the economies of scale in an industry, the lower the risk to incumbents, since new entrants must bear the higher the barriers of entry.

Banking products are very easily copiable and can almost be seen as commodities. Therefore, differentiation in the banking market is not easy due to the difficulty of differentiating against competition.

The banking industry is a market that is governed by the trust of customers to banks. Thus a new financial institution that enters the market must face a whole lengthy process to gain customer's trust. There is a psychological switching cost.

Largest threat of substitution is not from rival banks but from non-financial competitors, such as Fintechs and other startups acting on the financial industry. These newer firms provide standardized products, have leaner structures and a have greater flexibility to adapt to newer preferences of the consumers by rapidly incorporating changes in their business models according to shifting consumer. Fintechs and especially GAFAM are a particular threat to incumbent banks

THREAT OF SUBSTITUTE PRODUCTS

HIGH

The simpler, more commoditized the product, the higher the threat of substitute products (e.g. payments and transfers), which is the case for most banking products such as deposits, payments and loans.

As so, there is the risk substitution from deposits to products of insurance companies or even from corporate to capital markets funds and certificates by specialized companies.

The largest threat of substitution is not from rival banks but from non-financial competitors, such as Fintechs and other startups acting on the financial industry, with an offering more adapted to consumers' preferences.

RIVALRY AMONG EXISTING COMPETITORS

MEDIUM

Important action parameter of competition is price, quality and innovation, which are used to distinguish the competitor's products and offer added value to the customers.

There is generally a high concentration of market share in a few banks with the more or less the same market power that characterize the market.

Given the high similarity of products and services offered by competing banks, is up to quality and innovation to act as differentiating factor among competitors.

Banking industry often experiences high level of exit barriers due to high sunk costs.

VRIO ANALYSIS

	Valuable	Rare	Inimitable	Organized	Competitive implications
Renowned corporate brand and market position	Yes	Yes	Yes	Yes	Sustained Competitive Advantage
Corporate culture	Yes	Yes	Yes	Yes	Sustained Competitive Advantage
High quality of senior management	Yes	Yes	Yes	Yes	Sustained Competitive Advantage
Corporate Leadership and Vision	Yes	Yes	Yes	Yes	Sustained Competitive Advantage
Motivated workforce	Yes	Yes	Yes	--	Unused Competitive Advantage
Distribution of Branch network	Yes	No	--	--	Competitive Parity
Global presence	Yes	Yes	No	--	Temporary Competitive Advantage
Large Client base	Yes	Yes	No	--	Temporary Competitive Advantage
Partnerships with Fintechs and Startups	Yes	Yes	No	--	Temporary Competitive Advantage
Developing a culture of intrapreneurship, innovative initiatives and new ideas implementation	Yes	Yes	Yes	Yes	Sustained Competitive Advantage
Ability to raise capital to fund investments	Yes	Yes	Yes	Yes	Sustained Competitive Advantage
Wide range of Product and Services offering	Yes	No	--	--	Competitive Parity
Design of new customer journeys	Yes	Yes	Yes	Yes	Sustained Competitive Advantage
Fully Integrated Technology	Yes	Yes	Yes	Yes	Sustained Competitive Advantage
Requalification of the Workforce	Yes	Yes	Yes	Yes	Sustained Competitive Advantage

Business Model Canvas:

Adaptation from Business Model Canvas www.businessmodelgeneration.com

8. Key Partners (KP)	6. Key Activities (KA) / 7. Key Resources (KR)	2. Value Proposition (VP)	4. Customer Relationships (CR) / 3. Channels (CH)	1. Customer Segments (CS)
• Shareholders • Investment Partners • Stock markets • Rating agencies • Governments • Subsidiaries • Other brands of the group	**6. Key Activities (KA)** • Retail Banking • Private Banking • Investment Banking • Project Finance • Asset Management • Personal Finance **7. Key Resources (KR)** • Large customer base • Available funds for investment • Know-how of almost 200k employees • Partnerships	• Trust derived from a leading bank in Europe with a global reach • Full range of services to its diverse client base • Group offers solutions to capital markets, securities services, financing, treasury and financial advisory	**4. Customer Relationships (CR)** • Personal assistance • Self-service • Automated Services • Co-creation • Community of innovation **3. Channels (CH)** • Branch network • Business Centers • Online Banking • Relationship Managers • Telephone	• Large Corporate and Institutional clients • Individuals • Liberal professionals and entrepreneurs • Small and Medium-sized enterprises

9. Cost Structure (CS €)	5. Revenue Streams (RS €)
• Interest Paid • Commissions and Fees paid • Human Resources/ Overheads • Impairments and Provisions • Taxes	• Interest received • Commissions and Fees received

SWOT ANALYSIS OF BNP PARIBAS

Strengths	Weaknesses
1. Global brand; 2. Largest European bank with a worldwide presence; 3. Quality of senior management; 4. Availability of funds to finance new investments; 5. Well diversified business model by activities; 6. Well diversified geographically; 7. Broad and differentiated product and services offering to customers; 8. Motivated workforce/ employees;	1. Legacy IT systems and applications; 2. Slow and inefficient working processes; 3. Somewhat expensive Products and Services, and not fully customized; 4. Bank is not yet fully compliance with GDPR and PSD2; 5. Employees not fully aware of the importance of being compliant with regulations (AML, GDPR, etc); 6. Workforce without digital skills; 7. Cost-to-income above the average of the industry

Opportunities	Threats
1. New technologies; 2. GDPR; 3. PSD2; 4. FinTechs and startups; 5. Global economy's pace of growth especially in emergent markets.	1. Neo-banks and GAFAM competition; 2. Merging pressures from regulatory institutions; 3. New consumer trends, more mobile, well informed, more demanding; 4. Fines by not complying with GDPR and/ or PSD2; 5. Possible global economic slowdown, as the result of Brexit and the trade war USA – China; 6. Expectation of a low level of Interest for a long period; 7. More stringent regulatory demands; 8. Cyberattacks from hackers with no good intentions; 9. Staggering evolution of Europe's economy.

DYNAMIC SWOT: STRENGTHS-OPPORTUNITIES / THREATS

		Opportunities	Threats
		1. New technologies; 2. GDPR; 3. PSD2; 4. FinTechs and startups; 5. Global economy's pace of growth especially in emergent markets.	1. Neo-banks and GAFAM competition; 2. Merging pressures from regulatory institutions; 3. New consumer trends, more mobile, well informed, more demanding; 4. Fines by not complying with GDPR and/ or PSD2; 5. Possible global economic slowdown, as the result of Brexit and the trade war USA – China; 6. Expectation of a low level of Interest for a long period; 7. More stringent regulatory demands; 8. Cyberattacks from hackers with no good intentions; 9. Staggering evolution of Europe's economy.
Strengths	1. Global brand; 2. Largest European bank with a worldwide presence; 3. Quality of senior management; 4. Availability of funds to finance new investments; 5. Well diversified business model by activities; 6. Well diversified geographically; 7. Broad and differentiated product and services offering to customers; 8. Motivated workforce/ employees;	**S2xS4xS5xO1xO5**: Investment on new technologies to promote the redesign of the entire IT architectural and leverage it to explore new markets and/ or new products, to maintain BNP Paribas as a global reference in banking, that is becoming more modern and agile; **S2xS3xS4xO5**: Create a win-win partnership ecosystem with startups and FinTechs, by accessing their products and ways of working and giving them the necessary scale to be viable; **S4xS7xO2xO4**:Use GDPR to clean up and to validate customer's database, in order to monetize data and achieve greater operating efficiency, by making better use of data, and be closer to people, by implementing new customer journeys; **S5xS7xO3xO4**: Increase of business activity through PSD2 by upgrading the operational model, whether internally or using third-party applications; **S2xS3xS6xO4**: Expand the tried-and-tested innovations from one entity of the Group to other entities of the BNP Paribas' Group; **S3xS4xO4**: Train and develop new skills in employees to sponsor new ways of working and promote change management;	**S1xS2xS3xS4xT1**: Investment on new technologies to modernize and maintain BNP Paribas as a global reference in banking, that is becoming more modern and agile; **S1xS2xS7xS8xT3:** Leveraging on BNP Paribas brand reputation, global presence and quality of employees to be closer to customers and better understand their needs; **S3xS5xS6xT5xT6xT9**: Maintenance of the existing business model in order to diversify risk by benefiting from businesses/ regions that experiencing growth and to mitigate lower gains from others; **S4xS8xT4**: Training of employees regarding GDPR and PSD2; **S4xS8xT8**: Training of employees on cybersecurity and best-practices;

DYNAMIC SWOT: WEAKNESSES-OPPORTUNITIES / THREATS

		Opportunities	Threats
		1. New technologies; 2. GDPR; 3. PSD2; 4. FinTechs and startups; 5. Global economy's pace of growth especially in emergent markets.	1. Neo-banks and GAFAM competition; 2. Merging pressures from regulatory institutions; 3. New consumer trends, more mobile, well informed, more demanding; 4. Fines by not complying with GDPR and/ or PSD2; 5. Possible global economic slowdown, as the result of Brexit and the trade war USA – China; 6. Expectation of a low level of Interest for a long period; 7. More stringent regulatory demands; 8. Cyberattacks from hackers with no good intentions; 9. Staggering evolution of Europe's economy.
Weaknesses	1. Legacy IT systems and applications; 2. Slow and inefficient working processes; 3. Somewhat expensive Products and Services, and not fully customized; 4. Bank is not yet fully compliance with GDPR and PSD2; 5. Employees not fully aware of the importance of being compliant with regulations (AML, GDPR, etc); 6. Workforce without digital skills; 7. Cost-to-income above the average of the industry	**W1xO1xO4**: Adapt IT systems and applications, by adopting new technologies and leveraging on the know-how of startups and Fintechs; **W2xW6xW7xO1xO4**: Promote new ways of working to become more agile and cross-silos, by training employees, blending different generations (baby-boomers, X, Y, Millennials) and adopting best practices of startups, to design better and more productive processes; **W3xO1xO2xO4**: Use new technologies and GDPR, supported on insights from startups to extract value from customers data and offer more personalized products and services at a price that the client is willing to pay; **W4xW5xO1xO4**: Use new technologies and startups to be compliant with newer regulations and train workforce for the importance of being compliant; **W7xO1xO4xO5**: Use new technologies and innovations from startups of emerging markets, where economy is growing faster, in another regions where the bank is to improve efficiency.	**W1xW2xW3xW7xT1xT3**: Neobanks with leaner structures and GAFAM with highly digital processes, have a greater knowledge of clients needs and develop customized products at a faster pace and cheaper price; **W4xW5xT4xT7**: Need to adapt fast to new regulations and train workers for the need to be compliant and to protect the bank's reputation; **W7xT5xT9**: Need to develop new revenue streams and new business models in order to increase efficiency and diminish economy slowdown effects.

8 Lessons from the Case Study to the Management's field of study

Currently, and due to a number of reasons already described, organizations need to position themselves on the market in a competitive way. An organization, that intends to ensure a long-term presence in the market, has to develop a customer-centric strategy, offering products and services that differentiate itself from the competition, in order to create of value for the client, and through that, acquire and retain clients.

By encouraging students to show their overview of the banking sector, challenges and opportunities foreseen in the challenging environment that the banking industry is/will be living, the present case study allowed to better appreciate, how essential it is for organizations to create competitive advantages as a strategic choice, in order to better tackle stiff competition from incumbents and new comers to the market.

As the pace of change in business has increased, competitive advantages are less and less sustainable and becoming more rapidly temporary. Firms currently need to be able to actively support innovation - not as one-off projects, but as an ongoing process, ever-repeating.

In this sense, managers should ask themselves the following questions:

- How ready is my company to nurture and support innovation?
- Does my organization have the right leadership support, organizational design and innovation practice?

Also, and although the study of the development of BNP activities at the global scale is a praiseworthy example of good management practices that an organization can put in practice, at the same time the study of the bank's business development plan has raised up some issues:

1. How can digital transformation potentiate coo-petition by promoting collaboration between competitors, namely the bank and Fintechs?
2. How is digital transformation impacting the labor market by creating new jobs and requiring the re-skilling of employees and promoting the arrival of new talents with a pack of new competencies?

3. What are the biggest challenges/ difficulties to the adoption of an innovative mindset that the banking industry faces?

Based on the information taken from the case study and the set of analyses carried out, it is possible to draw some conclusions, namely in:

Strategy:

- The high-level of support, namely from Top Management, to the transformation plan is a key factor to its successfully implementation;
- Need of a vision: The Bank for a changing world. Having a compelling vision (and sharing it), has the power to rally people around a meaningful cause;
- Nevertheless, what's required to make that vision a reality are resources, planning and action. For that, the effective coordination of the different managerial levels in the organization has a huge influence in the successful implementation of the transformation plan, because every level of management must be coordinated to carry out specific roles and act as change agents and promoters of innovation;
- It is also important that, those that are innovating, whether they are innovating autonomously at innovation labs or launching corporate entrepreneurship actions, align with their management in terms of the strategic goals for innovation. They have to make sure that they are working on ideas that are affiliated with the organization's overall strategies, so both can profit. Otherwise these labs and intrapreneurs have a good chance of being the home for homeless ideas;
- Technology by itself is worthless, it is necessary that the purpose of the transformation plan is to better prepare the bank to correctly answer business' problems. Digitalization and innovation are meant to provide customers an easier, more practical and better adapted banking experience to their needs, by better mapping the customer journey and finding the right digital solutions that maximize their experience, as stated in a recent study by D-Rating classifying BNP Paribas as 2nd best Digital Bank in France (BNP Paribas, 2019b; D-Rating, 2019), named most innovative investment bank of 2019 by The Banker (BNP Paribas, 2019d) and also by Columbus Consulting (MIGNOT, 2019);

- It is necessary to have the engagement and participation of employees in the transformation plan. The bank may have the best technology on the market, but without a skilled workforce, who knows how to use technology and extract value from it, any innovation strategy will never achieve its full potential. It is necessary to be aware that data may be the new currency, but talent is the new gold. A certified professional training of all employees, in key areas, is a strategic choice that differentiates the company from the competition. It also noteworthy that this development of employees, can help reduce their fears that digital transformation can threaten their jobs and emphasize that this process is an opportunity for them to upgrade their expertise, and to better suit the marketplace of the future;
- Similarly, it is worthy noting that the involvement of the employees in the definition of strategy (Davis, 2018) tends to lead to better strategy outcomes;
- Also, the attaining in 2016, of the 'Top Employer Europe' certification for the third consecutive year (BNP Paribas, 2016), that distinguish BNP Paribas as one of the best companies to work in Europe, and also in the following years is, a clear vote of confidence given by the collaborators to the strategy being followed;
- For a successfully implementation of a innovation strategy, organizations must ambidextrous and build a balanced portfolio of exploit and explore business models (Tushman and O'Reilly, 1996). Ambidextrous is a company that improves its existing business, while at the same time creates an organizational space to invent future businesses. Ambidextrous organizations are difficult to achieve, but it can be done. Amazon e.g. designs an organizational culture that makes space for invention inside the company;
- Do not forget that is necessary to change culture. An innovative culture sponsors the success of the innovation strategy (Flamholtz and Randle, 2012; Kuratko, Covin and Hornsby, 2014). You might have the best strategy, but without a supporting culture, it will not succeed. As Drucker use to say: "*Culture eats strategy for breakfast*";
- Only by adopting a permanent innovative culture and mindset throughout the entire organization, it can remain competitive in the market, even, despite many of the competing companies, mimic some of its innovative services.

Innovation

- Necessity is the mother of invention – BNP Paribas must innovate in order to keep up with the surrounding environment or otherwise they may end like Blockbuster that failed to adapt to the changes in the entertainment industry and has been disrupted by Netflix;
- The game rules have changed, however, many banks are still adapting. It is not so easy for banks to change so fast, but those that embrace innovation (especially disruptive innovation), combining the virtues of a traditional bank (trust and dependability) with the speed, innovation and convenience of the FinTechs, will harvest the highest payoffs, will better meet customer needs and attain operating-model efficiencies. According to a Boston Consulting Group study, banks' profitability can increase as much as 25% (Boston Consulting Group *et al.*, 2019);
- It is therefore necessary to think about digital transformation across two dimensions: operational efficiency and customer experience (Harbert, 2019), which is the focus of the BNP Paribas current business development plan;
- In the light of its 2017-2020 Business Development Plan, BNP Paribas has created the Innovation and Development Committee which shows a strong sign of support to innovation and consequently a huge step towards change and since then, several innovative services have been presented, namely a set of innovative services at a global scale, which were already carried out in other European countries and, which allowed it to achieve a differentiating positioning;
- The bank has put into practice the following innovations: Product innovation (new products), commercial innovation (new forms of customer relationship, new ways of creating value with the product/service) organizational innovation (new forms of Organization Company's activity);
- Nevertheless, as innovation as a very low success rate, it is false to assume that successful ideas can came up whenever wanted. Given the uncertainty of innovation, it is necessary to generate the maximum number of ideas as possible, and make small investments in them (Etiemble, 2019). The higher number of ideas, the better probability of developing innovation in a sustainable way;

- This remits to the managing of innovation portfolio: new business ideas with high uncertainty cannot be managed the same way traditional business plan. It is necessary to manage new business initiatives differently. Given that validating new businesses is a very iterative search process, where many innovation initiatives will eventually fail and only a fraction of them will make it to implementation, it is necessary to track and map projects. An example of this is the one proposed by Osterwalder and Pigneur that classify new innovations according to two classifications: Expected return and Innovation risk (Osterwalder and Pigneur, 2019);
- Every innovative initiative developed must be guided by having as North Star making life easier for customers. As advised by Stay Nadella (CEO of Microsoft) cited in NDTV (2017), empathy must be at the heart of innovation in order to best tackle "*unmet and unarticulated need of people*" and in that sense, to better develop innovative products and services;
- The most successful firms in the innovation field play the full innovation spectrum: they experiment with potential growth engines to learn, and when they need to go faster, they make acquisitions. This is especially true for organizations with sufficient available funds, that make investing on acquisitions practically easier than promoting innovation processes (Strategyzer, 2019a), because acquisition price of startups goes to the balance sheet, while innovation investments need to be reflected through the P&L, which impacts results. However, it is necessary to look beyond quarterly earnings and shareholder reports to keep innovating;
- Furthermore, although acquiring startups allows speed, it is important to mention that usually startups do not intend to be part of a larger company and of its corporate culture – these innovative companies prefer most of times to remain separate entities.

9 Conclusion

Since the arrival of the internet, people have seen digital technologies transform the economy and their lives. Currently, there is a myriad of services that can be ordered and delivered, to where is more convenient to consumers, simply by clicking a digital button on the screen of a smartphone. This "*nouvelle vague*" of digitalization, allowed the entrance of new competitors in many industries, such as carmakers, media and retail, which caused (and is causing serious difficulties) to incumbents. Even a conservative industry, as the banking industry, is starting to feel the effects of new consumer habits and accelerated speed of technology.

In the age of digital and uberization, when artificial intelligence and algorithms arouse fears and fantasies, Fintechs and Neobanks flourish and the banking landscape is changing profoundly. Symbol of this digitalization, the massive reduction in the number of banking agencies, that benefits a more virtual relationship via the internet and mobile applications.

All this as serious consequences, due to the fact that banks have a very special and vital function in the economy. Banks perform the job of "maturity transformation", that is turning short-term deposits, that can be demanded at any time, into long-term loans. This allows savers to defer their consumption (and receive a gratification for that – the interest rate) and allows investment and borrowers agents to bring their projects take shape. Banks are so vital that, as the crisis of 2008-09 evidenced, the economy stumbles when they eventually fall apart. The vast majority of actors, in the banking industry, is late to the smartphone age, because since the financial crisis, they have been preoccupied, especially western banks, with fixing their balance-sheets and old-fashioned cost-cutting.

Following the traumas of the 2008 crisis, that contributed to the rise of widespread mistrust around banks, several new business models have emerged in the meantime, through the rise of fintech.

For banks to thrive in this "brave new world", it is necessary that they must embrace change, adopt digital technology, partner with outside firms that can provide them the necessary resources to meet customers' expectations and maintain their trust.

Banks have to reinvent their business model, but that means the implementation of measures that require substantial monetary and human resources, dedication and persistence. It should be noticed that, investing in new technologies alone will not work.

As so, and instead of letting a digital expert to be in charge of the company's digital transformation, banks must first define where they want to be in the future, design a strategy to attain it and choose the correspondingly technology. In order to do so, firstly banks must aks themselves three questions:

- What do we want to do?
- What is the goal we are trying to achieve?
- To whom are we adopting these new technologies?

This would avoid the deception that many banks are feeling with the results of the big investments made so far, because they are still waiting for big improvements in finances or in the customer experience. Also, there are customers (especially elderly) to whom all this technology does not make sense. On the other hand, even digital natives need advice on how different bank products best meet their needs. It is them necessary to mobilize customers, but also to take into account that such initiatives shall vary depending on the type of customer. The bank should be supported in this, with systematic planning and integrated organization.

A successfully digital transformation happens if, the method of its implementation is primarily focused on changing the mindset of organization's members, as well as the culture and processes of the firm, before it decides what digital tools to use and how to use them (Tabrizi *et al.*, 2019).

As so, digitalization also requires behavioral change among employees. It is very important to engage employees to carry the flag of digital change. **"***Strategy is not something an organization has but rather something that people in organizations do*"**.** (Jarzabkowski and Kaplan, 2015). With digital transformation, the discipline of managing change is more important than ever. Banks should setup different stages of shifting and organizational change: from awareness to understanding, acceptance, appropriation and anchoring. Also, organizations that embrace digital transformation must promote a favorable setting for behavioral change, and that includes identifying and removing organizational blockers. This often promoting more flexible and new ways of working, as well as the possibility of gaining new skills such as data analysis and programming.

All this requires feedback (like employee feedback), to help identifying and addressing risks at an early stage. Based on the feedback, managers as change agents, can better comprehend the issues that might arise, involve employees in discussing potential solutions and arrange a solution in a faster manner. By providing feedback, employees and other agents are promoting communication which allows for transformation plans to be adapted accordingly.

Additionally, and although we must not analyze Innovation in a short-term perspective (innovation must not be part of an annual report), it should be taken in consideration the utilization of innovation metrics, to know how far the banks' staff and customers have advanced in their digital journeys, so managers can be aware of what actions that can be taken to better promote the digital migration—or else bank's competitors will do so and customers will go with them.

At a more personal level, it must be said that BNP Paribas has been the perfect business case to analyze, first of all due to its rich banking history in Europe (and also a little bit around the globe) and also because of the known adoption and support to innovation by BNP Paribas since its inception, such as private funding, *carte bleue*, multi-channel banking, the early establishment of an international branch network, or the introduction of the first consumer loans in France. This allowed the group, since its beginning, to keep adapting and evolving to changes. Currently, with the strategic choice of having a diversified business model, and the way it fosters innovation, allows BNP Paribas to minimize the group's risk, and makes the bank a model to follow and worth of study.

It has also been a very good experience to meet and have conversations with some of the individuals in the Group BNP Paribas, and hopefully I will deal again with them the future.

Moreover, it should be said that, the field of innovation within the banking industry is immense and I find that to be even more true after having had the chance to develop this work. Banks are only at the beginning of digital transformation and it has been very exciting to testify it with this case study.

Further investigation can be sought on management innovation and mostly on change management, regional idiosyncrasies of innovation, and ethics in the application of innovative processes.

10 Bibliography

Arnold, M., Jenkins, P. and Noonan, L. (2018) *Banking M&A: the quest to create a European champion*, *Financial Times*. Available at: https://www.ft.com/content/cd640614-78a1-11e8-8e67-1e1a0846c475 (Accessed: 5 September 2019).

Backbase (2018) *Backbase Whitepaper / Four pillars of the digital-first bank / June 2018*. Available at: https://www.backbase.com/resources/banking-2025-whitepaper/#download (Accessed: 3 June 2019).

Bain & Company (2018) *in Search of Customers Who Love Their Bank*.

Baker, M. (2017) *BNPP puts digital heart in its three- year plan*, *Euromoney*. Available at: https://www.euromoney.com/article/b12khnzy87qf0q/bnpp-puts-digital-heart-in-its-three-year-plan (Accessed: 5 October 2019).

Bardin, L., Reto, L. A. and Pinheiro, A. (2004) *Análise de conteúdo*. Lisboa: Edições 70.

BNP Paribas (2016) *BNP Paribas awarded " Top Employers Europe 2016 " certification*. Available at: http://www.bnpparibas.pt/en/2016/02/17/bnp-paribas-awarded-top-employers-europe-2016-certification/ (Accessed: 18 September 2019).

BNP Paribas (2017) *How the banks face the challenge from finance start-ups ?* Available at: https://group.bnpparibas/en/news/banks-face-challenge-finance-start-ups (Accessed: 31 July 2019).

BNP Paribas (2019a) *2019: 16 anniversary dates from the BNP Paribas history that are worth noting*. Available at: https://history.bnpparibas/document/in-2019-12-dates-to-remember-in-bnp-paribas-history/ (Accessed: 6 July 2019).

BNP Paribas (2019b) *BNP Paribas en forte progression dans le classement D-Rating 2019 pour sa 'Proposition Digitale ' - BNP Paribas*. Available at: https://group.bnpparibas/communique-de-presse/bnp-paribas-forte-progression-classement-d-rating-2019-proposition-digitale (Accessed: 22 July 2019).

BNP Paribas (2019c) *History: two centuries of banking*. Available at: https://group.bnpparibas/en/group/history-centuries-banking (Accessed: 4 July 2019).

BNP Paribas (2019d) *The Banker names BNP Paribas most innovative investment bank of 2019*. Available at: https://cib.bnpparibas.com/our-news/the-banker-names-bnp-paribas-most-innovative-investment-bank-of-2019_a-33-3138.html (Accessed: 10 October 2019).

De Bondt, W. (2010) 'The crisis of 2008 and financial reform', *Qualitative Research in*

Financial Markets, 2(3), pp. 137–156. doi: 10.1108/17554171011091728.

Boone, C. *et al.* (2019) 'Top management team nationality diversity, corporate entrepreneurship, and innovation in multinational firms', *Strategic Management Journal*, 40(2), pp. 277–302. doi: 10.1002/smj.2976.

Boston Consulting Group (2019) *Banks Brace for a New Wave of Digital Disruption*. Available at: https://www.bcg.com/publications/2019/banks-brace-new-wave-digital-disruption.aspx.

Boston Consulting Group *et al.* (2019) *Retail Banking Distribution 2025: Up Close and Personal*. Available at: https://www.bcg.com/publications/2019/retail-banking-distribution-2025-up-close-personal.aspx (Accessed: 15 November 2019).

Bradnburn, N. M. (2004) 'Understanding Question-Answer Process', *Survey Methodology*, 30(1), pp. 5–15.

Braithwaite, T. O. M. (2019) *Silicon Valley is eating the banks' lunch*, *Financial Times*. Available at: https://www.ft.com/content/1b85b012-bf4c-11e9-b350-db00d509634e (Accessed: 20 August 2019).

Calantone, R. J., Cavusgil, S. T. and Zhao, Y. (2002) 'Learning orientation, firm innovation capability, and firm performance', *Industrial Marketing Management*, 31(6), pp. 515–524. doi: 10.1016/S0019-8501(01)00203-6.

Cambridge Advanced Learner's Dictionary & Thesaurus (2019) *Cambridge University Press*. Available at: https://dictionary.cambridge.org/dictionary/english/strategy (Accessed: 9 March 2019).

Castellaci, F. *et al.* (2005) 'Advances and Challenges in Innovation Studies', *Journal of Economic Issues*, 39(1), pp. 91–121. doi: 10.1080/00213624.2005.11506782.

Chen, T. (1999) 'Critical success factors for various strategies in the banking industry', *International Journal of Bank Marketing*. MCB UP Ltd, 17(2), pp. 83–92. doi: 10.1108/02652329910258943.

Chocron, V. (2019) 'Les banques ont raison de se faire du mouron', *Le Monde*, 28 March.

Clot, A. (2019) 'L'économie numérique à l'assaut de la finance', *Réalités Industrielles*, (1), pp. 41–44. Available at: https://search.proquest.com/docview/2186026709?accountid=38384.

CNBC (2019) *Commerzbank fourth-quarter net profit jumps 51 percent , tops expectations*. Available at: https://www.cnbc.com/2019/02/14/commerzbank-fourth-quarter-net-profit-jumps-51-pct-tops-expectations.html (Accessed: 1 October 2019).

Collyer, M. (2000) 'Communication – the route to successful change management:

lessons from the Guinness Integrated Business Programme', *Supply Chain Management: An International Journal*, 5(5), pp. 222–227. doi: 10.1108/13598540010350556.
Cook, K. A. *et al.* (2019) 'The influence of corporate social responsibility on investment efficiency and innovation', *Journal of Business Finance and Accounting*, (2001), pp. 1–44. doi: 10.1111/jbfa.12360.
Cooperrider, D. L. (2012) 'The concentration effect of strengths', *Organizational Dynamics*. Elsevier Inc., 41(2), pp. 106–117. doi: 10.1016/j.orgdyn.2012.01.004.
Crespo de Carvalho, J. and Cruz Filipe, J. (2014) *Manual de Estratégia - Conceitos, Prática e Roteiro*. 4ª Edição. Edited by M. Robalo. Lisboa: Edições Sílabo.
D-Rating (2019) *Proposition Digitale des banques de détail en France (Expérience client - Volet 1)*. Available at: https://www.d-rating.com/single-post/Customer-experience-retail-banks-France-2019FR (Accessed: 22 July 2019).
Davies, M. and Hughes, N. (2014) *Doing a successful research project using qualitative or quantitative methods*. Second Edi. London: Palgrave Macmillan.
Davis, P. J. (2018) 'Getting employees involved in strategy planning', *Journal of Business Strategy*, p. JBS-04-2018-0060. doi: 10.1108/JBS-04-2018-0060.
Delloite (2018) *Accelerating digital transformation in banking*, *Deloitte Insights*. Available at: https://www2.deloitte.com/insights/us/en/industry/financial-services/digital-transformation-in-banking-global-customer-survey.html (Accessed: 16 March 2019).
Drucker, P. and Pereira, J. S. (1986) *Inovação e gestão*, *Biblioteca de gestão moderna*. Lisboa: Editorial Presença.
Eco, U. *et al.* (2005) *Como se faz uma tese em ciências humanas*. 12th edn. Lisboa: Editorial Presença.
Etiemble, F. (2019) *How To Feed An Innovation Funnel*, *Q&A With An Executive*. Available at: https://www.strategyzer.com/blog/qa-with-an-executive-how-to-feed-an-innovation-funnel (Accessed: 5 October 2019).
Euro Finance (2018) 'Es gibt gin umdenken - Interview mit Jean-Laurent Bonnafé', *EURO FINANCE Magazin*, November, pp. 22–26.
Finextra (2018) *Most banks will be made irrelevant by 2030 - Gartner*. Available at: https://www.finextra.com/newsarticle/32860/most-banks-will-be-made-irrelevant-by-2030---gartner (Accessed: 17 March 2019).
Flamholtz, E. G. and Randle, Y. (2012) 'Corporate culture, business models, competitive advantage, strategic assets and the bottom line', *Journal of Human Resource Costing &*

Accounting. Edited by C. Nielsen, 16(2), pp. 76–94. doi: 10.1108/14013381211284227.

Fredrickson, J. W. *et al.* (1986) ‘The strategic decision process and organizational structure’, *Academy of Management Review*, 11(2), pp. 280–297.

Freire, A. (2000) *Inovação*. Lisboa: Verbo.

Galindo-rueda, F. and Van Cruysen, A. (2016) *Testing innovation survey concepts, definitions and questions: Findings from cognitive interviews with business managers*.

Garvin, D. (2003) ‘Making the Case: Professional Education for the World of Practice’, *Harvard Magazine*, pp. 56–65. Available at: https://harvardmagazine.com/2003/09/making-the-case-html.

Van Genderen, E. (2013) ‘What is strategy: Back to basics.’, *Middle East Journal of Business*, 8(2), pp. 3–5. Available at: http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=101797624&site=eds-live.

Goffin, K. *et al.* (2019) ‘State-of-the-art: The quality of case study research in innovation management’, *Journal of Product Innovation Management*, p. jpim.12492. doi: 10.1111/jpim.12492.

Grieten, S. *et al.* (2018) ‘Inquiring Into Appreciative Inquiry: A Conversation With David Cooperrider and Ronald Fry’, *Journal of Management Inquiry*, 27(1), pp. 101–114. doi: 10.1177/1056492616688087.

Harbert, T. (2019) *Business leaders gird for ‘ organizational explosions ’*, *MIT Ideas Made to Matter - Digital Economy*. Available at: https://mitsloan.mit.edu/ideas-made-to-matter/business-leaders-gird-organizational-explosions?utm_campaign=Newsletter&utm_source=hs_email&utm_medium=email&utm_content=75263747&_hsenc=p2ANqtz-_89I48bF5DlUz8C60VjXNyKpLC-7f7ZljZN0CodhN77LYYK0LdXkQlSaY7IoF1im (Accessed: 21 October 2019).

Hassen, T. *et al.* (2018) ‘Dynamic Effects of Mergers and Acquisitions on the Performance of Commercial European Banks’, *Journal of the Knowledge Economy*. Journal of the Knowledge Economy, 9(3), pp. 1032–1048. doi: 10.1007/s13132-016-0389-1.

Helms, M. M. and Nixon, J. (2010) ‘Exploring SWOT analysis – where are we now?’, *Journal of Strategy and Management*, 3(3), pp. 215–251. doi: 10.1108/17554251011064837.

Heyden, M. L. M. M., Sidhu, J. S. and Volberda, H. W. (2018) ‘The Conjoint Influence of Top and Middle Management Characteristics on Management Innovation’, *Journal of*

Management, 44(4), pp. 1505–1529. doi: 10.1177/0149206315614373.
International Financing Review (2013) *Bank of the Year: BNP Paribas*. Available at: http://www.ifre.com/bank-of-the-year/21052473.article (Accessed: 6 July 2019).
Jackson, O. (2018) 'GDPR implementation is harder than expected', *International Financial Law Review*, pp. 1–4. Available at: https://search.proquest.com/docview/2137332713?accountid=38384.
Jarratt, D. and Stiles, D. (2010) 'How are Methodologies and Tools Framing Managers' Strategizing Practice in Competitive Strategy Development?', *British Journal of Management*, 21(1), pp. 28–43. doi: 10.1111/j.1467-8551.2009.00665.x.
Jarzabkowski, P. and Kaplan, S. (2015) 'Strategy tools-in-use: A framework for understanding "technologies of rationality" in practice', *Strategic Management Journal*, 36(4), pp. 537–558. doi: 10.1002/smj.2270.
Kelley, T. and Littman, J. (2001) *The art of innovation: lessons in creativity from IDEO, America's leading design firm*. London: Profile Books.
Khazanchi, S., Lewis, M. W. and Boyer, K. K. (2007) 'Innovation-supportive culture: The impact of organizational values on process innovation', *Journal of Operations Management*, 25(4), pp. 871–884. doi: 10.1016/j.jom.2006.08.003.
Kuratko, D. F., Covin, J. G. and Hornsby, J. S. (2014) 'Why implementing corporate innovation is so difficult', *Business Horizons*. 'Kelley School of Business, Indiana University', 57(5), pp. 647–655. doi: 10.1016/j.bushor.2014.05.007.
de la Croix, A., Barrett, A. and Stenfors, T. (2018) 'How to…do research interviews in different ways', *Clinical Teacher*, 15(6), pp. 451–456. doi: 10.1111/tct.12953.
Lee, T. D., Chung, W. and Taylor, R. E. (2011) 'A strategic response to the financial crisis: an empirical analysis of financial services advertising before and during the financial crisis', *Journal of Services Marketing*, 25(3), pp. 150–164. doi: 10.1108/08876041111129146.
Lengnick-Hall, C. A. (1992) 'Innovation and Competitive Advantage: What We Know and What We Need to Learn', *Journal of Management*, 18(2), pp. 399–429. doi: 10.1177/014920639201800209.
Ludema, J. D., Cooperrider, D. L. and Barrett, F. J. (2006) 'Appreciative inquiry: The power of the unconditional positive question', in Reason, P. and Bradbury, H. (eds) *Handbook of action research*. London: SAGE Publications, pp. 155–165. Available at: https://books.google.pt/books?id=oSTkb90xof0C.
Malterud, K., Siersma, V. D. and Guassora, A. D. (2016) 'Sample Size in Qualitative

Interview Studies', *Qualitative Health Research*, 26(13), pp. 1753–1760. doi: 10.1177/1049732315617444.

McGrath, R. G. *et al.* (1996) 'Innovation, Competitive Advantage and Rent: A Model and Test', *Management Science*, 42(3), pp. 389–403. doi: 10.1287/mnsc.42.3.389.

McKinsey&Company (2018) *Banks in the changing world of financial intermediation*, *McKinsey Global Banking Annual Review 2018*. Available at: https://www.mckinsey.com/industries/financial-services/our-insights/banks-in-the-changing-world-of-financial-intermediation (Accessed: 5 October 2019).

MIGNOT, V. (2019) *Crédit Agricole , BNP Paribas , Revolut : le top des banques les plus digitales*, *CBanque*. Available at: https://www.cbanque.com/banque/actualites/74222/credit-agricole-bnp-paribas-revolut-le-top-des-banques-les-plus-digitales (Accessed: 22 July 2019).

Mintzberg, H. (1978) 'Patterns in Strategy Formation', *Management Science*, 24(9), pp. 934–948. doi: 10.1287/mnsc.24.9.934.

NDTV (2017) *Why Empathy Is Key To Innovation: Microsoft Chief Satya Nadella To NDTV*. NDTV. Available at: https://www.youtube.com/watch?v=V109yXqZyHY.

Nieves, J. (2016) 'Outcomes of Management Innovation: An Empirical Analysis in the Services Industry', *European Management Review*, 13(2), pp. 125–136. doi: 10.1111/emre.12071.

Northcott, C. A. (2004) 'Competition in Banking: A Review of the Literature', *Bank of Canada*, p. 24. Available at: https://ideas.repec.org/p/bca/bocawp/04-24.html.

O'Shannassy, T. (2008) 'Sustainable competitive advantage or temporary competitive advantage', *Journal of Strategy and Management*, 1(2), pp. 168–180. doi: 10.1108/17554250810926357.

OCDE/Eurostat (2018) *Oslo Manual 2018: Guidelines for collecting, reporting and using data on innovation, 4th Edition, The measurement of scientific, technological and innovation activities, OCDE*. doi: 10.1787/9789264304604-en.

Oliver, C. (1997) 'Sustainable competitive advantage: combining institutional and resource-based views', *Strategic Management Journal*, 18(9), pp. 697–713. doi: 10.1002/(SICI)1097-0266(199710)18:9<697::AID-SMJ909>3.0.CO;2-C.

Online Etymology Dictionary (2019). Available at: https://www.etymonline.com/search?q=innovation&source=ds_search (Accessed: 24 June 2019).

Osterwalder, A. and Pigneur, Y. (2019) *The Business Model Portfolio Part 2 : Manage*

New Business Initiatives, *Strategyzer Blog*. Available at: https://www.strategyzer.com/blog/the-business-model-portfolio-part-2-manage-new-business-initiatives (Accessed: 11 November 2019).

Osterwalder, A., Pigneur, Y. and Rocha, E. (2011) *Criar modelos de negócios*. Lisboa: Dom Quixote.

Pérez, A. and Bosque, I. R. del (2014) 'Customer CSR expectations in the banking industry', *International Journal of Bank Marketing*, 32(3), pp. 223–244. doi: 10.1108/IJBM-09-2013-0095.

Petralia, K. *et al.* (2019) *Banking Disrupted ? Financial Intermediation in an Era of Transformational Technology*. Geneva.

Philippe Wanlin (2007) 'Recherches Qualitatives : Bilan Et Prospectives De La Recherche Qualitative', *Hors Série - Actes du colloque*, numéro 3, pp. 243–272. Available at: http://www.recherche-qualitative.qc.ca/documents/files/revue/hors_serie/hors_serie_v3/Wanlin2.pdf.

Porter, M. E. (1985) *Competitive advantage: creating and sustaining superior performance*. New York: The Free Press.

Porter, M. E. (1996) 'What Is Strategy?', *Harvard Business Review*, pp. 61–78. Available at: http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=9611187954&site=eds-live.

Porter, M. E., Guerreiro, I. and Ramos, S. (2007) *Estratégia e vantagem competitiva*, *Líderes da gestão)*. Lisboa: Público.

Porter, M. E. and Kramer, M. R. (2006) 'The Link Between Competitive Advantage and Corporate Social Responsibility', *Harvard Business Review*, December, pp. 78–92. Available at: https://hbr.org/2006/12/strategy-and-society-the-link-between-competitive-advantage-and-corporate-social-responsibility.

Prensky, M. (2001) 'Digital Natives, Digital Immigrants', *On the Horizon*, 9(5), pp. 1–6. doi: 10.1108/10748120110424816.

Rego, A., Cunha, M. P. and Meyer Jr, V. (2018) 'Quantos participantes são necessários para um estudo qualitativo? Linhas práticas de orientação', *Revista de Gestão dos Países de Língua Portuguesa*. scielopt, 17(2), pp. 43–57. Available at: http://www.scielo.mec.pt/pdf/rpbg/v17n2/v17n2a04.pdf.

Reid, D. (2019) *Europe ' s bank bosses all want the same thing — fewer banks*, *cnbc.com*. Available at: https://www.cnbc.com/2018/08/30/europes-bankers-want-fewer-banks-and-forecast-ma-for-sector.html (Accessed: 3 September 2019).

Ridwan, M. S. (2017) ‘Planning practices: a multiple case study in the high-performing banks’, *Journal of Organizational Change Management*, 30(4), pp. 487–500. doi: 10.1108/JOCM-05-2016-0102.

Robinson, E. and Valentini, F. B. (2018) *French Banking Giant Is Looking Like ‘the JPMorgan of Europe’*, *Bloomberg*. Available at: https://www.bloomberg.com/news/features/2018-05-30/the-jpmorgan-of-europe-french-giant-bnp-paribas-is-on-a-roll (Accessed: 1 June 2018).

Romanova, I. *et al.* (2018) ‘The payment services Directive II and competitiveness: The perspective of European fintech companies’, *European Research Studies Journal*, 21(2), pp. 3–22. Available at: https://search.proquest.com/docview/2058577967?accountid=38384.

Rumelt, R. P., Schendel, D. E. and Teece, D. J. (1994) *Fundamental Issues in Strategy: A Research Agenda.* Harvard Business School Press.

Saldaña, J. (2013) *The coding manual for qualitative researchers*. London: Sage.

Schoemaker, P. J. H., Heaton, S. and Teece, D. (2018) ‘Innovation, Dynamic Capabilities, and Leadership’, *California Management Review*, 61(1), pp. 15–42. doi: 10.1177/0008125618790246.

Schumpeter, J. A., Opie, R. and Elliott, J. E. (1983) *The theory of economic development*, *Social science classis series*. New Brunswick: Transaction Publishers.

Solt, E. (2018) ‘Managing International Financial Crises: Responses, Lessons and Prevention’, in *Crisis Management - Theory and Practice*. InTech. doi: 10.5772/intechopen.74983.

Statista (2019) *Number of credit institutions in the European Union (EU) and in Eurozone countries from 2008 to 2016*. Available at: https://www.statista.com/statistics/349544/eu-eurozone-credit-institutions-number/ (Accessed: 5 September 2019).

Stephan, U., Andries, P. and Daou, A. (2019) ‘Goal Multiplicity and Innovation: How Social and Economic Goals Affect Open Innovation and Innovation Performance’, *Journal of Product Innovation Management*. Wiley Online Library. doi: 10.1111/jpim.12511.

Stoskopf, N. (2002) ‘La fondation du comptoir national d’escompte de Paris, banque révolutionnaire (1848)’, *Histoire, économie et société*, 21(3), pp. 395–411. doi: 10.3406/hes.2002.2310.

Strategyzer (2019a) *CEO Insights on Innovation from the 2019 Bootcamp : Anton*

Affentranger , Former CEO of Implenia, *CEO Insights on Innovation from the 2019 Bootcamp: Anton Affentranger, Former CEO of Implenia*. Available at: https://www.strategyzer.com/blog/ceo-insights-on-innovation-from-the-2019-bootcamp-anton-affentranger?hss_channel=lcp-3029520&utm_content=94308451&utm_medium=social&utm_source=linkedin (Accessed: 21 October 2019).

Strategyzer (2019b) *Innovation Readiness Assessment with Tendayi Viki & Alexander Osterwalder*, *StratChat Replay*. Available at: https://www.strategyzer.com/blog/stratchat-replay-innovation-readiness-assessment-with-tendayi-viki-alexander-osterwalder (Accessed: 20 June 2019).

Szutowski, D., Szulczewska-Remi, A. and Ratajczak, P. (2019) 'Managing innovation processes in industrial sector. Qualitative study', *Economic Research-Ekonomska Istrazivanja* . Routledge, 32(1), pp. 282–300. doi: 10.1080/1331677X.2018.1553681.

Tabrizi, B. *et al.* (2019) 'Digital Technology is Not About Technology', *Harvard Business Review*, March, pp. 2–7. Available at: https://hbr.org/2019/03/digital-transformation-is-not-about-technology.

The Economist (2019a) *Reflections of a business guru*. Available at: https://www.economist.com/business/2019/07/25/reflections-of-a-business-guru (Accessed: 3 August 2019).

The Economist (2019b) *Young people and their phones are shaking up banking*, *Special Report: Banking*. Available at: https://www.economist.com/special-report/2019/05/02/young-people-and-their-phones-are-shaking-up-banking?cid1=cust/dailypicks/n/bl/n/2019057n/owned/n/n/dailypicks/n/n/EU/236904/n (Accessed: 6 June 2019).

The Economist Intelligence Unit Limited (2019) *A whole new world: How technology is driving the evolution of intelligent banking*. Available at: https://www.temenos.com/wp-content/uploads/2019/07/EIU-2019-report-2019-Jul-22.pdf.

Tidd, J. and Bessant, J. (2013) *Innovation audit - How well do we manage innovation*. May-2013, *Innovation Portal*. May-2013. Available at: http://www.innovation-portal.info/wp-content/uploads/Innovation-audit-Latest-version-May-2013.pdf (Accessed: 2 May 2019).

Tushman, M. L. and O'Reilly, C. A. (1996) 'Ambidextrous Organizations: Managing Evolutionary and Revolutionary Change', *California Management Review*, 38(4), pp. 8–29. doi: 10.2307/41165852.

Volberda, H. W., Van Den Bosch, F. A. J. and Heij, C. V (2013) ‘Management Innovation: Management as Fertile Ground for Innovation’, *European Management Review*, 10(1), pp. 1–15. doi: 10.1111/emre.12007.
Wei, Y. S. *et al.* (2013) ‘The Impact of Innovative Culture on Individual Employees: The Moderating Role of Market Information Sharing’, *Journal of Product Innovation Management*, 30(5), pp. 1027–1041. doi: 10.1111/j.1540-5885.2012.01000.x.
Yin, R. K. (1994) *Case study research*, *Applied social research methods series*. Thousand Oaks: Sage.

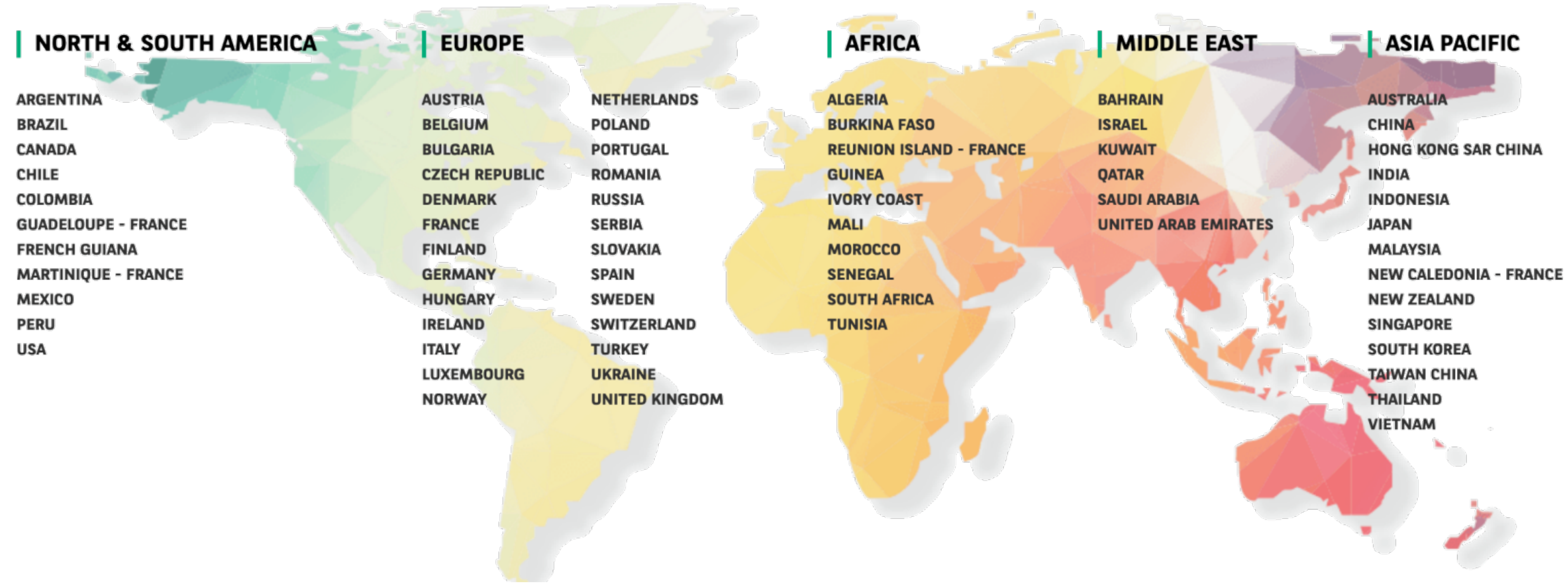
Appendixes

Appendix 1 - Activities of BNP Paribas

BNP Paribas organizes its businesses into two main fields of activity:

Appendix 2 - Locations of BNP Paribas

A European player with a global presence in 72 countries



Appendix 3 - Survey of Innovation Audit

#	Dimension	Questions	Answers							
0	Demographics	What is is your job title ?	Open question							
0	Demographics	How old are you ?	18 to 30 years old	31 to 40 years old	41 to 50 years old	51 to 60 years old	Above 61 years			
0	Demographics	How many working experiences have you had in the past ?	Open question							
0	Demographics	For how long have you been working for BNP Paribas ?	Less than 1 year	Between 1 to 3 years	Between 4 to 9 years	Between 10 to 20 years	Between 21 to 30 years	For more than 31 years		
0	Demographics	How long have you been doing this particular job at BNP Paribas ?	Open question							
1	Strategy	Does BNP Paribas have a clear idea of how innovation can help the bank to compete ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
2	Processes	Does BNP Paribas have processes in place to help the bank manage new products/ services development effectively from idea to launch ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
3	Innovative Organisation	Does BNP Paribas' organization structure helps innovation to happen?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.

#	Dimension	Questions	Answers							
4	Linkages	Do we have in BNP Paribas good 'win-win' relationships with our suppliers ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
5	Learning	Is there is a strong commitment in BNP Paribas to training and development of workers ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
6	Strategy	Is BNP Paribas' innovation strategy clearly communicated so everyone knows the targets for improvement ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
7	Processes	Are BNP Paribas' innovation projects usually completed on time and within budget ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
8	Innovative Organisation	Does staff in BNP Paribas work well together across departmental boundaries ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
9	Linkages	Are we at BNP Paribas good at understanding the needs of our customers/ end-users ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
10	Learning	Do we take time in BNP Paribas to review our projects in order to improve our performance next time ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
11	Strategy	Does staff in BNP Paribas know what its distinctive competence is - what gives the bank a competitive edge ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
12	Processes	Does BNP Paribas has effective mechanisms to make sure everyone (not just Marketing) understands customer needs ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
13	Innovative Organisation	Are workers in BNP Paribas involved in suggesting ideas for improvements to products or processes ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.

#	Dimension	Questions	Answers							
14	Linkages	Does BNP Paribas works well with universities and other research centres to help the bank develop our knowledge ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
15	Learning	Does the bank learns from its mistakes ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
16	Strategy	Does BNP Paribas looks ahead in a structured way (using forecasting tools and techniques) to try and imagine future threats and opportunities ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
17	Processes	Do we have in BNP Paribas effective mechanisms for managing process change from idea through to successful implementation ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
18	Innovative Organisation	Does the bank's structure helps it to take decisions rapidly ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
19	Linkages	Does BNP Paribas works closely with its customers in exploring and developing new concepts ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
20	Learning	Does the bank systematically compare its products and processes with other banks ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
21	Strategy	Does BNP Paribas' top management team has a shared vision of how the company will develop through innovation ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
22	Processes	Does the bank systematically searches for new product ideas ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
23	Innovative Organisation	Is communication is effective and works top down, bottom up and across the organization ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
24	Linkages	Does BNP Paribas collaborates with other firms to develop new products or processes ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.

#	Dimension	Questions	Answers							
25	Learning	Does the bank meets and shares experiences with other firms to help us learn ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
26	Strategy	Is there top management commitment and support for innovation in BNP Paribas ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
27	Processes	Does the bank has mechanisms in place to ensure early involvement of all departments in developing new products/processes ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
28	Innovative Organisation	BNP Paribas' has a reward and recognition system that supports innovation ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
29	Linkages	Does the bank tries to develop external networks of people who can help it - for example, with specialist knowledge ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
30	Learning	Is BNP Paribas good at capturing what we have learned so that others in the organization can make use of it ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
31	Strategy	Has BNP Paribas processes in place to review new technological or market developments and what they mean for the bank's strategy ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
32	Processes	Does the bank has a clear system for choosing innovation projects ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
33	Innovative Organisation	Does BNP Paribas have a supportive climate for new ideas - so people don't have to leave the organization to make them happen ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
34	Linkages	Is BNP Paribas working closely with the local and national education system to communicate its needs for skills ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.

#	Dimension	Questions	Answers							
35	Learning	Is the bank good at learning from other organisations ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
36	Strategy	Is there a clear link between the innovation projects that BNP Paribas carries out and the overall strategy of the business ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
37	Processes	Is there a sufficient flexibility in the bank's systems for product development to allow small 'fast track' projects to happen ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
38	Innovative Organisation	Does the staff work well in teams ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
39	Linkages	Does BNP Paribas works closely with 'lead users' to develop innovative new products and services?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.
40	Learning	Does BNP Paribas uses measurement to help identify where and when it can improve the bank's innovation management ?	Not true at all	Not true	Somewhat not true	Neutral	Somewhat true	True	Very True	N.A.

In the survey above one will find statements which describe employees of BNP Paribas should describe how they realize how the bank handles the question of innovation. For each statement, only a score is selected between 1 (= not true at all) to 7 (=very true).

Appendix 4 - Questionnaire – Interview guide

1. Please, can you tell me which strategies is BNP Paribas using in order to reach its long-term goals? By strategies I mean the changes, actions or plans that have been made or put in place in order to achieve the long-term goals of the bank.
2. What do you consider to be ours main competitive advantage in business? How does BNP differentiate itself from its competitors? (*For example, it can be price, new products, quality, customization, focus on a niche market, introduction of new technologies, etc*.)
3. Can you please tell me the role of innovation in our business strategy? Is there an agreed understanding of the relevance of innovation for achieving your long-term goals?
4. How would you define innovation? Can you please explain why ?
5. Do you think BNP should prefer a revolutionary or an incremental innovation strategy (or a balanced mix of both) ? Is there a reason for that choice ?
6. How do you see the relationship between BNP Paribas and Fintech enterprises? Do you see them as competition or as a partner ?
7. Is the innovation process helping to put the customer at the center of the bank's value-chain and therefore helping the bank to define a proposition value that understands and meets the client's needs ? Can you let us know why ?
8. Is the new payments directive and the RGPD, threats or an opportunity? Can a threat be seen as an opportunity ?
9. Do you feel that being BNP a global bank, there is a globalization penalty in terms of adaption and innovation? Does the fact of BNP Paribas' home country is France affects the way Top Managers drive innovation ?
10. Are the workers being involved in the transformation process ? Or do you believe that an ageing workforce will difficult the implementation of innovative solutions? i.e. Should an ageing workforce be understood as an opportunity or a threat to innovation/ transformation plan ?
11. Do you consider requalifying existing workers with new skills (design thinking, data mining skills, etc) in order for them to embrace new positions (i.e. is it more valuable to educate those people to do a more creative and interesting job) or is it preferable to hire workers with those skills ?
12. Assuming innovation as strategic to the bank, what were the main achievements you believe that have been made when implementing the transformation plan?
13. What else do you believe it can be done in innovation terms ?

Appendix 5 – Case Study

ISCTE Business School
Instituto Universitário de Lisboa

BNP Paribas road to 2020

The End of Business as Usual?

Authors: Pedro Manuel Vaz Andrade and Generosa do Nascimento, Ph.D.

"*Luck is what happens when preparation meets opportunity*" - Seneca

Abstract

Opportunities for evolution may be found in challenging circumstances. Stating a vision, defining a strategy, the capacity to execute it correctly and also the sharpness to adapt it to changes are naturally crucial to better be able to take advantage of volatile, uncertain and complex environments.

In the event of numerous challenges, such as the omnipresence of digital technologies, the new habits of customers, more stringent regulation, very low interest rates, the diversification of banking competition and also environmental issues, these challenges required BNP Paribas to drive its process of transformation forward. This is special true when taking in consideration that these challenges impact all its business areas – retail banking, corporate and institutional banking, and specialized financial services. It was therefore necessary for the bank to realize this transformation to be able to go on serving its customers and ensure the Group's performance over the long term.

After a successful business development plan during the period of 2014-2016, how should the BNP Paribas continue its transformation?

Table of Contents

1 Introduction

In a rainy October afternoon of October's 2015, Jean-Laurent Bonnafé – the CEO of the BNP Paribas Group – and his team were discussing the future of the bank, after the good performance of the Group with 2014-2016 Business Development Plan.

The 2014-2016 Business Development Plan was designed as the answer of the new market trends and the shift in consumers' habits. The plan's implementation was very positive, as the BNP Paribas Group made progress on all the major strategic priorities defined in the plan. Mr. Jean-Laurent Bonnafé and his team intended to keep this successful track towards a new plan more focused on digital domain and that keeps up to free capital.

However, Mr. Bonnafé and his team are also considering is the existing opportunity to merge with Commerzbank, a major German bank operating as a universal bank and take that prospect to become the largest player in Europe. The drawback with this potential merger, that can redraw the financial map of Europe, is the fact that it will divert the funds to a new development plan and might endanger the efforts already achieved with the previous one.

The central issue raised by Mr. Bonnafé is how could they keep growing as a profitable and modern bank, without risking the possibility to achieve a strategic advantage to address the new demands of their customers, leverage on digital technologies, and comply with new and more strict regulation.

2 BNP Paribas Group

2.1 Brief History of BNP Paribas

The history of BNP Paribas dates back to the 19th century, when the banks that would later form the Group, first opened doors and expanded their businesses leveraged on a period of industrial growth in Europe.

The first ones were the **Comptoir National d'Escompte de Paris** (CNEP) along with the Comptoir National d'Escompte de Mulhouse in March 1848.

Later in that century, **Banque de Paris et des Pays-Bas** (later known as **Paribas)** was established in 1872, through the merger of Banque de Crédit et de Dépôt des Pays-Bas, which had been founded in 1820 in Amsterdam, and Banque de Paris, established in 1869, in a context of banking concentration (BNP Paribas, 2019).

The Depression of the 1930s and the excessive commitment to loans to vulnerable companies led to the collapse in 1932 of Comptoir d'Escompte de Mulhouse. It re-emerged in the same year as **Banque Nationale pour le Commerce et l'Industrie** (BNCI).

In 1966, the French government decided to merge Comptoir National d'Escompte de Paris with Banque Nationale pour le Commerce et l'Industrie, to create the **Banque Nationale de Paris** (BNP). This fusion was a part of a program to stimulate the economy and represented the largest restructuring operation in the French banking sector since the end of the Second World War.

In 1982, Paribas was nationalized by the French government as part of a law that nationalized many major industrial companies and banks. It was then re-privatized later, in January 1986, following the shift in politics in France and deregulation of the banking sector that transformed the banking business in France and worldwide.

BNP was fully privatized in 1993 and began to build a group projected to become the leader in the European banking industry, by launching new banking products and services, the development of activities on the financial markets, expansion in France and also at the international level.

The following acquisitions have enhanced BNP Paribas' European presence: TEB in Turkey in 2005, BNL in Italy in 2006, Fortis in Belgium and BGL in Luxembourg in 2009, BGZ in Poland, Laser Cofinoga in consumer loans and Dab Bank in Germany in 2014.

After the storm due to the sub-crime crisis in 2008, BNP Paribas was granted with the Bank of the Year award by The International Financing Review in 2012. The IFR awards are a key industry benchmark and Bank of the Year is the top honor awarded.

2.2 Current situation of BNP Paribas

2.2.1 Organizational Structure

BNP Paribas is a European bank, headquartered in France, with an international reach. It has a presence in 72 countries, with more than 202,000 employees. The Group BNP Paribas serves nearly 32 million individual customers and 850.000 professionals, entrepreneurs, small and medium-sized enterprises and large corporate clients in its retail-banking networks.

The Group BNP Paribas comprises two main divisions: *i*) Retail Banking & Services and *ii*) Corporate & Institutional Banking, as illustrated in Figure 1

Figure 1 - BNP Paribas Group (BNP Paribas)

The overall coordination of all these Group's divisions is made by the Executive Committee and the CEO of the Group that have the top management functions of the BNP Paribas Group.

There are also Transversal departments within the Group of BNP Paribas that are responsible for providing support, and advisory to operational activities as well as in controlling them.

Below is a greater detail of each division's business line (the complete geographical presence can be found in https://group.bnpparibas/en/group/bnp-paribas-worldwide).

Retail Banking & Services

This division includes the Group's retail banking networks and specialized financial services in France and around the world. It is divided into: *i*) Domestic Markets and *ii*) International Financial Services

i. **Domestic Markets** - comprises the Group's 4 retail banking networks in the Eurozone (dark green in Figure 2)

- France (BDDF),
- Italy (BNL bc),
- Belgium (BNP Paribas Fortis),
- Luxembourg (BGL BNP Paribas).

And also 3 specialized businesses:

- Arval (long-term corporate vehicle leasing);
- BNP Paribas Leasing Solutions (rental and financing solutions);
- BNP Paribas Personal Investors (digital banking and investment services)

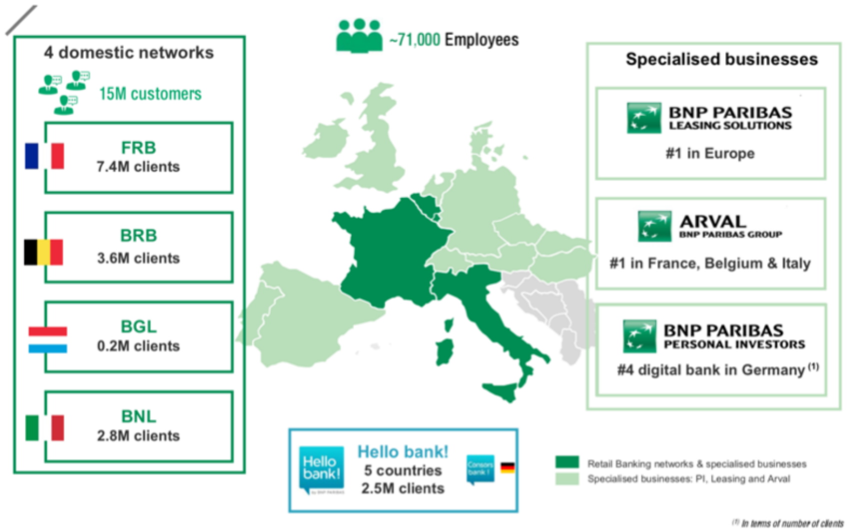


Figure 2 - Domestic Markets key figures (2016) - Source: BNP Paribas

ii. **International Financial Services (IFS)** - comprises the following business lines:

- International Retail Banking (all retail banks in 15 non-eurozone countries – including the United States, Turkey and Poland);
- BNP Paribas Personal Finance (credit solutions to individuals in around 28 countries through brands such as Cetelem, Cofinoga and Findomestic);
- BNP Paribas Cardif (savings and protection solutions in 36 countries, insuring individuals, their personal projects and assets);

And also 3 specialized business lines:

- BNP Paribas Real Estate (real estate services);
- BNP Paribas Investment Partners;
- BNP Paribas Wealth Management (private banking);

International Financial Services key numbers in 2016 (Figure 3):

- € 15,5 billion in revenues (Personal Finance: € 4.7bn; IRB: € 5.4bn; Insurance: €2.4bn; Wealth & Asset Management: € 3.0bn)
- Nearly 80,000 employees
- Presence in more than 60 countries

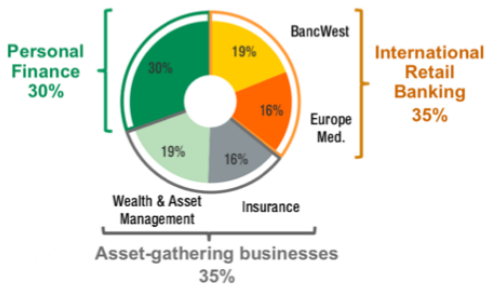


Figure 3 - Breakdown of IFS revenues - Source: BNP Paribas

Corporate & Institutional Banking (CIB)

BNP Paribas Corporate & Institutional Banking (CIB) is a global provider of financial solutions to corporate and institutional clients. It can be seen in Figure 4 that it serves almost 30,000 people in 56 countries across EMEA (Europe, Middle East and Africa), Asia-Pacific and the Americas, CIB offers solutions to its clients across capital markets, securities services, financing, treasury and financial advisory. CIB has expertise across multiple disciplines, including structured financing, derivatives, risk management, liquidity management (cash management, trade finance, forex), among others. CIB also acts as a bridge between corporate and institutional clients as it aims to connect the financing needs of corporate clients with the investment needs of institutional investors. By the year end of 2016 it served 7,000 Corporate clients and 12,000 Institutional investors.

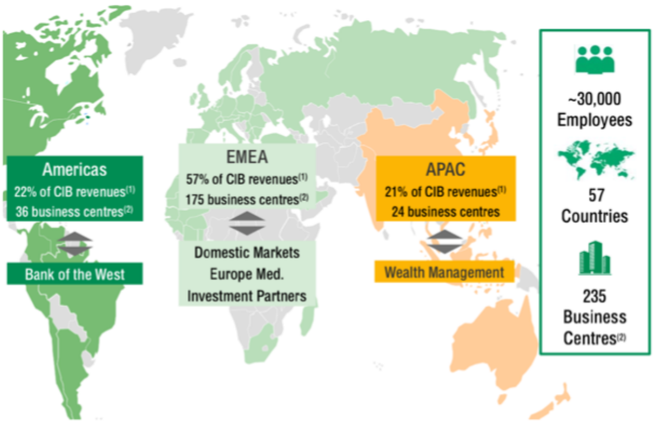


Figure 4 - Corporate & Institutional Banking key figures (2016) Source: BNP Paribas

2.2.2 Business Model

BNP Paribas is a leading European bank with a global reach, that provides a range of services to its diverse client base. These include payments, cash management, traditional and specialized financing, savings, protection insurance, wealth and asset management as well as real-estate services. Also, in the area of corporate and institutional banking, the Group offers clients solutions to capital markets, securities services, financing, treasury and financial advisory.

The BNP Paribas' integrated business model (Figure 5) is based on cooperation among the Group's businesses and in the diversification of risks. A successful cooperation between the different business lines is promoted in order to lead to stronger market positions and also to allow the reduction of the overall risk through diversification. The business model is diversified by country and business in order to avoid country, business or industry concentration. As for example, no business unit has more than 20% of allocated equity.

The purpose of the business model is through the four fundamental drivers: Innovation; Risk Diversification; Cross-Business Cooperation; and Engagement, to focus the Group activities on the customers' needs, gain economies of scale, increase revenues from cross-selling, and limit volatility of earnings.

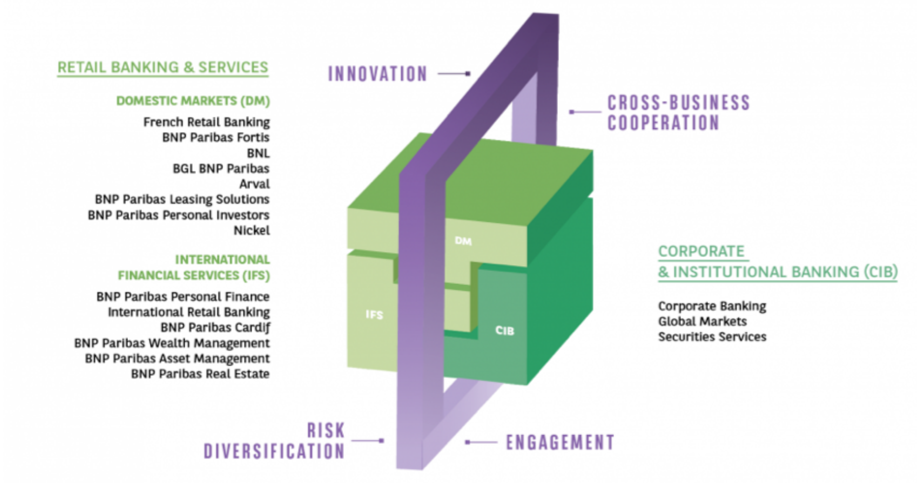


Figure 5 - BNP Paribas' Business Model (BNP Paribas)

In a changing world, this business model creates value for clients, encourages a sustainable growth for the economy, and ultimately allows for a steadier value creation for shareholders.

The Executive Committee believes that this model it's the model that better allows the bank to offer its clients a pack of integrated solutions and additionally provides the Group with the necessary conditions to adapt to change.

2.2.3 Vision, Mission and Values

The world is changing and therefore the lifestyles and ways of thinking are changing. Digital communications, the sharing economy, longer life expectancies, the relationship with money and scarcer natural resources are revolutionizing the behavior of clients. These transformations that are taking place in most develop societies, require the bank to experiment with new relationships and imagine new services for clients.

For the BNP Paribas Group, being the bank for a changing world means that the bank needs to: understand the evolution of the world; develop and progress its own methods; act to serve its clients; and participate in the initiatives that inspire.

In this context of transformation, BNP Paribas believes it is more important than ever to re-affirm its purpose, what it stands for and what it aspires to be. The bank's vision, its mission and values aim at inspiring its own decisions and actions to lead the bank for a changing world.

BNP Paribas wants to have a positive impact on its stakeholders - customers, employees, shareholders - and on society. On customers by delivering services and solutions that better fit their necessities. To employees by offering them an inspiring and stimulating place to work. As for society, BNP Paribas wants to be among the most trustworthy players of the industry, by anchoring values and ethics in its everyday behaviors.

The bank strongly defends that supporting these values is essential for pursuing the Group's strategy of transformation and growth and in that sense publicly affirms the "BNP Paribas Way" (Figure 6) organized around its driving forces (agility; client satisfaction; compliance culture; and openness) and strengths (stability; expertise; responsibility; and good place to work).

Figure 6 - BNP Paribas' way (BNP Paribas)

2.3 Analysis of Financial Demonstrations

By the end of 2016, global revenue of BNP Paribas was EUR 43,411 million, up by 1.1% when compared to the same period of 2015, as it can be seen in Figure 7.

However, this growth was uneven throughout the different divisions of the bank. They were down by 0.5% in Domestic Markets due to the low interest rate environment, rose by 1.2% at International Financial Services and decreased by 0.3% at CIB despite a particularly challenging market environment in 2016. At constant scope and exchange rates the figures would be the following: -1.2% for Domestic Markets, +2.7% for IFS, and +1.2% for CIB.

Operating expenses, which amounted to EUR 29,378 million in 2016, were well contained (+0.4% compared to 2015). They included acquisitions' restructuring costs and transformation costs resulting from the impact of new regulations and of the reinforcement of compliance. By division level, it was +2.3% for Domestic Markets, +2.3% for International Financial Services and -1.8% for CIB. At constant scope and exchange rates, they rose by 0.5% for Domestic Markets, by 3.6% for International Financial Services and 0.1% for CIB.

The combined result of above aggregates is the positive evolution of the group's gross operating income by 2.6%, up to EUR 14,033 million. As so and given the reduction of the cost of risk, resulting from the low interest rate environment and good control of risk at loan origination, the Operating Income rose to EUR 10,771 million from EUR 9,787 million in 2015 (+10.1%). Therefore, and despite a lower level of Non-Operating Items, Pre-Tax Income amounted EUR 11,210 million that compares well (+8.0%) with EUR 10,379 million in 2015. After deducting taxes, this resulted in a Net Income of EUR 7,702 million, up by 15.1% compared to 2015.

In millions of euros	2016	2015	2016/2015
Revenues	**43,411**	**42,938**	**+1.1%**
Operating Expenses and Dep.	(29,378)	(29,254)	+0.4%
Gross Operating Income	**14,033**	**13,684**	**+2.6%**
Cost of Risk	(3,262)	(3,797)	-14.1%
Costs related to the comprehensive settlement with US authorities	0	(100)	n.s.
Operating Income	**10,771**	**9,787**	**+10.1%**
Share of Earnings of Equity-Method Entities	633	589	+7.5%
Other Non Operating Items	(194)	3	n.s.
Non Operating Items	**439**	**592**	**-25.8%**
Pre-Tax Income	**11,210**	**10,379**	**+8.0%**
Corporate Income Tax	(3,095)	(3,335)	-7.2%
Net Income Attributable to Minority Interests	(413)	(350)	+18.0%
Net Income Attributable to Equity Holders	**7,702**	**6,694**	**+15.1%**
Cost/Income	**67.7%**	**68.1%**	**-0.4 pt**

Figure 7 - BNP Paribas 2016 Consolidated Results (BNP Paribas)

The Group's good overall performance in 2016 year derives from the successful implementation of the 2014-2016 business development plan. The average annual revenue growth was 4.0% over the period and the target of 10% return on equity, calculated on the basis of a CET1 ratio of 10%, was surpassed.

2.4 2014-2016 Business Development Plan

This plan was created with five major strategic priorities: Enhance client focus and services; simplify the organization and processes; continue improving operating efficiency; successfully implement Business Development Initiatives; and adapt certain businesses to the economic and regulatory environment.

During the period, the Group made progresses on all the major strategic priorities defined in the plan. To prepare itself for the transformations in the Domestic Markets division, the Group has i) launched Hello bank! in Germany, Belgium, France and Italy, reaching 2.5 million customers, ii) continued to adapt the branch network, by offering differentiated and complementary branch formats to support the expansion of the customer relation, and iii) also extended Private Banking in all the networks, by developing relationship with entrepreneurs. As for International Financial Services division it developed digital banks in International Retail Banking. When it comes to the CIB division, it gained market share on large corporate and institutional clients supported by the implementation of a more coordinated approach by BNP Paribas Securities Services and developed transaction banking and grouped together its market businesses in Global Markets in order to leverage BNP Paribas' European and global organization.

Despite an anemic environment with very low interest rates during the period of 2014-2016, the implementation of the program allowed the Group to present an average revenue growth of 2.2% per year (although this rises to 4% after stripping out exceptional items). As for expenses, operating costs were well contained and the plan, helped to generate € 2.5 billion in recurring savings since it was launched in 2014, which represented € 500 million above the initial objective, and allowed to reduce the cost-to-income ratio to 67.7% (although less than the expected 63% due to extraordinary items, namely taxes and contributions, that dented the results).

During the period of implementation of the plan, the Group also developed its Corporate Social Responsibility policy (CSR), financing socially responsible businesses, and played an active role in energy transition by restraining loans to industries that have a bigger carbon footprint and successfully launched a green bond.

3 Banking Industry – Overview

3.1 What are banks for?

The financial system comprises financial institutions, financial markets, and clearing and settlement infrastructure systems, however this part of the work will concentrate its focus on a brief overview of financial institutions, and specifically banks (broadly defined here as deposit-taking institutions).

Banks are a service industry, and as so they do not create real goods, but instead they offer the financial means to facilitate production in other industries (Northcott, 2004). Banks satisfies financial needs of the economic agents. Theoretically, they exist to minimize a mixture of problems (namely informational asymmetries, and duration mismatches) that could prevent funds from going from savers with an excess of funds (depositors) to agents with a shortage of funds (borrowers) (Petralia *et al.*, 2019).

The most known and common services of banking currently are:

- Lending – To sell credit
- Deposits – To buy credit
- Advisory – To advise customers on their financial choices
- Investments – To manage assets of wealthy clients
- Security – To provide security of assets
- Trade/Payments – To guarantee, facilitate and act as a clearing house for international trade and payments
- Distribution and access to funds – Simple and global access to wealth based in another region

The primary source of profits for most banks is interest income earned by intermediating between borrowers (interest received) and depositors (interest paid), but banks also collect non-interest income by charging fees to their customers for a variety of financial services.

In sum, banks can be seen as the oil that lubricates the engine of our economies, as they provide liquidity to economic agents. Banks have been providing this for centuries, though, does not mean that structure of the industry will always remain the same.

3.2 Recent evolution of the banking industry

Banks exist for centuries as banking history is entangled with the history of money and as such it presents a long and rich track. Nevertheless, the following work will focus mostly on the years after the early 2000s, because it coincides with the full establishment of BNP Paribas group as a result of the merger of BNP and Paribas in the year 2000.

Since the beginning of 21st century, and after an initial period of industry consolidation, the collapse of Lehman Brothers in September of 2008 led to a credit crunch and to a global banking crisis that caused significant financial stress on banks worldwide. This raised fears that the world economy was at risk of facing another depression similar to the Big Depression in the 1930s. As a response, central banks announced unconventional monetary policies including quantitative easing, and lower interest rates on banks' deposits with the central bank in order to ease access to credit. This led to a crushing of bank's margins (Solt, 2018) and consequently to a loss of profitability in the banking industry that it is still present nowadays. In 2017, the average ROE for banks in Europe remained below 8%, which is less than their cost of capital or the ROE of US Banks (Arnold, Jenkins and Noonan, 2018).

According to estimations for the year 2017 made by McKinsey&Company, the banking system globally stored, transferred, borrowed, invested, and managed risk in an amount of more than $260 trillion in funds. The global revenue associated with this intermediation was approximately $5 trillion in 2017 (McKinsey&Company, 2018). This represented, in aggregated terms, a profit margin little more than 1,92% in 2017, that according to the same source, is less than the 2,20% that the banking system presented in 2011.

Notwithstanding this, the biggest revenue sources continue to be interest income and fees from traditional bank activities, such as everyday commerce and transactions (e.g. deposits, payments, and loans) for corporate and retail banking that represent more than 80% of total revenue. This varies by bank size, as larger banks, when compared with smaller banks, usually do less traditional banking (as a proportion of their balance sheets or income streams). Even if the loans in larger banks represent more than 50% of assets, this proportion in 2017 is still lesser than the proportion of loans relative to their total assets evidenced by the smaller banks (Petralia *et al.*, 2019).

3.3 Current state of banking industry in Europe

Given that Europe's banking industry is still highly fragmented, it is therefore not surprising that European Central Bank, as the main supervisor of banks in Europe, is favoring bank mergers, especially cross-border ones within the euro area, hoping that will improve European banks' profitability and create a sector more resilient to shocks (Arnold, Jenkins and Noonan, 2018; Reid, 2019).

As so, and despite the fact that the number of M&A in the banking industry has reduced after the sub-prime crisis, since 2008 until 2016 the number of credit institutions in the European Union and the eurozone kept declining (Figure 8), as the result of many merger operations between mid-sized domestic banks. In the EU the number of banks summed up to 6,648 in 2016, contrasting with the 8,570 banks existing in 2008 (Arnold, Jenkins and Noonan, 2018; Hassen *et al.*, 2018; Statista, 2019).

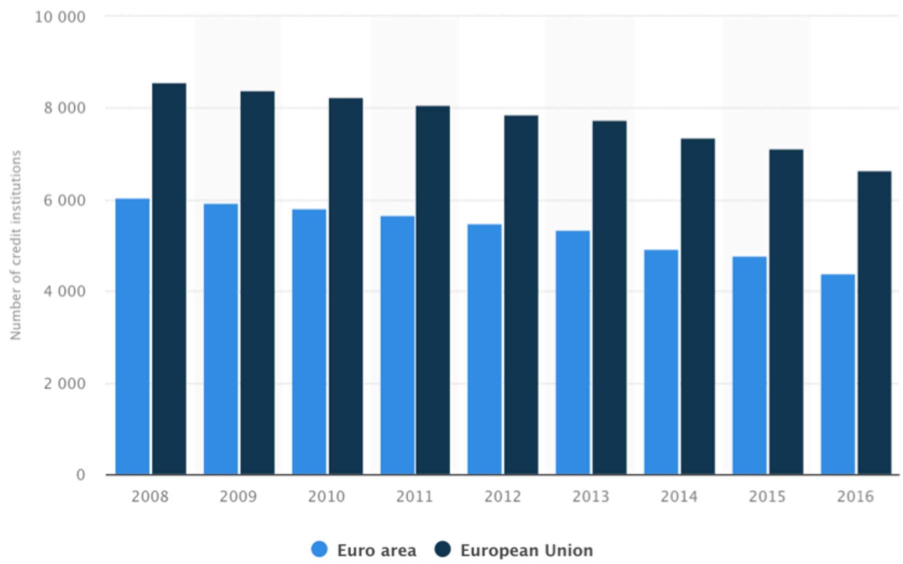


Figure 8 - Number of credit institutions in the European Union (EU) and in Eurozone countries from 2008 to 2016

Source: Statista (2019)

3.4 Challenges to the industry

Since the beginning of the 21st century, new entrants in the banking industry are starting to take a piece of the business. Taking advantage of the opportunities created by the new regulatory requirements, namely the new Payment Services Directive II (PSD2), which allows other companies than banks to offer financial services for bank customers

(Romanova *et al.*, 2018; Clot, 2019), and by General Data Protection Regulation (GDPR) (Jackson, 2018) they are increasing the pressure on the business model of banks. These new rivals supported in digital technologies come up with more efficient methods of banking services and better customer experiences. Today "*customers don't compare different banks anymore, they compare experiences*" (Backbase, 2018). These – Fintechs and Neobanks – are truly threatening the existing banks' business model and if the giants of the Silicon Valley, namely Google, Amazon, Facebook, Apple and Microsoft (GAFAM) choose to enter in banking game, the competition will be fierce or as JPMorgan's Jamie Dimon warned "*Silicon Valley is coming to eat the banks' lunch*".

Bain & Company (2018), surveyed online 151,894 people in 29 countries and find out that 54% of respondents would prefer to trust their money to a big technology company rather than to banks in general (Figure 9). However, the answers are slightly differently in the US, the EU and China. This is even more distinct in younger consumers and mostly in Asia, where more than 80% of the under 34's prefers these new-comers. Nevertheless, and although the rates of older people in more developed countries are lower than in China or India, people of every age are becoming more used with financial products from tech-companies especially through mobile. This is particularly relevant when we look at the number of persons that select to use third-party payment and peer-to-peer payments apps rather than their bank apps (The Economist, 2019).

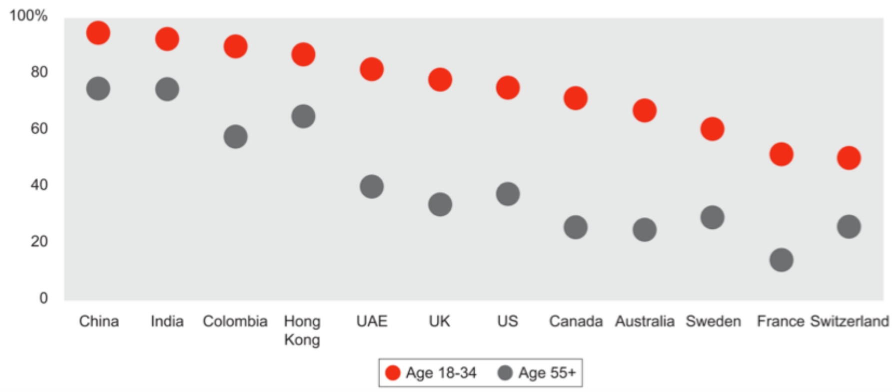


Figure 9 - Percentage of respondents open to banking with tech companies - Source: Bain & Company (2018)

Therefore, these new players have a huge structural and strategic impact for the incumbents. According to the Economist Intelligence Unit (Figure 10), the area where banks expect new entrants to gain the most market share are Payments, Savings and deposits, and Lending/ Leasing *(The Economist Intelligence Unit Limited, 2019).*

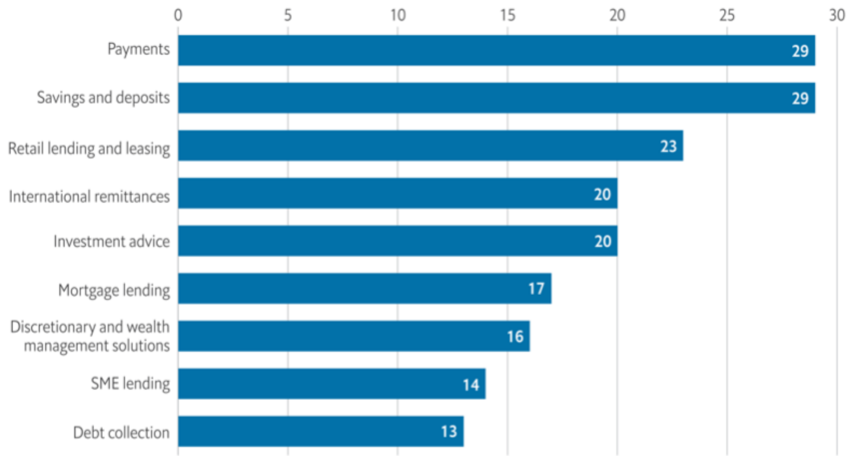


Figure 10 - What is the main area where banks expect new entrants to gain more market share

Source: The Economist Intelligence Unit Limited (2019)

These findings follow the results that BCG revealed in their study regarding the impact of digital giants (Figure 11), namely GAFAM in the banking business:

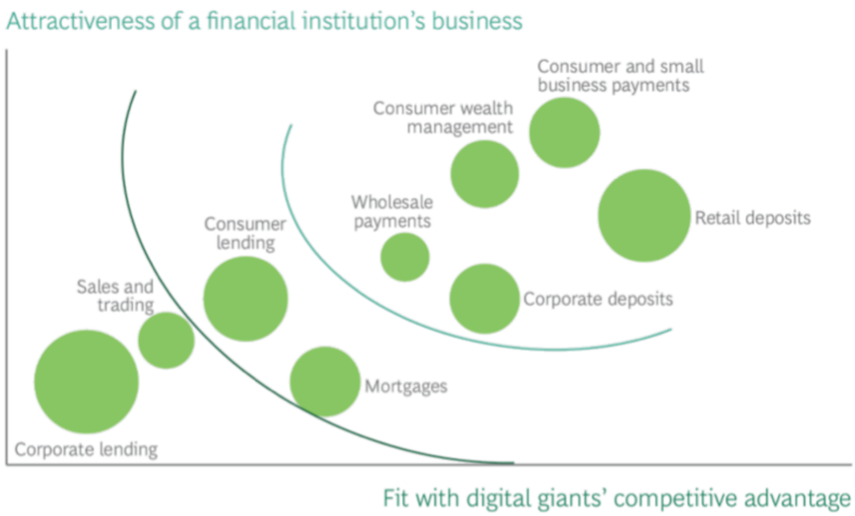


Figure 11 - Disruptive Threats to Various Banking Businesses - Source: Boston Consulting Group (2019)

The pace of change is likely to accelerate and Banks seem to be having their Kodak moment (Braithwaite, 2019) as they are facing crushed margins, increasing pressure to consolidate, an ongoing digitization, the commoditization of their services, an ever increasing connectivity, mobility and the displacement of digital and physical boundaries, a greater human-machine cooperation... in sum a more volatile, uncertain, complex and ambiguous (VUCA) world.

Nevertheless and although the global financial crisis somewhat jeopardized banks' image and led to a loss of belief in financial institutions (De Bondt, 2010; Lee, Chung and Taylor, 2011), today many costumers still trust banks (confidence is still a big asset), and massive customer runaways from banks haven't yet materialized, as currently customers use Fintechs mainly for specific needs (Boston Consulting Group, 2019; Chocron, 2019). This trust capital is the banks' last defense, but one kept wondering, for how long?

Innovation hasn't been the major concern of banks until recently, as they more worried with repairing their balance-sheets and cost-cutting after the 2008 crisis. Traditional banks have until recently not developed the ability to enable them to look holistically at the data they hold on customers and present related value propositions, for example to support customers in budgeting or handling their financial wellbeing and wealth at different stages in their lives.

It's easy to disregard the disruption movement that it is materializing at a distance, but it will very hard to get into it once it is close. Banks that are not preparing now will suffer hard later on. Faced with competition from agile FinTech and other technology firms, banks can't delay the IT investment, mainly in the upgrading of its core legacy banking platforms.

3.5 Benchmark of the competition

Some are becoming aware that they are falling behind and are already realizing all these digital issues both as challenge and also as an opportunity that will support new revenues streams. While some are looking at spreadsheets with the market values of competitors to check the size of potential merger candidates, others have launched expensive transformation plans, with the aim to transform and come up with new business models, more focused on the customer journey and on a more personalized and integrated approach so as to meet customers' demands, remain competitive, challenge new entrants and to seize opportunities from the new regulations. Per example, Société Générale, within the framework of its transformation plan "Transform to Grow", has spent nearly 5 billion euros in 2018 on the renewal of its IT system and into the support of FinTechs. BBVA on its turn, has adopted an open banking strategy and it is monetizing it by marketing APIs through its BBVA API Market. In the USA, JP Morgans allows the possibility to open a bank account in 5 minutes.

Nevertheless, despite all the evolution that the banking industry is experimenting, a question arouses: Will investing in new technologies and processes alone will do the job? What other factors should come to play?

3.6 Key Success Factors for Digital Transformation in the Banking Industry

So far, the key success factors for competitive success of the banking industry were bank operation management ability, developing bank trademarks ability, bank marketing ability, and financial market management ability (Chen, 1999). Currently changes in driving forces and competitive conditions, are pushing financial institutions to embrace digital transformation and to build analytics capabilities to understand and serve customers more effectively.

The previous key success factors do not seem sufficient anymore for the players of banking industry that pretend to exploit digital technologies to become more efficient, to increase business into new markets, and to offer new products for a global consumer base comprised by an increasing number of digital natives (Prensky, 2001). Hence, banks that want to ensure future competitive success must design their business models also taking in consideration the following:

- **Client-centric**: the focus must be on customer needs. Clients want a faultless experience across every channel; highly personalized products and services; strong security; business transparency and ethics; and, importantly, reasonable pricing;
- **Fully Integrated Technology**: A critical part of digital transformation is the upgrading of legacy systems to keep pace with digital. Despite the fact that digital technologies can improve efficiency within firms, they still depend on data and information flows that reside across legacy systems. It is therefore necessary to upgrade and promote the full integration of IT systems;
- **Faster Product Innovation**: banks must conceive an innovation delivery pipeline based on agile practices – benchmark of market trends, co-creation of products, testing of innovative products, and then fast feedback to iterate products for continuous improvement. Such an agile innovation pipeline will help banks to decrease customer churn;

- **Requalification of the Workforce**: As automation replaces routine tasks, 56% of the financial services industry workforce will require new skills, and 29% will be employed in new roles by 2022 (World Economic Forum, 2018). Therefore, it is necessary to upskills the workforces so they can "buy" the change to digital, better cooperate with younger generations that are "digital natives" and take the most value of technology.

4 Crossroads, to merge or not to merge?

It is an October rainy morning in Paris and the taxi where you and your team of consulting have taken is stalling in traffic due to some congestion works. While admiring the view to the Seine river, you are wondering on what to expect from the meeting[1] with Jean-Laurent Bonnafé, the chief executive officer of BNP Paribas and his team. You know the bank is facing economic challenges as markets analysts recently issued profit warnings on BNP Paribas, because and although in 2016 the net income of the Group grew by 15% growth on a YoY basis up to € 7,702 millions (from € 6,694 millions in 2015, it failed to reach the estimated net profit target of the analysts (Cavaleiro, 2017). This is partly due to the fact that European Union's economic recovery might be vacillating which may prompt the European Central Bank to keep interest rates low. This is not exactly good news for players in an intense competition industry, as it will keep bank's margins under pressure. Also, there is the market's expectation of more stringent regulations on the banking industry that may have a large impact on its earnings.

After arriving to the bank's headquarters, you are headed to the cabinet of Mr. Bonnafé were you are presented with a table with baskets of freshly baked croissants, orange juice and coffee served on silver pots. Mr. Bonnafé greets you and your team and kindly asks you all to sit down on a long wooden table with glass finishes. After reclining a little in the chair, he comes closer to the table, crosses his hands over the top and starts explaining the strategic crossroad the Bank is facing.

4.1.1 Should BNP Paribas merge with Commerzbank?

On one side, there is the possibility to acquire Commerzbank, Germany's second largest bank in Germany by the total value of its balance sheet (CNBC, 2019), to leverage BNP

[1] This meeting was fictional and totally romanticized for case purposes

Paribas. Being the French bank the biggest by market capitalization, this would allow to create the largest Bank in Europe. Mr. Bonnafé with a calm and experienced voice, mentions that this is a risky operation, that requires the computation of the right price, hard negotiations with regulators in France and Germany and other potential suitors.

The rationale for the operation would be to allow BNP Paribas to gain more market share and gain more corporate customers, especially in Germany where BNP Paribas is still a 2nd tier bank in Corporate Banking (Robinson and Valentini, 2018). This could represent a huge opportunity to gain market share and to further cross-selling and increase up-selling to existing customers, without having to compromise profitability.

This potential merger, that can redraw the financial map of Europe, it is something not new to Mr. Bonnafé, as he has been the head of the assimilation of BNL in 2006 and three years later of Fortis in Belgium and Luxembourg.

Nonetheless, the picture is not all rosy. This operation as some drawbacks, as it will require the fusion of two different working cultures and IT systems. Moreover, such consolidation with a competitor that is facing difficulties, might jeopardize BNP Paribas current situation and future prospects, as the CEO of BNP Paribas adverts: "*It sounds very easy in theory. But in practice, it is very difficult to merge banks. Integration swallows up time and money that are then lacking elsewhere, especially in a new cycle with a huge digital transformation*".

4.1.2 Or should BNP Paribas continue its previous transformation effort?

On the other side, Mr. Bonnafé unveiled that he is very keen on continuing the restructuration of Bank. He picked up a glass of water and after drinking part of it, he explained that the restructuration has begun with the previous development plan that ended in 2016, the 2014-2016 Business Development Plan, designed to potentiate growth with various revenue and cost-cutting targets. It is intention of the Executive Committee to launch a new transformation plan that continues the development of an integrated and diversified business model of the bank. This new transformation plan must be designed to take into account the growing regulatory constraints, shifting in consumer demands and also the mounting importance of new digital technologies, in order to build the bank of the future, where new customer experience, digital transformation and savings will become the novel battlefield. The bank wants to keep developing business as usual, while innovate. That requires ambidextrous qualities, it's hard but feasible

Mr. Bonnafé continued to explain that the bank wants to focus more on digitization and innovation, but funding might be more difficult as cost to income is somehow high and it the BNP Paribas' intention not wish to worsen it. On the contrary, the goal is to conquer efficiency gains.

One item that was worrying the BNP Paribas' CEO is how should the group conduct innovation throughout the different divisions? In a centralized manner or the other way around? As a French bank, where power is somewhat centralized in companies and government, but also geographically, it is difficult not to centralize decisions, but might not work well in other geographies, says Mr. Bonnafé. He wonders if perhaps it should be wiser to let each business unit drive its own innovation and then scale up the best practices.

Another concern raised, was regarding employees, as all this might sound confusing and perhaps raise doubts and fears. Mr. Bonnafé alerted to fact it is needed for them to engaged in the transformation plan, namely in what is related to innovation and to acquire new skills. The BNP Paribas is known as "good place to work". Although, this allows the bank to recruit new talent, the Executive Committee is not willing to lay off thousands of workers that aren't digital masters. It might be necessary to invest strongly on change management. More than new skills, digital transformation is a consequence of a cultural and individual transformation. The sooner there is this awareness on employees, the more chances of reaching competitive differentials to better understand the customer and excel in an increasingly dynamic and creative economy.

The challenges that BNP Paribas is striving to meet make serious demands of each and every one in the organization. However, with a collective effort, the bank will be most able to withstand the difficult environment around the world.

4.1.3 2017-2020 Business Development Plan

Following the success of the 2014-216 Business Development Plan, evidenced by the good performance of the Group in the end of 2016 and leveraging on a broad range of digital initiatives already and to be launched by all business lines, BNP Paribas unveiled in February 2017 a new program for the improvement of its business, the 2017-2020 Business Development Plan.

In a changing world, with new technologies, new customer needs and expectations, this new plan aims to be an ambitious program of: *i*) New Customer Experience; *ii*) Digital

Transformation; and *iii*) Savings. According to chief operating officer Philippe Bordenave, this new plan puts technology at its core. Also, and similarly to the previous plan, it involves cutting costs, but on the capital front the focus is on transformation (Baker, 2017)

The 2017-2020 plan has a budget that is estimated to cost € 3.0 billion in transformation initiatives between 2017 and 2019 but is expectable that it will be self-financed by roughly € 3.4 billion in savings during the same period and will allow to generate around € 2.7 billion in recurrent annual savings starting from 2020. It is targeted an average revenue growth of 2.5% (more than the achieved 2,2% of the previous 3 years), while net income is targeted to grow by at least 6.5% per year. As for Cost to income ratio the goal is to improve the ratio from the reported 67.7% in 2016 to 63% in 2020.

To "*build the bank of the future*", this new transformation plan works in 5 main priorities (Figure 12) to offer a new customer experience and attain a more effective and digital bank, namely: *i*) Implement new customer journeys; *ii*) Upgrade the operational model; *iii*) Adapt information systems; *iv*) Make better use of data to serve clients; and *v*) Work differently.

1	Implement new customer journeys	▪ New digitalised, expanded, seamless and personalised customer journeys (more services, more attractiveness, choice of channel, etc.) ▪ Upgraded service models (better customer segmentation based on user habits, "the right product at the right time and through the right channel," etc.) ▪ Digitalisation of distribution by developing digital customer interfaces ▪ New services made available
2	Upgrade the operational model	▪ Streamlining and automatisation of end-to-end processes ▪ Simplification of the organisations ▪ Shared platforms and smart sourcing
3	Adapt information systems	▪ Evolution of information systems and incorporation of new technologies in order to accelerate digital ▪ Improvement of IT efficiency and agile practices ▪ Promotion of innovation
4	Make better use of data to serve clients	▪ Better reliability of data and enhancement of data use for the benefit of customers ▪ Reinforcement of data storage, protection and analysis capacities ▪ Use of cutting-edge technologies (artificial intelligence, machine learning, etc.)
5	Work differently	▪ More digital, collaborative and agile work practices ▪ Day-to-day digital environment & digital and innovation driven culture ▪ Staff training

Figure 12 - 5 Top priorities for 2017-2020 business development plan

Source: (BNP Paribas, 2017)

The transformation strategy will be differentiated by division (Figure 13) so it can better leverage the strength of the integrated and diversified business model.

Figure 13 - Examples of Programs to be implemented by division

Source: (BNP Paribas, 2017)

Domestic Markets division will reinforce the development of new customer experiences in order to adjust to new customers' habits, to take advantage from a risk environment that continues to be favorable in order to consolidate the leading positions of its businesses, to adapt the branch networks, and to transform the operating model and accelerating digitalization to improve its operating efficiency.

As for International Financial Services, it will strengthen the sales and marketing by accelerating the development of the attractiveness of the existing services while proposing new offers and continuing to expand Retail Banking outside of the euro zone. This division will also continue to improve its operating efficiency and to adapt to future regulations (MIFiD2, etc.), by accelerating digital transformation, streamlining processes and developing cooperation with other business units in the Group.

Regarding CIB it will leverage the good results of its plan in 2016 to attain resource optimization, cost reduction and revenue growth, by extending to 2020 all the actions under way and accelerate the operating and digital transformation. This division is looking forward to expand its client base in Europe, namely in the countries of Northern

Europe (Germany, Netherlands, etc.), and will continue to develop cross-selling with other businesses in the Group.

The global target is thus to achieve more than 6.5% average annual growth of net income and 2.5% CAGR revenue growth until 2020, the accomplishment of a Solvency Ratio (CET1 – Common Equity Tier 1 ratio) of 12%, a cost to income ratio of 63% and a 10% ROE in 2020.

4.1.4 Future challenges

After two years implementation of the 2017-2020 transformation plan, Mr. Bonnafé and the Executive Committee are somewhat satisfied with their decision to let go the merger with Commerzbank and moved forward with a new business development plan.

The digital transformation program is ongoing well with the roll out of new customer experiences and the automation of processes that allowed an improvement in operating efficiency (1,150 million euros in savings since the launch of the program in early 2017) is in line with the objective.

Domestic Markets division's branch network adaptation continues, creating omni-channel customer service centers and delivering end-to-end digitalized processes. Regarding Hello bank! it reached 3 million customers and exceeded the number of 400,000 customers in France thanks to the level of net client acquisition. As for Nickel it exceeded 1.1 million new accounts, or a 44% increase compared to 31 December 2017.

The International Financial Services' Department implemented the e-signature at Personal Finance which allowed that almost 50% of contracts were signed electronically and 35 processes that use e-signatures in the international retail networks. IFS also digitalized client journeys at Personal Finance with a digital application process for consumer loans already deployed in 7 countries.

Due to the low interest rates environment, CIB was forced to intensify its transformation plan. The business of CIB continued its digital transformation with good development on multi dealer platforms and also the development of an online platform for corporates, that has already 10,000 clients as at 31 December 2018 (+1,500 compared to the end of 2017).

Notwithstanding the apparent success, the fact that the project is only halfway means that there is much work yet to be done. BNP Paribas in partnership with the Fintechs startups in its digital ecosystem have considerably work ahead in order to continue to implement new customer experiences, accelerate digitalization, improve operating efficiency and become a reference in such a competitive market.

The overall purpose is to develop new client journeys and digital transformation to conduct automatically the most basic services and keep developing automation to services with higher added value. The lower, more commoditized services, with lower operational costs, will allow greater volume processing and in theory allows for opportunities to conquer market share.

On the other hand, the risk for the bank of increasing automation of its services is that the relationship bank-client becomes less frequent, and even further apart, a trend that is already impacting the banking industry. Nevertheless, and for example, personal clients still prefer talking in person about products that are more complex or that will likely have a lasting impact in their financial life, like designing investment strategies, buying a house, or setting up the future or their wealth.

Would it be possible that in the future the digital market become so important in terms of market share that the traditional banking of BNP Paribas might be affected? Similarly, to the Fintechs market behavior, when these startups suddenly started to gain market share to the traditional banks, what if BNP Paribas starts losing customers for its digital banks? Would Hello Bank! and Compte Nickel become a problem for BNP Paribas retail bank? Will BNP Paribas new businesses cannibalize the existing ones?

Another challenge is how to continue to be a bank that simultaneously exploits incremental innovation, with small improvements in its products and services so it can operate more efficiently and achieves the desired financial targets and, simultaneously tries to be a step ahead of competition by exploring the future with disruptive innovation?

5 Bibliography

Arnold, M., Jenkins, P. and Noonan, L. (2018) Banking M&A: the quest to create a European champion, Financial Times.

Backbase (2018) Backbase Whitepaper / Four pillars of the digital-first bank / June 2018.

Bain & Company (2018) in Search of Customers Who Love Their Bank.

Baker, M. (2017) BNPP puts digital heart in its three- year plan, Euromoney.

BNP Paribas (2017) 2020 Business Development Plan.

BNP Paribas (2019) 2019: 16 anniversary dates from the BNP Paribas history that are worth noting.

De Bondt, W. (2010) 'The crisis of 2008 and financial reform', Qualitative Research in Financial Markets, 2(3), pp. 137–156. doi: 10.1108/17554171011091728.

Boston Consulting Group (2019) Banks Brace for a New Wave of Digital Disruption.

Braithwaite, T. O. M. (2019) Silicon Valley is eating the banks' lunch, Financial Times.

Cavaleiro, D. (2017) BNP apresenta lucros abaixo do esperado e avança com plano de transformação, Jornal de Negócios.

Chen, T. (1999) 'Critical success factors for various strategies in the banking industry', International Journal of Bank Marketing. MCB UP Ltd, 17(2), pp. 83–92.

Chocron, V. (2019) 'Les banques ont raison de se faire du mouron', Le Monde, 28 March.

Clot, A. (2019) 'L'économie numérique à l'assaut de la finance', Réalités Industrielles.

CNBC (2019) Commerzbank fourth-quarter net profit jumps 51 percent, tops expectations.

Hassen, T. et al. (2018) 'Dynamic Effects of Mergers and Acquisitions on the Performance of Commercial European Banks'. Journal of the Knowledge Economy, 9(3).

Jackson, O. (2018) 'GDPR implementation is harder than expected', International Financial Law Review, pp. 1–4.

Lee, T. D., Chung, W. and Taylor, R. E. (2011) 'A strategic response to the financial crisis: an empirical analysis of financial services advertising before and during the financial crisis', Journal of Services Marketing, 25(3).

McKinsey&Company (2018) Banks in the changing world of financial intermediation, McKinsey Global Banking Annual Review 2018.

Northcott, C. A. (2004) ‘Competition in Banking: A Review of the Literature’, Bank of Canada, p. 24.

Petralia, K. et al. (2019) Banking Disrupted ? Financial Intermediation in an Era of Transformational Technology. Geneva.

Prensky, M. (2001) ‘Digital Natives, Digital Immigrants’, On the Horizon, 9(5), pp. 1–6.

Reid, D. (2019) Europe ’ s bank bosses all want the same thing — fewer banks, cnbc.com.

Robinson, E. and Valentini, F. B. (2018) French Banking Giant Is Looking Like ‘the JPMorgan of Europe’, Bloomberg.

Romanova, I. et al. (2018) ‘The payment services Directive II and competitiveness: The perspective of European fintech companies’, European Research Studies Journal, 21(2), pp. 3–22.

Solt, E. (2018) ‘Managing International Financial Crises: Responses, Lessons and Prevention’, in Crisis Management - Theory and Practice. InTech.

Statista (2019) Number of credit institutions in the European Union (EU) and in Eurozone countries from 2008 to 2016.

The Economist (2019) Young people and their phones are shaking up banking, Special Report: Banking.

The Economist Intelligence Unit Limited (2019) A whole new world: How technology is driving the evolution of intelligent banking. Available at: https://www.temenos.com/wp-content/uploads/2019/07/EIU-2019-report-2019-Jul-22.pdf.