

Fintech perception of cooperation or competition with banking

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ABSTRACT

Over the past few years, significant industries have modified their operation mode in the markets due to the substantial emergence of information technologies. The changes occur in the interaction with customers, production processes, or implementing strategies. The banking sector is not an exception, and this study focuses on the digital transformations of banks. This paper aims to understand how financial organizations in Portugal are changing to remain competitive while implementing information technologies. The purpose is to study a fintech, that emerged due to the digital transformation of the bank sector, and to understand its relationship with traditional banks, whether it is of cooperation or competition. This case study follows a qualitative methodology based on a semi-structured interview with the CEO of the fintech company nBanks. The fintech companies and banks can collaborate and work together to develop the financial market in Portugal. The relationship between them can be of cooperation instead of competitiveness.

Keywords: Banks; Fintech, Innovation, Information Technologies, Digital Transformation

INTRODUCTION

The digitalization of the banking sector has proven to be a valuable resource for efficiency and cost reduction, as it changed rigid and old working methods for new automated and dynamic processes. This led to greater productivity in the sector and to the emergence of fintech solutions. Fintech are financial companies, strongly focused on technology that can result in new business models, applications, processes, or products with significant impacts on markets and financial organizations, such as the banking sector (Wang et al., 2020).

This study aims to understand the digital evolution of the banking sector with the emergence of these digital solutions. Since the adoption of digital technologies by banks is emerging at the same time as fintech companies, this paper will assess the relationship between them (cooperative or competitive).

To this end, an interview was conducted with the CEO of nBanks, one of the main fintech companies operating in Portugal. This study contributes to the evolution of the banking sector towards cooperation with other digital solutions.

The work is structured into five sections. After the introduction, a review of the literature on the emergence of fintech, its field of operation, and its relationship with banks is presented. The third section presents the methodology and research questions. The fourth section presents the case study and ends with the conclusions, limitations of the study, and suggestions for future research.

LITERATURE REVIEW

The emergence of fintech

Fintech is a term that results from the combination of two concepts, finance, and technology, and is also considered a financial industry that applies technology to improve its activities and performance. This recent concept aims to cover companies that create innovative technologies with a view to being applied in the financial field. This application may impact the sector, its customers, intermediaries, and users (Silva, 2019).

There are five main environments associated with fintech (1) startups in the financial sector such as insurtech that regulates insurance activities and regtech that controls fintech activity; (2) technology creators such as information technology analysts, cloud computing, virtual currencies, and blockchain; (3) the government, with its regulatory and legislative function; (4) financial customers (individuals or organizations) and (5) traditional financial institutions such as banks, insurance companies, brokers and investment companies (Lee et al., 2018).

The concept of fintech has changed over the decades. According to Thakor (2019), fintech became commonplace in recent years despite being present in the financial markets and banking sector for many years. The author highlights three phases. Between 1866 and 1967, these companies were important in the diffusion of financial information and the evolution of different payments. In a second phase, between 1968 and 2008, the evolution of these companies assumed greater preponderance in the digitalization of banking, especially in the creation of e-banking and, consequently, in electronic payments. The last phase is from 2009 to the present. In this period, fintech proved to be much more important than in previous phases and often became a competitive advantage for those involved in the banking sector. Nowadays, technologies are no longer an intermediary for financial organizations and are now used directly in customer service.

In a study conducted by Zalan et al (2017), in North Africa and the Middle East, with the aim to study, through interviews with different employees in the banking sector, whether fintech companies represented a threat to traditional banking, the responses were disparate, mainly divided into two groups. One of the groups argued that these emerging companies, which link the banking sector with technology, do not represent any sustained risk or threat to banks. The other group, with a much smaller size, states that there are already financial technology companies that are conquering market segments that belong to traditional banking. As a complement to the study, the authors highlight that the stakeholders belonging to the first group lived in areas where financial technology was emerging very prematurely on the market. Finally, they also point out that some of the employees responded that services provided at retail in traditional banking could be the most affected by the expected impact. These services include payment solutions, consumer credit, savings, and current accounts.

The emergence of fintech companies could lead to a disaggregation of the value chain present in the banking sector in recent years. The ease of communication and execution of transactions resulting from technology means that business partners, customers, and suppliers establish relationships without a direct physical point of contact. Interface platforms that bring together different product offers are an example of this transformation, as they are reducing the activity in the banking sector, such as physical branches. Online platforms are one of the main contributions to this destruction of the value chain, as the aggregation of services on these same platforms can make them a new market, where their participants interact directly. In this way, physical branches as we currently know will only provide support and back office for this market (Navaretti, 2017).

According to Pinto (2020), it is important to understand how these fintech companies have grown and what are their main sources of financing, as they differ significantly from older financial organizations. In the case of traditional banks, their main creditors are families who deposit their savings and companies that have excess liquidity. On the other hand, if these companies do not have financial resources, banks provide a finance possibility and obtain income from the interest charged. Within this activity, banks use short-term deposits to finance the medium-term and reduce the risk inherent to individual loans.

In the case of fintech companies, according to Bucks et al., (2018) most of these financial organizations are financed by insurance that participants in the financial market buy, mainly from stock exchange investors. Public companies and those financed by governments are also one of the main sources of financing for fintech. In 2015, more than half of these companies were later sold to companies with government connections. Financial companies strongly focused on technology continued to grow in recent years, mainly due to guarantees from their governments through insurance. In opposition to what is often associated with fintech, public subsidies and deposits made by governments are not one of their financial dependencies. On the other hand, the author states that private investment will always be the biggest catalyst for the growth of these companies.

Operational field of fintech

The scope of a fintech is difficult to define due to the different definitions. Buchak et al (2018) highlight that fintech includes technological products provided by banks, such as online loans. However, most of the authors distinguish the activity of these companies from the normal activity of the banking sector. This heterogeneity of concepts makes it difficult to determine the scope of fintech. However, using the growth venture capital investment indicator in fintech companies, we can say that the dimension of these companies has grown exponentially in the last five years. According to the International Organization of Securities Commissions, investments accumulated from 2016 onwards exceeded 100 billion dollars distributed among 8800 companies. In the first half of 2018, these companies raised venture capital investment of around 41.7 billion dollars, an amount that exceeded the amount for the entire year 2017.

The volume of operations carried out by fintech companies is still quite small when compared to large banking institutions. Nevertheless, its influence and growth in the financial markets is notable. On a global scale, it is estimated that in 2018 there were more than 15,000 fintech companies operating. This number may have increased by 50% by 2020. The USA and the European Union, together with the United Kingdom, lead the implementation of these companies in their respective financial markets (Molina, 2018).

According to Brandão (2020), the emergence of fintech cannot be dissociated from the customers' loss of trust in large banking institutions (because of factors such as the LIBOR scandal or the 2008 financial crisis) and a lower predisposition to dealing with procedures considered time-consuming and bureaucratic. Associated with this loss of notoriety of traditional banking, there is the need for consumers, especially younger age groups, to obtain a faster, more accessible, and reliable financial service. Therefore, fintech companies present themselves in the markets to improve financial inclusion by providing simpler, more efficient, and cheaper financial services, taking advantage of the digital revolution. Although it is common to exclude traditional banks from digitalization, it is undeniable that large banking institutions have also invested heavily in updating their technology. The purchase of startups created and developed by fintech or the development of specific departments within banks to design market innovations in the digital field are examples of technological progress made in the banking sector.

It is important to clarify how fintech companies have been implemented in the financial markets in recent years, this way will we be able to understand their impact in the medium and long term (Thakor, 2019). Ernest & Young (2016) indicated some features associated with the services provided by fintech that may reflect the growth of current areas in the markets such as the development and customization of services adjusted to customers; growth of business models achieved without resorting to capital increases in large amounts; clear value proposition and simplicity in perceiving differentiating factors.

The operational fields of fintech are payments, loans, financial management and investments, insurance, cryptocurrencies and blockchain, and robotics as detailed in **Figure 1**.

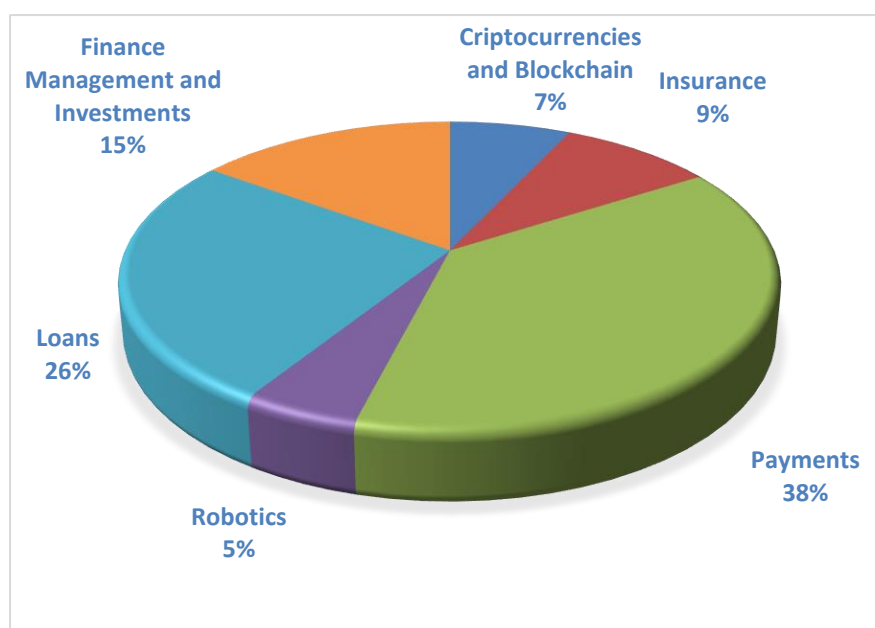


Figure 1. Operation field of fintech
Source: Adapted from Demarco (2021)

Describing each operational fields of fintech, according to Thakor (2019), Peer-to-Peer (P2P) lending are lending of money to individuals and companies mostly through the internet (increasing accessibility and impacting the financial market (Luo et al., 2018)) or platforms for collecting funds and investors. Loans are applied to companies through techniques such as crowdfunding and to individuals to obtain advantageous returns. These services combine individuals who want to lend money and obtain profits and individuals who want to acquire this resource. This entire process is independent of intermediary banks and is one of the main services required by fintech companies. It is expected that the money transacted in this type of loan, between 2016 and 2024, will grow by more than 250 billion dollars. Although most of these transactions take place in the USA, the use of these loans in Europe is becoming noticeable. Fernandes (2019) states that this financing, along with payments, are services introduced by fintech with a greater volume of associated business. The genesis of this rapid growth may be due to the flaws in traditional financing and restrictions on SME financing due to greater stringency in banking regulation.

New services of payment are also one of the changes that fintech seeks to implement in the market. Fernandes (2019) states that 50% of fintech in Portugal focuses their business model, above all, on payments. For the author, the main advantage of payment services is working in a digital environment, that is, it is not necessary for the user to travel to the physical establishment to contract financial services. These services become even more appealing to customers, as they are different from those offered by traditional banks, safer, less bureaucratic, and, normally, less expensive.

Thakor (2019) highlights that the emergence of cryptocurrencies also called virtual currencies is the biggest potential disruption of fintech in the financial markets. Virtual currency emerged in 2009 with Bitcoin and is defined as a digital code stored in an electronic wallet in cyberspace. These currencies depend on a form of proprietary and secure control, such as a cryptography database that replaces the banks.

The emergence of fintech also means changes in the way businesses are managed. The use of robots associated with financial markets has grown significantly in the last year. It is speculated that when these procedures take root in the economy and prove to be 100% reliable, fintech (one of the main catalysts of this robotization) will assume a greater role in the markets. Several investors highlight the benefits of using robots, for example in the stock market, as they can help obtain better returns by reducing expected volatility.

Finally, insurance can also be considered one of the main activities of fintech, especially after the creation of insurtech (a branch of fintech dedicated to the insurance sector). One of the great advantages of insurtech is that through smartphones, computers and sensors, intermediaries can find precisely the insurance that best suits the client's needs. In this way, the insurance policy can be adjusted, almost in real-time due to the perception of low-risk behavior by insurtechs, which is communicated directly to the insurer.

Relationship between fintech and banks

Wang (2020) analyzed several studies on the effects of the emergence of fintech on the performance of banking institutions and concluded that the information collected is still reduced and divergent. According to the author, the fintechs interact with banks with the purpose of modifying and redesigning the business models on which they depend. It was found a positive correlation between the growth of fintech transactions and the expected return on bank shares.

For Andrighetti (2021), the main purpose of these new technology-oriented financial companies is to attract new customers who have accounts in traditional banking. In addition to these customers, fintech intends to invest resources in attracting customers who are not loyal to traditional banks, as they are more dissatisfied with most banks' services and thus less averse to digital transformation. Unlike traditional banks, the entrance rate of fintech on the market is, notably, higher than the rest. The age segment between 26 and 47 years old represents more than 70% of these fintech customers. On the other hand, in this age group has been a greater reduction in the use of traditional banking services.

Ferraro (2018) states that fintech differs from its competition since they have lower organizational complexity and human capital that is considerably young, highly qualified, and focused on creating value for the customer. The author also highlights that governments and banks are the organizations that most invested in technology, in recent years, aiming to meet the different needs of customers in the financial sector. However, the results, besides being time-consuming are not personalized to consumers. Based on the demands of these customers and the limited offer of many technological services, these companies seek to fill the gaps and attract customers through this mechanism.

Despite acting as competitors in most financial markets, in some cases, cooperation between banking institutions and fintech can be beneficial for both. According to Bengtsson et al (2014), the main reasons for strategic alliances between banking organizations and fintech are the ease of access to resources, new markets or market segments, and the sharing of knowledge. For the author, the creation and development of new innovative technologies can benefit the position and competitive advantage of banks and fintech.

For Ritala (2012), the main purpose of financial organizations is to reduce strategic risk and invest in innovation (achieved through the rapid launch of new products and different approaches to the market), which can also be considered a motivation for these intuitions to join forces and focus on a common goal.

Regarding the strategic alliances between banking entities and fintech, Holotiuk et al., (2018) argue that from the banks' point of view, a strong investment in digitalization, specifically in digital innovation, can be the main motivation for direct collaboration with these companies. The author explains that fintech, namely those with a strong sense of internationalization, present constant innovations in information technology, which can be a differentiating factor in the relationship between the banking sector and its digital customers. From another perspective, in the case of financial entities focused on technology, Holotiuk et al (2018) highlight the aim of achieving scale economies as the main reason for strong partnerships with banks. Finally, the most prominent motivation to establish alliances is their customers. Any institution's main objective is to respond to the growing needs of its consumers and create value for them.

For Cygler et al (2018), one of the main motivations for strategic alliances is to fight against another stronger player in the same market, but common to the institutions that intend to cooperate. In this case, the common competitor is BigTech, companies that threaten the sustainability of several sectors in the medium term, specifically the GAFA group (Google, Apple, Facebook, Amazon). This is a strong argument for alliances, between banks and fintech, defending themselves from the threat arising from these large companies, which have revolutionized several sectors due to their proximity to consumers through the e-commerce they promote.

Alliances can increasingly be a competitive advantage in the strategic positioning of banks and fintech among their customers and market competitors (Bussmann, 2017). On the one hand, fintech benefits from the organizational structure of the banks, and banks can deepen their digital and technological knowledge.

Although the main motivation of fintech, in its initial phase, was to become a valid and differentiated alternative to traditional banking, currently, both entities collaborate and cooperate with common objectives (Molina, 2018). The business model presented by the fintech, studied by Molina (2018), reveals the level of collaboration that can be negotiated with banking entities. Therefore, if the business model is aimed at companies, that is, B2B (Business To Business), fintech seeks greater cooperation with banking institutions. However, if the offer is B2C (Business To Consumer), aimed at private customers, these companies fit into the market as an alternative to banking institutions, since they focus on innovating the final product.

Acar et al (2019) believe that fintech and banks should strengthen their cooperation due to the innovations that the new player can add to the financial sector. However, they found that the growth of fintech negatively affects the profitability of banks.

METHOD

This paper is based on a qualitative analysis and aims to study the relationship between banks and fintech companies. The study is based on a semi-structured interview with the CEO of nBanks. The interview was carried out asynchronously, in 2022, and lasted approximately 1 hour and 30 minutes. The interview was supported by the script of 5 questions that allowed the interview to follow the path initially outlined. Despite the relevant questions addressed in the script, it was given to the interviewee the freedom to address other relevant topics. Thus, the interviewee was able to express their opinions using their own methods and words. This way, it was possible to transform the opinion of an expert into relevant content for the study.

The interview allowed us to obtain knowledge and experience from someone who has known the reality of the financial sector for several years, namely the banking and fintech sectors.

One of the reasons for selecting nBanks is related to the experience of the CEOs. The interviewee followed the daily life of the banking sector for more than two decades, before investing in the creation of fintech. This experience will help us to understand the main common points, the main divergences, and whether there are connections that can be explored in the future.

nBanks is an innovative company that facilitates communication in the financial areas of companies, streamlining the processing of all banking transactions and creating easily shared digital files. nBanks was created in 2017 and was founded by Orlando Costa, current CEO, by Ricardo Vieira and Nuno Oliveira, who also hold leadership roles in the organization. The company has more than a dozen employees and most of the services provided are subcontracted to software development or marketing companies. Although much of the support is carried out remotely, the company aims to be closer to its customers and has two physical establishments, in Porto and Lisbon.

Below we present the questions chosen for the interview and their grounding:

Q1: In what context did nBanks emerge?

This question will help to understand the motivations that led to the creation of nBanks and the conjecture of the financial sector that allowed its implementation in the market.

Q2: How did the emergence of Openbanking contribute to the creation of nBanks?

With this question, we will learn the reasons for the growth of fintech and consequently of nBanks. Openbanking will be the most analyzed phenomenon given its global scope.

Q3: What are nBanks' main services?

By analyzing this issue, we will understand in detail the services provided by nBanks and in general in most fintech. This way it will be defined in detail these companies and explain the conflict that may exist with the banking sector.

Q4: What is the business model?

The added value of this topic for the study is to understand the strategies adopted and the businesses carried out by the company and relate them to the activity of the banking sector.

Q5: How can nBanks differentiate itself from the competition?

By explaining this question, it will be possible to understand how nBanks relates to its direct competitors. If the differentiation is not very pronounced, it will be simpler to predict, through the interview, the impact of fintech on the banking sector.

CASE STUDY

The main purpose of the study is to understand whether there is a relationship between a fintech, in this case, nBanks, (which sells substitute and complementary services to digital banking) and the banking sector.

However, more than explaining the relationship between these two players in the financial market, the study will try to understand whether both will be able to "cohabit" within the same market segment, becoming partners, and if it will be beneficial for both and especially for their customers.

The mission of the company is to promote a new reality of financial management for all businesses, with impartial and centralized information. nBanks aims to simplify accounting processes and not neglect environmental and social responsibility through available technology. Its founders want to reinforce the impartiality and transparency of the financial sector, aggregating information, and leading managers to save resources and time. This has been the main driver of the positive results of the company.

The company emerged in the Portuguese market at the same time as the COVID-19 pandemic, although there was no significant impact on its growth. As the company is dependent on technology and robotics, the services offered by nBanks become more advantageous in completely remote work and commercial activity.

Historical and sectoral context of nBanks

nBanks emerged through the connection between the founders' professional lives and their different critical spirits to the financial sector. The three founders had a professional career spanning more than 15 years in the banking sector before founding the company, which demonstrates great experience in the sector and in-depth knowledge of the Portuguese financial market. Although none of the founders were specialized in the field, the three collaborated with Banco Portugues do Investimento (BPI), and the first ideas and sketches of nBanks dated back to that time.

Their experiences lead them to understand the trend in the sector and above all the tools banking institutions use. At the same time, they decipher the main flaws in the banking sector, which were increasingly becoming more pronounced and visible with the emergence of technology. For the CEO, banking has always been a sector that sold its products in "mass", that is, poorly adapted to the needs of each customer. Currently, most customers are no longer identified with this type of offer, as they are more demanding, expecting more personalized and diversified products.

The founders of nBanks always believed in independent and impartial positioning when the customer must compare several proposals, from different banking entities, for the same product. Only in this way could the customer's choice be

conscious and responsible. At the root of this failure of supply in the financial market, specifically in the banking sector, is the lack of availability of customers to research all the offers. Therefore, customers usually ended up accepting proposals without being able to understand the contractual clauses because, in addition to a lack of time, they did not have the means to understand the entire offer. The only option left was through over-the-counter business, usually with employees with whom customers had some connection. This type of business based on trust may often not be the most beneficial for the customer or the banking institution.

Technology has become, precisely, the means for customers to have access to all available information so they can choose consciously, without spending a lot of time. nBanks understands this market failure (which can be overcome with the dissemination of technology in the sector) as its main business opportunity for penetration and affirmation in the market.

Contributions of the emergence of Openbanking to the creation of nBanks

The implementation of openbanking, guided in Europe by the revised Payment Services Directive (PSD2), is directly associated with the emergence and growth of nBanks. This directive contributes to a more integrated European market and a significant improvement in the security of electronic payments and breaks the data monopolization in the banking sector. With this directive, the customer can aggregate their information on a single platform, meaning there is no need for a banking commercial relationship for data processing. For the CEO of nBanks, personal data processed by banking entities, such as balances and movements, and all innovations that facilitate customers' access to this information must be positively received by the market.

Considering the growing importance of data and information management in the context of the global economy, the aggregation of banking data can become an important working tool for the performance and differentiation of companies. nBanks, through the aggregation of data, automated processes, and technological tools provide extremely important data for companies. At the same time, it replaces the specialized employees who spent time and costs on companies to have available and aggregated banking information.

Openbanking also boosted another payment tendency. Fintechs linked to e-commerce stood out in the market allowing their customers to purchase and pay for a service almost simultaneously on the same platform. nBanks don't have this service available to its customers yet as it cannot offer it in a safe and competitive way.

nBanks is one of the first fintech to explore the Openbanking market in Africa, namely in Angola, Mozambique, or South Africa, and is expected quite pronounced growth in the coming years. This strategy can positively influence the company results, due to the high demand for this service and the lack of players in the market.

Services provided by the company

The main services provided by the company are 1) management of banking and financial business issues in a single software, with possible access to banking information separately; 2) aggregated and independent consult of all bank accounts through unlimited banking history and an interactive digital report with innovative search methods; 3) collect easily and efficiently all the offer available on the financial market allowing the best and impartial choice for the client's business; 4) information on business evaluation methods, by financial institutions, allowing an initial negotiation improvement in business conditions; 5) management of debts, policies, financial loans, tax responsibilities, and other customer business commitments through pre-definition of notifications in all activities.

nBanks business model

The company's business model was designed in a simple way, standing out for its objectivity and simplicity, as in most fintech. The first draft was created in the Canvas application. The initial project underwent many modifications until it reached the final business model. The main differentiating factors of this business plan were the clear identification of the costs to bear in the first phase and the value proposals that allowed to follow the initially outlined path.

When many fintech choose the B2C path, nBank chooses the business side. Since the beginning, nBank, has charged for all its services, while most startups opt initially for a free business model. The genesis of this model is the confidence in their product and services, and the awareness of the customer for the corresponding value. In addition to companies, nBanks services began to be used by accountants and auditors who considered this fintech very relevant to their activity.

The founders carried out several investments preventing nBanks from being financed by equity. The main purpose was to reduce the risk exposure of the founders' capital and to take advantage of the opinion of future shareholders to validate the project since several prototypes were presented to professionals to check whether the product was meeting market needs.

The relationship between nBanks and main competitors

The main market competitors of the nBanks' is traditional banks. Most of these banks are currently investing a lot of resources in technological development and their services could become very similar to those offered by nBanks. However, banks can make the biggest digital evolution, but customers will continue to be averse to placing all their bank account information in a single bank since the bank will acquire a certain control over the company by having privileged data. The bank will also have access to all the customer's movements, balances, and documents, which will lead to a loss of commercial power.

nBanks and other fintech allow this aggregation in an independent entity and do not share information with any bank without the customer's consent. Marketing services impartially, protecting customers' interests and data, is nBanks' main competitive advantage. However, the company's CEO assumes that nBanks' intention is to cooperate with the banking sector and does not foresee them becoming a competitor in the sector.

Management software companies are another market segment that could become a threat to the development of nBanks. Their services can often be confused with those provided by fintech, particularly in information management and digital documentation archives. The CEO of nBanks highlights price as one of the company's main differentiating factors as the customer can choose the cost plan that best suits their activity. The pricing strategy adopted by nBanks is quite similar to the payment service offered to streaming platforms in which each set of services corresponds to a certain established price and the purchase of additional services is normally associated with an increase in the customer's monthly fee.

Another feature in which this fintech differs from traditional management software is the simplicity of its digital platform and the back office. These allow a very intuitive association between the user and the platform. To start using the platform, no additional training is required, which is quite common in management software and usually involves high costs for the company.

In addition to these factors, nBanks is completely server-independent and has many languages available to its users, making it a valuable partner in internationalization. The digital platform can place the financial situation and net results of a company on the manager's cell phone in seconds.

CONCLUSION

nBanks is a fintech company that provides complementary services to banking entities and can create synergy for both. They can join forces to provide a quality service to their customers.

In the diversity of the services offered by nBanks, we highlight, as the main cooperation, the aggregation of banking information on a digital platform and financial consultancy. Based on the first service, customers on both sides will be able to consult their bank statements, invoices, and contractual information in a digital "cloud" that allows access to information in a faster and safer way, leading to greater demand for business. In accounting terms, customers common to both parties will be able to automate processes such as bank reconciliations, accounting entries, and analysis of balance sheets.

In these points lies the added value of the relationship between banks and fintech. Considering that banking information may not be completely clear to its customers the consultancy provided by nBanks will promote competitiveness between banking entities and a continuous improvement and innovation within the sector.

The banking sector may lose some of its services for fintech, for example, in this case, the aggregation of banking information. The genesis of the loss of customers could be the lower prices and simpler business model of fintech. However, the banking sector will never lose market share in services where the added value for the institution is higher. From the perspective of fintech, it will also be beneficial to enhance their growth in these services as they shape their business model to attract new customers from banking entities. Payment security and the digital aggregation of data and documents are two examples of these services, more focused on technology, that should begin to be provided by fintech. On the other hand, the entire process of credit intermediation and the provision of international trade services or bank

guarantees is essential to remain in banking institutions, as long as personalized to the reality of each customer.

The study contributes to the scarcity of studies on digital banking and fintech. By presenting a complementary relationship between fintech and the banking sector, it contributes to fostering cooperative evolution between both. Despite being a single case, through nBanks it was possible to understand the operationalization of fintech companies in the Portuguese financial market.

For further research, we suggest other case studies on fintech companies highlighting the complementary services with banks.

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