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Disrupting the Industry – Millennium BCP’s Strategic Positioning towards FinTech

*Empirical Research on the Threat of Disruption of the Banking Industry through FinTech via Assessment of Global Venture Capital Investments*

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Abstract

The business project conducted in partnership with the retail bank Millennium BCP (thereafter called Mbcp) of Portugal was subject to formulating a strategy to integrate FinTech into the bank’s operations in order to enhance its customers’ experience. After conducting an analysis of the banking and FinTech sector as part of the industry and market analysis a customer analysis identifies characteristics of FinTech users. Thereupon, Mbcp’s internal resources and competitive advantages are identified, which in turn serve as basis for a gap analysis revealing the bank’s As-Is and To-Be state. The chapter FinTech readiness deals with the initiatives that are used to close the identified gaps. Based on the stage that has been created through the initiatives, methods to approach FinTechs are presented and tested towards their feasibility at Mbcp. For the most suitable methods, the business project presents steps for implementation. The work project supplements the business project with an analysis of venture capital investment in the FinTech sector to identify a potential hype around the new industry.

Key words: FinTech, Banking, Venture Capital, Corporate Accelerator
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1 Brief Content

1.1 Client
Mbcp is a branch brand operating under the Portuguese bank Banco Comercial Português (BCP) since 2004. BCP was founded in 1985 and is the largest private bank in the country. Mbcp incorporates all commercial structures of BCP’s retail banking in Portugal. According to the bank, its value proposition is based on innovation and speed aimed at mass market customers, and through the personalized management of service targeting prestige and business customers. The bank offers a range of financial products and services, such as current accounts, payment systems, savings and investment products, private banking, asset management and investment banking, including mortgage loans, consumer credit, commercial banking, leasing, factoring and insurance, among others. Apart from business in Portugal, it has international operations in Angola, Mozambique, Poland and Switzerland. By the end of 2015, operations in Portugal accounted for 72% of total assets.¹

1.2 Market Overview
The retail banking or consumer banking industry is a form of mass-market banking in which individual consumers use local branches of large commercial banks. Services provided in the retail banking sector include all of the above mentioned products that Mbcp’s portfolio contains. To understand the structure of the retail banking industry, this paper conducts a Porter’s Five Forces Analysis of it.

Bargaining Power of Suppliers. Since Capital is the major resource in the retail banking industry, the four major suppliers are customer deposits, mortgages and loans, mortgage backed securities and loans from other financial institutions. Hence, the power of the suppliers is largely based on the market and fluctuates between medium to high.² Besides, the root of liquidity in the Euro area is the European Central Bank (ECB). It monitors the amount of

¹ Millennium BCP (2016), 2015 Annual Report
² See https://sites.google.com/site/bankingindustryandtheinternet/home/5-forces#TOC-Power-of-Suppliers:
money in the market by issuing currency or via instruments like interest rates on bonds and loans. It can dictate reserve requirements, that is how much retail banks can loan to customers and how much capital they must keep on hand. The ECB’s power is extremely high.

**Bargaining Power of Customers.** Switching costs between competitors are relatively high and thus customers are often bounded to retail banks on a long term basis. Yet, those switching costs decreased since the European banking industry adopted the *Common Principles for Bank Account Switching* in 2008. Besides, through online comparison portals the cost for consumers to compare prices of opening and holding accounts as well as the rates offered has been greatly reduces. Thus, the power of individual consumers is comparably low but increasing. Corporate customers on the other hand are high-margin clients to banks, providing huge amounts of capital. Therefore, financial institutions work extremely hard to offer the best B2B services. Their bargaining power can be regarded as very high.

**Threat of New Entrants.** Entering the banking industry not only requires high initial investments but is also exposed to a huge barrier: trust. The industry deals with money and financial information – things that people are very cautious to share. Due to the nature of the industry, customers feel more comfortable, dealing with well known, established brands, which they consider trustworthy. Clients also usually prefer to assign one bank to hold all their accounts. This has already caused major consolidation within the industry before the financial crisis. The number of mergers and acquisitions (M&A) even increased after the crisis. A lot of smaller (not considered as systemically relevant) institutions could not cope

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5 See https://sites.google.com/site/bankingindustryandtheinternet/home/5-forces#TOC-Power-of-Suppliers:
6 See http://www.investopedia.com/features/industryhandbook/banking.asp
7 See https://sites.google.com/site/bankingindustryandtheinternet/home/5-forces#TOC-Power-of-Suppliers:
with the bank runs between 2007 and 2008 and went bankrupt.\(^8\) With an industry concentration towards fewer large and powerful players as well as an ever stricter regulatory framework, an entry into the market is tough and thus its threat relatively low. A higher threat stems from the entry of already existing big international banks into new markets, challenging smaller local incumbents.\(^9\) In addition to that, technological advancements have given rise to FinTechs, who digitalize traditional banking services and offer them to customers at lower prices and higher transparency. This will be discussed in greater detail at a later stage of this paper. All in all, the threat of new entrants into the market can be considered medium.

**Threat of Existing Substitutes.** Non-banking financial services companies like insurances or mutual funds are capable of offering similar services as banks when it comes to taking deposits. On the lending side, unconventional players are coming up with e.g. automobile companies offering financing to customers.\(^10\) Again, a big threat stems from FinTechs, which have a steep curve of popularity and scale and offer a wide set of digitalized products, at the same time being geographically independent. Therefore, the threat of existing rivalry if high.

**Competitive Rivalry.** The market for banking underlies high rivalry and can be considered saturated within the industrialized part of the world.\(^11\) Participants need to lure away customers from competitors to enlarge their own base. This in turn triggers a race for offering the best and fastest service at the lowest possible rate. Consequently, banks face lower ROAs and are forced to take-on high risk projects.\(^12\) In retail banking, competitive rivalry is high.

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\(^9\) See http://www.investopedia.com/features/industryhandbook/banking.asp

\(^10\) Ibid.

\(^11\) There is a huge unbanked population that is little lucrative to reach for banks due to a limited infrastructure. It’s those people that now highly profit from the online services offered by FinTechs. This will be discussed in more detail within the chapter 3. *Academic Discussion*.

\(^12\) See http://www.investopedia.com/features/industryhandbook/banking.asp
1.3 Current Client Situation
A SWOT analysis conducted about Mbcp has revealed that the bank has a strong national brand and that stability is assured through its large international branch network. There is an online product portfolio in place and the management’s awareness for the need of innovation is reflected in Projecto Avançaç – the bank’s strategy regarding digital modernization. Simultaneously the bank faces great opportunities for a strong future position in digitization. The structure of its customer base conveys that 59% of it consists of potential FinTech users. Since Portuguese investment in FinTech lacks behind international standards, Mbcp could profit from a potential national pioneer role, if reacting quickly to global trends.

Yet, at the same time, the bank lacks an overall digital mindset and has no active online presence besides its website. Its IT department runs on a 30 years old legacy system and poses a bottleneck to new initiatives. Hence Mbcp has a slow reaction time to market trends, which poses the danger of lacking behind digital trends and losing customers. Especially Spanish banks have strengthened their position in the FinTech market and can capture market share of Mbcp within Portuguese retail banking. The bank’s high debt owed to the Portuguese government limits its investment freedom as it comes with tight regulations. This further complicates Mbcp’s possibility to gain insight into FinTech.

1.4 The Business Project Challenge
The recent rise of FinTech has confronted banks around the world with the challenge of dealing with new, technologically more advanced competitors that are more agile and don’t underlie the same set of regulations as incumbents do. Simultaneously, FinTechs can also be regarded as opportunity for collaboration and thus source of differentiation. Therefore, Mbcp turned to CEMS students at Nova SBE in order to develop an approach on how to deal with the industry disrupters with the ultimate goal of increasing the user experience and value proposition of the bank’s customers to a level of excellence. Thereby, multiple approaches were evaluated and the best options elaborated.
2 Reflection on the Work done and Individual Contribution

2.1 Problem Definition

FinTechs pose a disruptive threat to the banking sector through three main innovation streams. They reach markets that traditional financial service companies don’t serve, their technological advancements enable an increase in personalization of services, and they have a high degree of mobility and agility.

Generally, FinTechs operate in four major service blocks including Digital Payments, Business Finance, Insurance and Consumer Finance. The last couple of years have seen a rapid increase in investment into FinTech, with a preliminary peak reached in 2015. In the same year, 19 FinTechs were rated as unicorns worldwide, meaning that they were valued at one billion US$ or more. The density of unicorns is forecasted to steadily increase, especially within the fields peer-to-peer (P2P) lending and digital payment systems.

The high growth momentum of the industry with a lot of capital inflow increasing the startups’ liquidity harms retail banks in particular. Mbcp for instance engages in all of the above mentioned service blocks except insurance. Considering the entry barriers to the financial service industry, evaluated via Porter’s Five Forces, the major threat does not necessarily come from the startups itself though. It is the technological innovations in combination with high investment into collaboration with FinTechs by direct and indirect competitors that poses the major threat to banks like Mbcp. Not staying up-to-date with the latest developments can mean being outpaced by the competition in the medium to long run.

Apart from major global banks that have set aside billions of Dollars for investments into the new technologies, also smaller incumbents like the Spanish banks BBVA and Santander have made FinTech involvement a focal point of their strategic positioning. In addition to that, tech companies like Google and Intel have realized that FinTech has the potential to become

\[13 \text{ For a more profound and visual overview, please refer to Appendix 1.} \]
future’s cash cow, once widely accepted and used by millennials. Thus, staying out of FinTech involvement can mean that customers, once familiar with digital technology in banking, migrate towards those service providers that offer them the best products.

Mbcp’s management realized that Portugal’s largest private bank could not afford to stay out of this trend. Thus, the business project focuses on developing a strategy for Mbcp to integrate financial technology into their operations in order to enhance their customers’ experience. This strategy design had to be done on condition of the financial constraints that the bank faces since the financial crisis and the complex regulatory environment created by banking supervision.

2.2 Methodology
First, the authors of the business project conducted a thorough market and customer analysis of Portugal’s financial sector as well as the global FinTech industry. Next, internal structures of Mbcp were examined to understand how, where, and to what extend an integration of financial technology was possible. These insights have revealed that there are three interrelated mainstays for the development of a digital strategy, in which all of them Mbcp is showing significant gaps: IT, governance, and human capital.

Hence, it became clear that financial technology was not going to be implementable without previously founding an environment of FinTech readiness. This in turn enlarged the scope of the business project to two stages. In the first one, from now on referred to as Stage 0, the authors developed initiatives that Mbcp has to take in order to achieve FinTech readiness in the three named mainstays. In the second one, termed Stage 1, five different approaches of FinTech collaboration were tested on the basis of hypotheses. The five approaches included:

14 The term Fintech readiness was developed by the authors and refers to a state of corporate structure in which IT, governance and human capital show digital alignment and thus compose an environment in which the integration of financial technology if feasible.
M&A, a research center, partnerships, a corporate accelerator, and an external corporate venture capital (VC) fund.\textsuperscript{15}

In the end, two approaches were identified as suitable for Mbcp, given that the above mentioned initiatives from Stage 0 were put in place. One approach is the investment in FinTech firms via an external venture capital fund and the other the fostering of external FinTech knowledge via a corporate accelerator. The last part of the business project thus elaborates on the development of implementation strategies for both approaches.

\textbf{2.2.1 Hypothesis}

As mentioned above, the course of the business project revealed that the work had to be split into two parts: Stage 0 and Stage 1. Former does not include a hypothesis per se but rather elaborates on initiatives to be taken to reach the state of FinTech readiness. Stage 0 will be discussed in detail within the chapter 2.2.3 \textit{Methodology}. Stage 1 on the other hand includes several hypotheses that were tested to examine the best approach to incorporate FinTech into Mbcp’s organization. Every approach thus has a major hypothesis that is followed by two to three sub-hypotheses.

The over-hypothesis is congruent among all tested approaches and starts off by naming the approach, followed by \textit{“[name of the approach] is/are the right approach for Mbcp to tackle FinTech.”}. This hypothesis is tested via the sub-hypotheses. Thus, if all the sub-hypotheses or the majority of them are verified, so is the over-hypothesis. In case the majority of sub-hypotheses is refuted, a refutation of the over-hypothesis follows. Once the over-hypothesis is verified, an implementation procedure plan is designed. In case of refutation, no further research is conducted about this approach.\textsuperscript{16}

\textsuperscript{15} For a visual overview of the two stages, please refer to Appendix 2.
\textsuperscript{16} For a visual overview of the hypotheses and their sub-hypotheses, please refer to Appendix 3 a - e.
2.2.2 Analysis
An analytical part builds the foundation of the business project. It is split up into three major parts: market analysis, internal analysis, and gap analysis.\textsuperscript{17} Its importance laid in the information gathering, required to draw conclusions about the necessity as well as Mbcp’s potential to deal with FinTech. In the following, each of the above named parts will be discussed in detail.

Market Analysis. The market analysis starts off by portraying digital banking affinity in Europe and setting European and Portuguese consumers in comparison. It becomes clear that Portugal has one of the lowest digital banking rates with only 28% of its population using digital channels provided by the financial services industry – as compared to a global average of 45%. More traditional banking channels enjoy higher popularity. Thus, Portuguese customers use branches more often than the worldwide average and are especially fond of ATMs with latter reaching a penetration rate of 58%. When zooming into Mbcp’s customer base, one can see that it has an even lower penetration of digital banking channels with only 26% using online services. Furthermore, 34% prefer physical attendance inside the branches, 63% use ATMs for conducting banking related issues and 4% use telephone banking.

Yet, projecting the digital development in Portugal to 2020, it becomes evident that internet penetration in general will increase by 14.8%, online banking penetration by 13.4%, digital payments in specific by 21%, and consumer finance service usage even by 34%. Focusing especially on the trends of digital payments within Portugal, the analysis reveals that online B2C commerce will be the driving force in the sector.

Internal Analysis. The internal analysis is conducted on the basis of the 7S-Model developed by the consultancy firm McKinsey & Company. By means of this tool, seven interrelated key

\textsuperscript{17} The part Industry Analysis, which precedes the here named blocks, can be neglected for this purpose, since it serves the business project as an introductory overview of the FinTech sector and contributes little to evaluating Mbcp’s FinTech readiness. For the results on the industry analysis, please refer within this paper to Market Overview for the conducted Porter’s Five Forces Analysis as well as to Problem Definition for further information gained on the FinTech industry.
aspects of an organization are evaluated to analyze its ability to change. Those aspects include a corporate’s strategy, structure, stakeholders, systems, style, staff, skills, and shared values. The outcome of each aspect’s analysis is briefly described as follows.

- **Strategy**: Within the corporate strategy, new strategic priorities have been defined with the objective to transform Mbcp into a sustainable bank that is oriented towards the new needs of markets and customers. As an example, the bank plans to redefine its retail distribution model and simplify and automatize processes. To become a healthier company, it also intends to adopt the risk in each business area, promote a business sharing culture, and launch a cultural transformation.

- **Structure**: Mbcp is structured in a classical top-down hierarchy. A board of directors is the governing body that delegates the day-to-day management to the Executive Committee. This in turn is supported by commissions. Below these entities, regular departments such as IT, Compliance or Direct Banking are located. To face the challenge of a customer base shifting towards digital, an internet and digital department has been created that serves simultaneously as an innovation department.

- **Stakeholders**: Within a power-interest grid developed by the authors of the business project, different bodies within Mbcp are compared based on their stakeholder influence over the success of a digital strategy (power) and their concern over the digital strategy (interest). From this, it can be derived that the IT as well as the Compliance department act as main distracters to a digital innovation strategy.

- **Systems**: In a simplified development process, any initiative started by a business unit first passes through the IT department that validates the initiative for implementability to then develop it or outsource its execution. Once done, the Quality department checks the initiative for functionality and whether it fulfills the company standards.

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18 For a visual overview of the power-interest grid, please refer to Appendix 4.
• **Style:** Mbcp’s cultural key principles are described by the bank as: 1. *Being a reference institution in the industry in Portugal*; 2. *Keen on innovations to benefit customers*; 3. *Committed to everyone involved*; 4. *Level of excellence in any project, function or task*. The bank’s key drivers to ensure the fulfillment of its debt repayments to the Portuguese government are efficiency and value-for-money.

• **Staff:** The majority of Mbcp’s employees are still within the company’s commercial area such as branches or customer support. The average age of Mbcp employees is 38 years. The employment stop since the financial crisis has caused a massive increase in this. The overall number of employees has decreased over the last years with a simultaneous expansion of low-cost traineeship roles.

• **Skills:** Risk management and project management are examples of strong skills of the bank. Agility and online marketing have been evaluated as lacking behind.

• **Shared Values:** Based on Mbcp’s mission and vision, five key values have been developed that should build the basis for every act the company is undertaking: 1. *Respect for people and institutions*; 2. *Vocation for excellence*; 3. *Ethics and responsibility*; 4. *Focus on the client*; 5. *Trust*.

**Gap Analysis.** The gap analysis can be regarded as extended internal analysis of Mbcp, focusing on flaws within the organization that might harm the realization of a FinTech implementation. As mentioned above, it brings to light gaps in the three major interrelated mainstays for the development of a digital strategy. By identifying so called As-is and To-be states of Mbcp, the gap analysis also serves as basis for the later elaboration of Stage 0.

• **IT:** In the As-is state, Mbcp’s IT operates on a legacy system that causes high costs and represents an obstacle to adapting to changing market trends and weakening the bank’s agility. This in turn makes the IT department a bottleneck to new initiatives.

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19 For a detailed visual overview of the skill evaluation, please refer to Appendix 5.
since all innovation requests pass through it. The IT budget has been continuously cut-down since 2001 and has its focus mainly on maintenance (90%) rather than on innovation (10%). In the To-be state, Mbcp has an agile system that allows quick adaptation to changes and innovations within the industry in order to provide a competitive advantage. Besides, its budget is structured in a way that sufficient capital is put aside for innovation to eventually add value to the company.

- Governance: Mbcp’s As-is state underlies an unclear digitization strategy, which would be a necessary basis for the bank to tackle FinTech. Innovation within Mbcp happens on a decentralized level. Multiple departments release initiatives without coordination amongst each other. In addition to that, the public relations positioning lacks digital presence. Thus, Mbcp gains little recognition by millennials that obtain most information via online channels, and leads to a deficient credibility in terms of innovation standards. In the To-be state, a clear digital strategy is defined and innovative technologies in terms of FinTech identifiable and concretely accessible. Besides, Innovation within Mbcp happens on a centralized level, organized by a superior body that aligns different initiatives released within the company.

- Human Capital: Research has conveyed that within the As-is state, employees don’t understand the impact of digital and don’t consider innovation as a significant part of the company’s future development, lacking willingness to take innovational risk. Besides, the organization has a huge gap in terms of FinTech know-how. This situation is even worsened by the fact that a misalignment in the recruiting process repels young and innovative talent, which in turn harms its market positioning. The bank should aim to achieve a To-be state in which employees have an open mindset towards digital innovations and show a risk-taking attitude towards new opportunities. At the same time they convey know-how to develop solutions for challenges and

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20 For this, please also refer to the chapters 1.3 Current Client Situation and 2.2.2 Analysis.
thereby help Mbcp to create innovation that serves as a competitive advantage in the market. At the same time its personnel policy is designed in a way that it attracts young talent that fosters innovation.

2.2.3 Methodology
As mentioned in the chapter 2.2.1 Hypothesis, the methodology of implementation is based on a two stage model to ensure a solid and effective approach towards FinTech interactions. Stage 0 focuses on overcoming the shortly discussed gaps. For this, the three major mainstays for the development of a digital strategy were broken down into six key areas that are in the authors’ eyes required to achieve FinTech readiness. Those are Mindset, Digital Presence, IT, Know-How, Governance, and Strategic Positioning.

A score between 0 and 10 is assigned to each of the key areas, resembling the As-is state. Also the To-be state is quantified by a score within the indicated scale. The scores were subject to the authors’ assessment and in order to reach the To-be state, the bank needs to implement a set of 35 initiatives, also developed by the authors and assigned to each of the key areas.21

In line with this and based on the prior analysis, is the elaboration of a spider diagram, referred to as the 6-Axes Model. By assigning an axis to each of the key areas, it grants visualization to the their As-is and To-be states. Each axis is divided into ten segments, resembling the score within a particular key area. The scores of the axes are connected through lines, creating the “spider web”. The larger the web, the bigger is the overall score and thus the FinTech readiness.22

Once FinTech readiness is reached, Mbcp can enter Stage 1, also referred to as the FinTech approach. Within this stage – as has been described before – five approaches to tackle FinTech are identified as viable and subsequently tested for feasibility. The feasibility tests

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21 For a detailed overview of the initiatives, please refer to Appendix 6.
22 For a visual overview of the 6-Axes Model, please refer to Appendix 7.
are conducted on the basis of the earlier mentioned hypotheses and sub-hypotheses.\textsuperscript{23} The results of the sub-hypotheses-tests are elaborated upon in the following chapter.

2.3 Recommendations to the Company.

From these tests, two approaches emerge as optimal solutions for Mbcp’s FinTech approach: The implementation of an independent corporate VC fund and the development of a corporate accelerator. For both an implementation plan is elaborated that follows the same structure. Initially, it specifies the structure of the team that should compose the approach’s management. Next, it defines Mbcp’s role in the approach, including its influence in the strategy development of fund or accelerator. After that, the plan elaborates on how the strategy concerning investments respectively acceleration support should be developed. Since the bilateral strategy development with the bank is of utmost importance, key criteria for that are imposed that help to guarantee a strategic alignment.

Thereupon, the plan defines chronological steps that are supposed to serve as guide for an end-to-end implementation and minimize potential errors in the process. Finally, benefits and challenges for each approach and its implementation are demonstrated.

2.3 Recommendations to the Company

The hypotheses-tests show the following results:

- \textit{M&A}: Under the pretext of renewing the legacy system, it can be assumed that the IT is sufficiently agile to manage the technological integration of an acquired FinTech. Yet, an absorption integration is expensive and cultural clashes are very likely, so that significant value from synergies might be destroyed. At the same time it is expected that despite the anticipated repayment of the debt to the Portuguese government by 2017, Mbcp will not have enough capital to stem high acquisition costs. Also, mergers through the exchange of shares will most likely not attract potential merger candidates

\textsuperscript{23} For a visual overview of the hypotheses and their sub-hypotheses, please refer to Appendix 3 a - e.
given the bank’s low and volatile share price. Hence, M&A is not considered an appropriate approach to address FinTech.

- **Partnerships:** After having completed Stage 0, Millennium BCP will have a sound and coherent digital strategy as well as the skill set to collaborate with targeted FinTechs to acquire even more profound knowledge about certain technologies. Yet, regulatory uncertainty and again the risk of cultural clashes jeopardize the potential ability to exploit the partner’s technologies in order to increase customer value. Hence, partnerships are not considered an appropriate approach to address FinTech.

- **VC Fund:** An independent VC fund can set the focus on the right strategic positioning as the bank can take a more defining position through the fund that helps it evolve with the customers. It gets very good insights into the business, not subjugating decisions to time or risk constraints. Being detached from the mother bank, the fund is an efficient way to escape from bureaucratic and regulatory hurdles. Finally, this seems to be the easiest way to approach FinTechs. The equity financing at an early stage of the startup helps to circumvent regulatory limitations to the investment stake. Besides it allows the fund to act in the interest of the portfolio companies, which in turn creates trust. Hence, the implementation of an independent corporate VC fund can be considered an appropriate approach to address FinTech.

- **Corporate Accelerator:** Accelerators can function as interface between Mbcp and the ventures. It is an option to gain a detailed overview of the market and transfer know-how at a low cost. The bank can leverage its trustworthy image to attract entrepreneurs. Hence, the implementation of a corporate accelerator can be considered an appropriate approach to address FinTech.

- **Research Centre:** Building research and disseminating it requires significant time. Due to the fast paced nature of the FinTech sector, this approach could navigate the bank into a lagging position. The benefits of a research centre can be exploited to a similar
degree by a corporate accelerator, while latter grants the bank more control. Hence, a research centre is not considered an appropriate approach to address FinTech.

Since two different FinTech approaches are identified as appropriate, recommendations to Mbcp regarding the implementation plan need to be split into two parts:

*Corporate VC Fund.* The management team of the corporate VC fund should have extensive know-how about FinTech and VC in general. Even though the fund should enjoy operational independence from the mother bank, a bilateral strategy development with the bank’s management has to be ensured. Due to the constant knowledge gain through investees, the bank’s strategic positioning should be flexible. Communication channels should be designed in a way that information can flow efficiently and smoothly between FinTechs and the bank’s strategy definers. The budget granted to the fund has to underlie two considerations: The risky nature of VC investments and the fast pace of FinTech development.

*Corporate Accelerator.* The choice about the team managing the corporate accelerator is in this case the choice of the right partner accelerator. Interests between bank and ventures within the acceleration program need to be aligned. The know-how gained by Mbcp will need to be rewarded with support in business plan development and granting access to customers and distribution networks. Again, strategic positioning should be kept adjustable according to new insights gained from the technological knowledge transfer. Effective communication channels between Mbcp and the accelerator will allow finding the most suitable solutions.

### 2.4 Concerns

With the FinTech industry developing at a rapid pace, reacting to the technological advancements and defining a digital innovation strategy that copes with that, has to be of major importance to Mbcp. Thus, implementing the initiatives defined in the business project and reaching FinTech readiness by fulfilling the minimum level requirements on the above mentioned 6-axes model has absolute priority for the bank. Yet, one major concern lies in
Mbcp not tackling the challenges in the near future and falling behind the national and international competition when it comes to digitalizing – and eventually optimizing – its services. General reasons for that can be the limited digital mindset, liquidity constraints, and the missing FinTech know-how within the corporation in combination with the bank’s probable pitfall in attracting suitable talent.

The mindset issue that had been detected through the internal analysis can pose the biggest obstacle to implementation. Rooted within a corporate culture, a firm’s mindset directs the workforce to pull on the same string in order to achieve a common goal. For this mindset to prosper, the right attitude must already prevail on the organization’s top executive level. From there it can then spread to the whole bank in a top-down approach. Hence, if the C-level management of Mbcp does not prioritize FinTech readiness on their agenda, it will be hard to reach a corporate culture that allows for the bank to steer into the right direction.

With high debt of about €750mn outstanding towards the Portuguese government – a loan granted in the course of the crisis-induced liquidity constraints – budget for innovation is scarce. Even though it is expected that the debt will be paid back by 2017, a multitude of costly projects with priority of implementation (and not necessarily related to the bank’s digitization process) is already in the pipeline. Hence, another major concern lays in not enough capital being freed up to initiate the proposed incentives.

It is also the economy measures that have let the bank fall behind in terms of digital and financial technology know-how. A large chunk of the workforce needed to be laid off while barely any new talent was employed. When attracting digital talent, a firm, regardless of its industry, competes primarily with tech firms. Adequate wages need to be paid and a modern working environment created. Hence, with no such talent at hand and difficulties to attract it, Mbcp will face problems implementing the proposed FinTech strategies.
All in all one can conclude that the major implementation concerns lie in Stage 0. The bank is far from FinTech readiness and not reaching that will pose the main obstacle to implementing FinTech in its operations and improving its customers’ experience.

2.5 Individual Contribution
During the process of the business project, it became clear that one major strength of the authors was rooted in the group’s excellent team spirit. The individual members complemented each other with deviating talents and brought in know-how from their different backgrounds in management and finance. Accordingly, everyone was assigned different tasks that she or he put special emphasis on during the course of completion.

My personal fields of focus laid in the conduction of the industry as well as market analysis, the testing of the hypotheses regarding the feasibility of an implementation of an external corporate VC fund, and the eventual development of an implementation strategy for that VC fund. For the industry and market analysis, I benefited from my experience obtained during my extracurricular engagement in the Nova Investment Club (NIC).24 As a part of the investment banking division, I was encouraged to create an industry report on a monthly basis that would be shared with investment institutions based in Portugal. The know-how I gained about VC during my studies proved to be of great advantage for the elaboration of the fund. The frameworks25 that found their origin in this business project were developed in collaboration with all the authors. Likewise, the initiatives for FinTech readiness were elaborated in collaborative discussions by all team members. It goes without saying that structure, conception and layout of the business project were worked out together as well.

The industry analysis included an elaboration of the main properties of the FinTech industry. It was examined what fields of banking services FinTechs tap into and how banks’ reaction is

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24 NIC is a club created and managed by students from the Masters in Finance program of Nova SBE whose mission it is to organize activities that enhance the experience of the members’ as well as their fellow students’ experience in the program.
25 These frameworks include e.g. the Stage 0-Stage 1-Model or the 6-Axes Model.
to the disruptive threat. The market analysis focused on the state of FinTech on a global and European level and zoomed into the potential of it in Portugal. Simultaneously, an analysis of Mbcp’s customer base evaluated its fit for an engagement in the FinTech sector. The evaluation for the fit of a VC fund was conducted in the above mentioned manner by testing these three sub-hypotheses: 1. A venture capital fund’s independence from Mbcp grants the best access to FinTechs; 2. An independent venture capital fund sets the focus on the right strategic positioning; 3. An independent venture capital fund is a very efficient way of engaging in FinTech. As can be seen in the chapter 2.3 Recommendations to the Company, the implementation plan was elaborated by first specifying what the team, the bank’s role, and the strategy development should look like. After that, a detailed chronological procedure of implementation was developed to eventually conclude with benefits and challenges that the bank might face during the development of the fund.
3 Academic Discussion

3.1 Key Criteria for a Disruptive Threat

According to Rachel Botsman, author of *What’s Mine Is Yours: Collaborative Consumption Is Changing The Way We Live*, an industry’s incumbents face a disruptive threat in case the market fulfills four key criteria: *1. There are fees that can be cut out of the process and people will benefit; 2. It’s unnecessarily complex; 3. Trust has broken down; 4. People who have been excluded from the system are getting new access.* The first part of the academic discussion will consist of an analysis of the disruptive threat that FinTech poses to the financial industry by making reference to those criteria.

1. *There are fees that can be cut out of the process and people will benefit.* Banks are finding themselves exposed to a lot of pressure, as an increasing number of consumers proves open to new financial technology and tends not to return to the incumbents’ service after using FinTech. It is estimated that by 2025 there will be a deterioration of 10% to 40% in revenues and 20% to 60% in profits within five major retail banking businesses, namely consumer finance, mortgages, SME lending, retail payments and wealth management. This will not be caused solely by a major chunk of consumers defecting to FinTech services, but also due to margin compression as the new players are able to charge lower prices for equivalent services. Because FinTechs can offer highly automated, scalable and software-based services with no physical distribution network via e.g. branches, they have a huge cost advantages over banks, in turn enabling them to offer more attractive terms to customers.

Further research has conveyed that 59% of banks’ earnings are generated through pure fee services (e.g. advice and payments) or sales products (e.g. new loans and deposits) that yield an average return on equity (ROE) of 22%. Provision and fulfillment components of products (e.g. administration of loans) have high operating costs and capital requirements, yielding

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only an ROE of 6%. Hence there is considerable threat that FinTechs exploit exactly that mismatch in banks’ business model.\textsuperscript{29} It is expected that FinTech will have the biggest effect on the global payments business, having already entered the digital currency space and offering alternative technology in areas such as settlement terms and methods of exchange.\textsuperscript{30}

2. \textit{It's unnecessarily complex}. The financial crisis has led regulators to tighten compliance frameworks to a large extent. This has not only increased the banking industry’s complexity but also increased costs for banks that are now forced to entertain large compliance departments. Hence, the average bank in the US and Europe now has five board committees overseeing regulations as opposed to three before the crisis. Research has also shown that financial institutions’ costs for meeting regulatory guidelines now amount to 2.5\% to 3.5\% of total expenses or $0.7bn to $1.5bn per annum. In addition to that, an excessive growth of middle management since 1993 has led to additional complexity in the banking sector. Since then, the number of banks shrank by 45\%, while the amount of employees grew by 15\%.\textsuperscript{31}

3. \textit{Trust has broken down}. According to studies conducted by the US based communications marketing agency Edelman, the financial services sector is the least trusted one. Even though an increase has been noted during the last years, only 54\% of respondents to a survey conducted among consumers, stated to trust the industry as a whole.\textsuperscript{32} In comparison,

\textsuperscript{29} Dietz, M. et al. (2016), \textit{A digital crack in banking’s business model}, in McKinsey Quarterly
\textsuperscript{30} Most prominent example of a disruptor in e.g. the currency exchange business is UK based FinTech Transferwise. Mann, P. (2015), \textit{Assessing FinTech’s Current Influence on the Banking Industry}, in International Banker; BNY Mellon (2015), \textit{Innovation in Payments: The Future is FinTech}
\textsuperscript{31} Emerson, R. et al. (2015), \textit{Managing Complexity – The State of the Financial Services Industry 2015}, for Oliver Wyman
\textsuperscript{32} The data has been collected by Edelman over 16 years, within 28 countries and among more than 33,000 respondents. Survey respondents have been split in three groups: 1. \textit{General Online Population}: 1,150 respondents per country, aged above 17 years; 2. \textit{Informed public}: 500 respondents in the US and China and 200 in all other countries. Respondents must have college education, be aged between 25 and 64, be within the top 25\% household income per age group in each country, and report significant media consumption and engagement in business news; 3. \textit{Mass Population}: All population not including informed public.
electronic and mobile payment systems garner a higher percentage of trust among respondents (69%) who acknowledge the improvements in protection against e.g. credit card fraud.\textsuperscript{33}

4. People who have been excluded from the system are getting new access. FinTech has granted historically unbanked and underbanked consumers access to financial services. In parts of the world where mobile phones are affordable to a large part of the population but institutionalized banking is scarce, basic banking services such as money transfer, micro loans or savings can now be offered. One of the most successful examples is mobile payments system M-Pesa from Kenya that already has 17mn local users and is responsible for transacting 42\% of the national GDP in 2014-15.\textsuperscript{34} As will be discussed in more detail at a later stage of this paper, Asia is home to major FinTech growth as investors see huge potential in the world’s largest unbanked population as well as a private wealth market that is eager to overtake the North American in the near future.\textsuperscript{35} Besides from overcoming infrastructural problems in less developed areas, FinTech causes a major cut in service fees as technology takes over. The increasing affordability of financial services grants access to a new base of customers that was underserved before.\textsuperscript{36}

3.2 Empirical Analysis of the VC-backed Equity Investments in FinTech
This part of the discussion will direct its focus on identifying a possible hype around FinTech, analyzing venture capital (VC) investment in FinTech during the last five years and calculating the correlation as well as linear relation between global VC backed FinTech investment and total VC investment.\textsuperscript{37}

\textsuperscript{33} Edelman (2016), 2016 Edelman Trust Barometer – Global Report
\textsuperscript{35} Pizzala, J., Webster, I. (2015), Fintech: Are banks responding appropriately? – Viewpoint, for EY
\textsuperscript{36} Williams, C. (2016), Fintech: The Power of the Possible and Potential Pitfalls, for Federal Reserve Bank of San Francisco
\textsuperscript{37} The analysis is conducted upon quarterly figures from Q1/2011 until Q4/2015, published by KPMG and CB Insights within the report Pulse of Fintech, 2015 Review.
3.2.1 Data and Methodology
Underlying the analysis are two sets of data provided by CB Insights. Those sets span a timeframe of twenty quarters, from Q1/11 to Q4/15 and contain information about the overall global VC investment as well as the specific VC-backed equity investments in FinTech firms in US$ per quarter. First, the development of each, the absolute investment over the above mentioned period of time is examined. Next, with the help of the statistics and data analysis tool *Stata 13.1*, the two above mentioned sets of data’s correlation as well as a linear relationship are calculated. For a closer look at the so far biggest FinTech market in the US, data about VC-backed equity investment in financial services from Q1/1995 until Q1/2016 is analyzed. This data has been provided by the National Venture Capital Association (NVCA).

3.2.2 Assumptions and Limitations
Financial Technology companies are generally startups, relying on early stage capital funding through VC funding. Hence, this paper uses the amount of VC capital invested in FinTech as proxy for the hype about the industry. It is also assumed that the timeline of existent data is a sufficiently large sample to generate significant results when evaluating the two sets’ relation. Since the FinTech industry is still at an early stage of development, twenty quarters is the available time span to track back investment. For the analysis of the US market, data for VC-backed investment in financial services firms serves as proxy for general FinTech investment.

3.2.3 Results
Since 2011, investment in FinTech has grown exponentially with the high having been reached in Q2/15 so far. The quarters Q3 and Q4/15 have experienced a stark global decline in VC backing of FinTechs. A 4.08%-decline from Q2 to Q3 was followed by a 63.83%-decline from Q3 to Q4. Zooming into US-VC-investment in players within the financial industry, a further declining trend can be observed for Q1/2016. Here, major investments in Q3/15 were followed by a 35.30%-drop in Q4/15 and a further decrease of 49.02% in

38 CB Insights is a globally trusted database that uses data, algorithms and predictive analytics to help customers answer questions about “what’s next?” Source: https://www.cbinsights.com/about.
- 25 -
Q1/16. This intense volatility and uncertainty upset investors around the world, raising the question whether the investment in FinTech companies underlies a hype-like trend.

Apart from FinTech, other industries have experienced a contraction of VC-backed equity investment as well with the whole market shrinking by 28.97% from Q3 to Q4/15 and another 7.94% in Q1/16. Also the overall global deal count fell by 2.59%, 10.93%, and 4.09% from Q3/15 to Q1/16 respectively. Hence, the overall development seems to match that of VC-backed FinTech investment. By observing a timeframe of twenty quarters from Q1/11 to Q4/15, one detects a Pearson’s coefficient of 0.9387. This indicates the correlation between overall global VC investment and VC-backed equity investment in FinTech firms is extremely high. Running a regression analysis over the same set of data to detect a linear relation, one obtains a linear model that displays a p-value of 0.000, indicating that the relation has high statistical significance. A very high R² of 0.8812 implies that the model assumed in this paper explains close to 90% of the variability of the response data around line of the regression model. From these results, one can derive the conclusion that the global decline in VC-backed FinTech investment during the quarters Q4/15 and Q1/16 does not underlie hype-like trends but is mainly due to the general drop in VC funding by investment volume. Still some uncertainty remains due to the relative weakness of the data base and the restriction of the input data to the US market but the empirical reasoning gives a high probability of the veracity of this assumption.

3.2.4 Interpretation of Results
All in all, a slowdown of investment growth in certain geographic areas, increasing deal sizes, some successful IPO’s in 2015 and the simultaneous disappearance of smaller players have

40 PwC, NVCA (2016), MoneyTree Report, data provided by Thomson Reuthers, accessible at: https://www.pwcmoneytree.com/HistoricTrends/CustomQueryHistoricTrend.
43 Data derived from CB Insights
44 View Stata results in Appendix 8.
45 View Stata results and graphic in Appendices 9 and 10.
brought down investors’ expectations about FinTech to a more realistic level. As mentioned above, the major cool down can be seen in the major market of FinTech investment, the US. This is compensated by a transformation of the market composition, with a shift in investment activity towards Asia and Europe. FinTech investment in Asia-Pacific more than quadrupled in 2015, reaching a volume of $4.3bn. This makes the region the second largest for FinTech investment after North America. Considering the size of the Asian market with its expanding demand for digital banking and the altering levels of maturity for financial services across the region, it is expected that large FinTech deals in Asia will continue and that there will be a rise in Asia-based FinTech unicorns. Also Europe has strengthened its position in fostering innovation, which should help the continent to take up a more dominant role in financial technology and the investment in FinTech in the near future.

4 Personal Reflection

4.1 Personal Experience

Apart from the way that my know-how and proficiency in finance helped me work on the business project, I also realized that I have other valuable strengths that can contribute to a good outcome during team works. My ability to integrate everyone into the decision making process, trying to understand deviating opinions, helped to prosper the team spirit and eventually caused the richness of the final work. At the same time, I’m capable of explaining my points of view in an understandable manner so that other team members can easily grasp the logic behind it. This is especially valuable in discussions about complex topics and when beliefs about how to proceed diverge.

46 Accenture (2016), *Fintech and the evolving landscape: landing points for the industry.*
47 Between 2013 and 2015 the funding volumes as well as the number of FinTech deals with VC firms were growing at an exponential rate. The number of deals increased within that time frame from 58 to 102 to 347 respectively. Source: Startupbootcamp, PwC (2016), *FinTech APAC Landscape Development.*
48 KPMG, CB Insights (2016), *Venture Pulse Q1 2016*
At the same time my team members showed me that I also have major fields of personal improvement. I often proof impatient, having little understanding for lacking efficiency by other team members. I need to understand that different working styles also benefit the outcome and that not only being fast is important. Simultaneously, I need to put more diligence into certain aspects of work. Reviewing work several times can help optimize the result.

4.2 Benefit of Hindsight
During the course of the project, I faced some big obstacles to overcome. Firstly, financial technology is a very young field of study. Academic research on it is rare and most information on FinTech is published by consultancies and banks itself. Data on the FinTech market dates back only a few years so that trends are hard to recognize. When testing different approaches of FinTech implementation, experiences from peers can be observed and used as inspiration for the development of a template. Yet, the question remains whether the approaches followed by other banks turn out to be successful. Again, the recency of FinTech renders best practice examples impossible.

Apart from that, the tentative collaboration by the corporate partner made it tough to obtain reliable information for the internal analysis. Information that could have further increased the work’s quality was at times withheld or only provided to a minor degree. Customer data exceeding numbers published in the annual report were for instance never provided by the marketing department, despite several requests. The authors could also never get hold of quantified information on the bank’s risk adversity even though it could have helped to evaluate Mbcp’s mindset readiness for the implementation of a corporate VC fund.

Besides from the challenges that the authors faced in gathering certain information, a lot of interesting insights into Mbcp’s business, structure and operations were granted and
informative interviews led. The authors met representatives of every department and a lot of people in the organization proved very helpful during the research phase.

I personally got an excellent overview of the challenges that a retail bank faced after coming through the financial crisis. Besides, it was interesting to see how the fast emergence of FinTech poses a problem to retail banks around the world, especially the ones that had been stripped off a lot of liquidity by the crisis. At the same time, the project work equipped me with massive amounts of knowledge about the FinTech sector, one of the fastest growing in the tech industry. I realized that financial technology will revolutionize global banking and can potentially pose a huge chance to banks, if they make use of it quickly and wisely.

An assignment of the scope of a business project takes many turns during its completion. To eventually come up with the optimal solution requires trying many different paths. Yet, even though not every path taken led to a successful end or contributed to the final outcome, it triggered new ideas and broadened the horizon. This in turn enabled the authors of the business project to come up with a profound and elaborate solution. Hence, in the retrospective, I wouldn’t have chosen a different approach in the development of the project.
5 Appendix

Appendix 1

4 building blocks of FinTech

Digital Payments
- Online B2C Commerce
- Mobile Wallet systems
- Mobile P2P money transfer
- Cryptocurrencies

Business Finance
- Business Lending platforms
- Crowdfunding
- Invoice factoring platform

Insurance
- Usage-based insurance
- Data capture and analytics

Consumer Finance
- Customer lending platforms
- Automated investment services


Appendix 2

Source: Own elaboration.
Appendix 3 a

M&A Hypotheses Testing

Source: Own elaboration.

Appendix 3 b

Partnerships Hypotheses Testing

Source: Own elaboration.
Appendix 3c

Corporate VC Fund Hypotheses Testing

Hypothesis
VC is the right approach for Mbcp to tackle FinTech

Sub-hypothesis 1
A venture capital fund’s independence from Mbcp grants the best access to FinTechs

Sub-hypothesis 2
An independent venture capital fund sets the focus on the right strategic positioning

Sub-hypothesis 3
An independent venture capital fund is a very efficient way of engaging in FinTech

Source: Own elaboration.

Appendix 3d

Corporate Accelerator Hypotheses Testing

Hypothesis
Accelerators are the right approach for Mbcp to tackle FinTech

Sub-hypothesis 1
Accelerators bring Mbcp up to date with market development

Sub-hypothesis 2
Mbcp has the right brand to develop an Accelerator

Sub-hypothesis 3
Mbcp has the capabilities to optimally support the most promising startups

Source: Own elaboration.
Appendix 3 e

Research Centre Hypotheses Testing

- **Hypothesis**
  
  Research centres are the right approach for Mbcp to tackle FinTech

- **Sub-hypothesis 1**
  
  A formal research centre should be implemented in Mbcp (separate unit)

- **Sub-hypothesis 2**
  
  Mbcp should foster research through a collaborative research platform

**Source:** Own elaboration.
Appendix 4

Power Interest Grid

Power: Stakeholder influence over the success of the digital strategy
Interest: Stakeholder concern over the digital strategy

Source: Internal Interviews and own elaboration.
## Appendix 5

### Skill Evaluation

<table>
<thead>
<tr>
<th>Skill</th>
<th>Description</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk management</td>
<td>The ability to understand and evaluate risk factors as well as their impact in comparison to a possible return on action.</td>
<td></td>
</tr>
<tr>
<td>Project management</td>
<td>Direcility in coordinating a temporary endeavor to produce/change a new product, service or process, including actions such as planning, controlling and monitoring.</td>
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</tr>
<tr>
<td>Customer orientation</td>
<td>Focus on customer satisfaction as core of business, through clear communication channels, strong customer service and continuous adaptation to customers' demands.</td>
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<tr>
<td>Customer understanding</td>
<td>Knowing customer needs, wants, motivations, expectations and behaviours, in such way that you can anticipate them.</td>
<td></td>
</tr>
<tr>
<td>Awareness of industry trends</td>
<td>Knowing and understanding the banking industry and surrounding environment and perceiving what are the main trends and changes that may emerge.</td>
<td></td>
</tr>
<tr>
<td>IT management</td>
<td>Managing IT resources in accordance to companies' needs and priorities, creating value with the use of technology by responding to internal and external changes.</td>
<td></td>
</tr>
<tr>
<td>Information management</td>
<td>Ensuring an efficient information flow that guarantees the availability of crucial information at any moment to facilitate decision making.</td>
<td></td>
</tr>
<tr>
<td>Innovative mind</td>
<td>Ability to create or identify new opportunities to develop the business. Having a visionary focus and maintaining a global outlook.</td>
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</tr>
<tr>
<td>Leadership</td>
<td>Ability to direct teams to achieve the best results possible, guiding and influencing people to drive change.</td>
<td></td>
</tr>
<tr>
<td>Agility</td>
<td>The ability of the business system to rapidly respond to changes, adapting its initial structure in an effective way.</td>
<td></td>
</tr>
<tr>
<td>Online marketing</td>
<td>Ability to use digital technologies to reach and convert leads into customers, through measurable, targeted and interactive tools.</td>
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</tr>
</tbody>
</table>

**Source:** Internal Interviews and own elaboration.
## Appendix 6

### Initiatives

<table>
<thead>
<tr>
<th>Axis</th>
<th>Initiative</th>
<th>How?</th>
<th>Why?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tech panel in the Board of executives</td>
<td>Implementing a digital banking unit reporting directly to the CEO, responsible for the digital agenda across the bank and monitoring emerging technologies that may influence the bank’s strategy</td>
<td>Insuring upper-level executives’ knowledge on digital transformations and trends, making it a priority in strategic decision-making</td>
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</tr>
<tr>
<td>HR Academy focus on Digital</td>
<td>HR Academy solely focused to deliver training on digital, with a progressive, specific learning path for employees and executives; This will comprise tests, presentations and workshops available for participants</td>
<td>Foster employees’ knowledge on digital with real adaptations, leveraging known and familiar knowledge while familiarising with new technological tools and applications</td>
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</tr>
<tr>
<td>Inject new digital talent</td>
<td>Hire new employees with digital mindset, with experience in technology/innovation focus companies or technologic background that can help transform the business</td>
<td>Move from traditional bank approach to innovation and digital culture with non-traditional roles and capabilities that are currently unexistent</td>
<td></td>
</tr>
<tr>
<td>Graduate programs</td>
<td>Develop a Graduate Program for undergraduate and master students in different areas of the Bank, for example an IT, Marketing, or Sales Program</td>
<td>Bring young new talent with a digital mindset and innovative spirit into the bank, at a low cost (by using funds from Instituto do Emprego e Formação Profissional). This allows opening new perspectives but at the same time building a succession plan</td>
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</tr>
<tr>
<td>Partnerships with universities</td>
<td>Take advantage of Universities’ academic knowledge and research development to have a good insight into markets and potential areas of business improvement. An example would be the CEMS Business Projects</td>
<td>Connect the bank to a source of solid knowledge and research and continuously integrate it into business decisions. Additionally, prematurely connect the bank with potential hires, assessing their knowledge and capabilities prior to employment</td>
<td></td>
</tr>
<tr>
<td>Hire Senior Executives with digital experience and technological expertise</td>
<td>Appointing an experienced executive that can take over the digital duties of the bank, with ability to be disruptive and reinvent capabilities to achieve a digital business model. The executive’s profile should have a strong focus on technological capabilities within his role</td>
<td>Fill the gap of digital expertise, insufficient in most senior leaders, helping to drive and manage change from top</td>
<td></td>
</tr>
<tr>
<td>Expert track career paths</td>
<td>Create new attractive paths of career progression for individual contributors that may have limited interest in managerial roles</td>
<td>Give opportunity to employees, for instance in the IT department, to define an attractive career growth path and hence attract more talented and ambitious individuals that will</td>
<td></td>
</tr>
<tr>
<td>Mindest</td>
<td>Borrow talent – source out through Freelance market</td>
<td>Shared vision</td>
<td>Digital Immersions</td>
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<tr>
<td>------------------------------------------------------------------------</td>
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<tr>
<td>Borrow talent, tapping into contingent labour, such as freelance expertise in data privacy and other specialized digital fields. Take advantage of new outsourcing platforms, such as Kaggle and Upwork</td>
<td>Having an external and inorganic innovation trigger that can bring the right mindset into the company. Allows to partially overcome the difficulties in attracting the right talent, as a risk-averse bank</td>
<td>Common idea of what the company aims to and what needs to be achieved to reach goals. CEOs must shape the overall vision, communicating it internally and externally, effectively bringing key leads on board so that management spreads the vision throughout the whole bank in the same direction</td>
<td>Having Top management visit Fin(and)Tech events (as Joaquim, Members of Board, etc.) to grasp ideas on how Tech companies/startups deal with innovation on a daily basis with a Lean approach</td>
</tr>
<tr>
<td>Typically not consider a bank as a workplace due to limited growth opportunities</td>
<td>Without a shared vision opportunities will never be clearly and fully embraced, goals and strategies will blur and effective change management face obstacles from the inside</td>
<td>Focus on innovation must be kept as must-have, generates innovative thinking within top Management to be shared internally and fosters digital mindset</td>
<td>To put business ideas into action with confidence to ultimately test and improve your decision-making</td>
</tr>
<tr>
<td><strong>Redesign HR</strong></td>
<td>Business simulations meet to bring knowledge to one another: the former with industry and company-specific insights while the latter come with fresh eyes, open minds, and instant links to the technology in place.</td>
<td>industry trends and level out feeling of involvement as well as know-how</td>
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<tr>
<td><strong>Customer centricity in HR</strong></td>
<td>Realistic and engaging learning experience where new information to the participants is gradually introduces and recreates the workplace environment where they work in teams, make decisions, and experience the consequences first-hand.</td>
<td>It allows participants to learn from mistakes, solve issues and get to test new knowledge by actually implementing it</td>
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</tr>
<tr>
<td><strong>Downsize traditional structured departments</strong></td>
<td>Build new engines to source talent, assign employees clear roles, and integrate new resources into the organisation with support. To attract talent to fulfill needed areas of expertise (e.g. IT), compensation structure must align with the (Fin)Tech companies against which banks compete. What would the employee get else where, etc.</td>
<td>Assess the digital talent with the aim of getting the best people in terms of know-how and fit for the company</td>
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</tr>
<tr>
<td><strong>Future of Digital Competitions at Mbcp</strong></td>
<td>Hire talent that is similar to the customers the Bank wants to target, according to age, skills and lifestyles.</td>
<td>This way Mbcp will be able to have a direct insight on the customers preferences and innovate on it’s basis rather than on the basis of product or technology</td>
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<tr>
<td><strong>Open hours with Executives</strong></td>
<td>Adjust teams to become more flexible, smaller and leaner. Teams and even working spaces should be variable, with people coming together to tackle projects, then disbanding and moving on to new assignments once the project is complete.</td>
<td>Given the high number of employees and the reduced budget allocated to new talent hiring, it is important that existing teams can become fully efficient, with the right people and the right agility. Mbcp employees need to be taken away of their comfort zone to feel challenged and pressured to deliver</td>
<td></td>
</tr>
<tr>
<td><strong>Future of Digital Competitions at Mbcp</strong></td>
<td>Have both internal and external Innovation competitions on new and innovative ideas from the smallest change to a new product proposal. The participants should present arguments through a small business case and present it to the judge panel.</td>
<td>With the Future of Digital Competitions at Mbcp, it allow for a bottom up initiative source, where innovation will be incentivized and employees feel they are being part of the innovation processes at their Bank</td>
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</tr>
<tr>
<td><strong>Open hours with Executives</strong></td>
<td>Implement a Chat Room Event with board members, where employees from all hierarchical levels can go and share their views.</td>
<td>The traditional vertical structure of Mbcp will become more horizontal, as barriers between C-level executives and bottom employees will decrease. The</td>
<td></td>
</tr>
<tr>
<td>Table</td>
<td>Description</td>
<td>Text</td>
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<tr>
<td><strong>Digital Centralism</strong></td>
<td>Mbcp embeds digital experts in business units that require a digital transformation. These experts support adoption across the bank. As digital activities begin to spread across the MBCP, a strong digital unit takes ownership of initiatives from the center, ensures coordination, and manages execution to finally build economies of scale in tools and processes.</td>
<td>The central unit, supervising, aligning and managing the individual digitalisation initiatives, increases efficiency and ensures that economies of scale add value.</td>
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</tr>
<tr>
<td><strong>Agile and Multidisciplinary Teams</strong></td>
<td>Teams are designed in a way that their lean size allows for quick reactions to changes in the environment and fast change of direction. As development happens in short sprints, progress remains visible and predictable. This can be implemented within three phases: first within IT, then scaling to select parts of the business, and finally extending throughout the business.</td>
<td>Apart from the fact that such a team design increases agility, quick decision making and efficiency, tracking of the team’s progress becomes easier. This in turn reduces delivery risk and enables the bank to quickly react within a fast paced and ever changing industry.</td>
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</tr>
<tr>
<td><strong>Portfolio Management</strong></td>
<td>Prioritization of various initiatives by comparing their cost of implementation with their expected business benefits. This can be done through a two by two matrix where cost of implementation runs along the x-axis and expected business benefit runs along the y-axis. Individual initiatives are then plotted on the matrix, where a third axis evaluates if they are disruptive or incremental.</td>
<td>Not only will this increase efficiency and filter out less beneficial projects, this approach increases the individual motivation of project owners to fulfill promising initiatives.</td>
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<tr>
<td><strong>Budget for experimentation</strong></td>
<td>An additional budget or shifted budget should be given to the IT to enable employees the development of and the elaboration of innovative ideas that help to reach excellence in terms of customer-orientation and to increase the user experience.</td>
<td>Research has shown that the overall IT budget has been cut continuously since 2001. The available budget is spent 90% on maintenance of the systems and 10% on innovation and experimentation.</td>
<td></td>
</tr>
<tr>
<td><strong>Innovation department within IT</strong></td>
<td>A team, responsible for the superior steering of innovation topics, should be</td>
<td>Research has shown that usually Innovation departments reside within IT. The</td>
<td></td>
</tr>
<tr>
<td>Setting up a BI department</td>
<td>A team within the digital department needs to be set up that is in charge of providing information about market and industry trends as well as the evaluation of potentially interesting company to enhance the customer’s user experience</td>
<td>Assuming that a new internal team for innovation will be set up, the demand for innovation-related topics will increase significantly. Such a BI department would ensure the agility and adaptability of the company in terms of newest trends, changing the positioning of Mbcp from a late follower to a early adopter</td>
<td></td>
</tr>
<tr>
<td>Renewal of legacy systems</td>
<td>A wave-based approach, the legacy system will be slowly renewed towards a third-level system without interrupting the business processes</td>
<td>The legacy system is the core system of the company, managing all data traffic within the company as well as storing all related data. Obsolete systems makes it in a more digital world difficult to adapt to new market situations as well as it can become an objective for any kind of collaboration with FinTechs as the IT compatibility is not given. This in turn will result in a weaker marketing position in comparison to other players</td>
<td></td>
</tr>
<tr>
<td>Launching an internal IT assessment focussing on factors that decrease Mbcp’s speed to market</td>
<td>Conducting an internal assessment that is focussed on the analysis of the current IT environment. Ultimate goal is to answer if the current development and operations process can be improved by setting up a superior agile development approach and an effective IT operation and service delivery by setting up agile approaches, SOA and a DevOps IT department</td>
<td>Analyses at Mbcp have shown that the duration until market-readiness for new developments is between 6 – 12 month (depending on project size). Within the industry, a common reason is the mismatch in handing over the process from one step to another. Setting up agile methodologies, SOA architectures and a DevOps department that gets the development and operations processes aligned, allocated, and more effective from the demand phase through the IT service provisioning may increase the speed to market for Mbcp significantly and leverage the IT organisation as a strategic lever for disruptive innovation</td>
<td></td>
</tr>
<tr>
<td>Launching an analysis of suitable company-FinTech process and</td>
<td>Conducting an analysis on the most suitable solution for creating an interface that allows Mbcp to integrate and/or exchange FinTechs easily if required.</td>
<td>A suitable solutions for an interface will increase the company’s agility in reacting to changing market circumstances. Without such an interface, synergies cannot be realized</td>
<td></td>
</tr>
<tr>
<td><strong>Digital Presence</strong></td>
<td><strong>Search Engine Optimization</strong></td>
<td>Focus on SEO by to increase the rank within the organic search result list of major search engines such as Google or Bing</td>
<td>Increase Mbcp’s website visibility, increasing number of visits and consequently customers and sales</td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Content Marketing</strong></td>
<td><strong>Creating and distributing valuable, relevant and consistent content to attract and retain defined segments and ultimately driving customer action. An example would be saving tips or estimation tools</strong></td>
<td>Communicating with your customer, creating a relationship of friendly tips and tools free of charge, to then sell your products indirectly. Furthermore, create higher engagement and indirect promotion of the brand (word-of-mouth)</td>
<td></td>
</tr>
<tr>
<td><strong>Reinforce social media presence</strong></td>
<td>Use diverse social media networks and frequently update, as an internal and external marketing tool and to manage customer relationship</td>
<td>Social media has much higher reach than traditional marketing and allows quick and responsive communication with customers, creating leads and generating buzz. It also conveys that the bank is shifting to a more digital approach</td>
<td></td>
</tr>
<tr>
<td><strong>Online media plan</strong></td>
<td>Implement a plan detailing allocation of media spending across online media (like search engine marketing or banner advertising affiliate marketing)</td>
<td>Having a structured plan with tracking, reporting and controlling tools that allow the bank to optimize the digital outlook and corresponding budget.</td>
<td></td>
</tr>
<tr>
<td><strong>Strategic Positioning</strong></td>
<td><strong>Detailed Business Plan</strong></td>
<td>Create a spreadsheet with supporting documentation that quantifies the investments and returns over time, resulting from the execution of the digital strategy</td>
<td>This way Mbcp is able to track performance and make sure the direction that is wanted is achieved; as the Business Plan will also define KPIs that will be required to measure success</td>
</tr>
</tbody>
</table>

**Source:** Own elaboration.
Appendix 7

6-Axes Model

Source: Own elaboration.

Appendix 8

3. correlate VCInvFinTech TotalVCInv
   (obs=20)

<table>
<thead>
<tr>
<th>VCInvFinTech</th>
<th>TotalVCInv</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCInvFinTech</td>
<td>1.0000</td>
</tr>
<tr>
<td>TotalVCInv</td>
<td>0.9387</td>
</tr>
</tbody>
</table>

Source: Own elaboration.
Appendix 9

. regress VCInvFinTech TotalVCInv

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>Number of obs =  20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>2.9559e+19</td>
<td>1</td>
<td>2.9559e+19</td>
<td>F(  1,    19) = 133.47</td>
</tr>
<tr>
<td>Residual</td>
<td>3.9864e+18</td>
<td>18</td>
<td>2.2147e+17</td>
<td>Prob &gt; F = 0.0000</td>
</tr>
<tr>
<td>Total</td>
<td>3.3546e+19</td>
<td>19</td>
<td>1.7656e+18</td>
<td>R-squared = 0.8812</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Adj R-squared = 0.8746</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Root MSE = 4.7e+08</td>
</tr>
</tbody>
</table>

| VCInvFinTech  | Coef.   | Std. Err. | t     | P>|t| | [95% Conf. Interval] |
|---------------|---------|-----------|-------|------|---------------------|
| TotalVCInv    | 0.1399503   | 0.0121138 | 11.55 | 0.000 | 0.1145001 to 0.1654005 |
| _cons         | -1.16e+09    | 2.44e+08  | -4.76 | 0.000 | -1.68e+09 to -6.49e+08 |

Source: Own elaboration.

Appendix 10

![Diagram](image)

Source: Own elaboration.
## 6 Abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATM</td>
<td>Automated Teller Machine</td>
</tr>
<tr>
<td>BBVA</td>
<td>Banco Bilbao Vizcaya Argentaria</td>
</tr>
<tr>
<td>bn</td>
<td>billion</td>
</tr>
<tr>
<td>CEMS</td>
<td>Community of European Management Schools</td>
</tr>
<tr>
<td>e.g.</td>
<td>exempli gratia, Latin for “for example”</td>
</tr>
<tr>
<td>EBIC</td>
<td>European Banking Industry Committee</td>
</tr>
<tr>
<td>ECB</td>
<td>European Central Bank</td>
</tr>
<tr>
<td>Et al.</td>
<td>Et alia, Latin for “and others”</td>
</tr>
<tr>
<td>Ibid.</td>
<td>ibidem, Latin for “in the same place”</td>
</tr>
<tr>
<td>IT</td>
<td>Information Technology</td>
</tr>
<tr>
<td>KPMG</td>
<td>Klynveld Peat Marwick Goerdeler</td>
</tr>
<tr>
<td>M&amp;A</td>
<td>Mergers and Acquisitions</td>
</tr>
<tr>
<td>Mbcp</td>
<td>Millennium Banco Comercial Português</td>
</tr>
<tr>
<td>Mn</td>
<td>million</td>
</tr>
<tr>
<td>No.</td>
<td>Number</td>
</tr>
<tr>
<td>Nova SBE</td>
<td>Nova School of Business and Economics</td>
</tr>
<tr>
<td>NVCA</td>
<td>National Venture Capital Association</td>
</tr>
<tr>
<td>P2P</td>
<td>Peer-to-peer</td>
</tr>
<tr>
<td>PwC</td>
<td>PricewaterhouseCoopers</td>
</tr>
<tr>
<td>Q</td>
<td>Quarter</td>
</tr>
<tr>
<td>ROE</td>
<td>Return on Equity</td>
</tr>
<tr>
<td>SWOT</td>
<td>Strengths Weaknesses Opportunities Threats</td>
</tr>
<tr>
<td>US</td>
<td>United States</td>
</tr>
<tr>
<td>US$</td>
<td>US-Dollar</td>
</tr>
<tr>
<td>VC</td>
<td>Venture Capital</td>
</tr>
</tbody>
</table>
## Glossary

<table>
<thead>
<tr>
<th>Technical term</th>
<th>Meaning</th>
</tr>
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<tbody>
<tr>
<td>FinTech</td>
<td>Dynamic segment at the intersection of the financial services and technology sectors where technology-focused start-ups and new market entrants innovate the products and services.</td>
</tr>
<tr>
<td>Unicorn</td>
<td>Start-up company valued at $1+ bn.</td>
</tr>
<tr>
<td>Millennials</td>
<td>A person reaching young adulthood around the year 2000</td>
</tr>
</tbody>
</table>
8 Sources

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