A Work Project presented as part of the requirements for the Award of a Masters Degree in Finance from the NOVA School of Business and Economics

Millennium BCP's strategic positioning in the FinTech ecosystem

Sofia Ferreira Sotto-Mayor, number 14757

A project carried out on the Masters Degree in Finance course, under the supervision of:

Professor Paulo Faroleiro

20/05/2016

ABSTRACT

The finance system has been breached by technology (FinTech) creating a massive disruption. Millennium BCP needs to engage measures to overcome this threat. Research narrowed the choices of the Mbcp to five hypothesis, acquire a FinTech, partner with a FinTech, open a Venture Capital fund focused on FinTechs, launch a FinTech accelerator or build a Research Centre. Testing each of the alternatives, it was clear that a VC fund and an accelerator would allow the bank to have maximum exposure to innovation, access to market information and build a point of origin for strategic partnerships or acquisitions.

1. BRIEF CONTEXT

a. Client

Millennium BCP (Banco Comercial Português) is the largest private bank in Portugal. It was founded in 1985, following the deregulation of the Portuguese financial system, allowing private capital commercial banks to be established in the Portuguese market. The bank began by investing in the organic growth of the firm, and from 1994 onwards, it resorted to inorganic acquisitions to pave its way to the top, mainly due to the rising competition in the market and its deregulation. In the 90s Millennium BPC (Mbcp) was renowned for its financial innovations, personalized services, diversified product portfolio and innovative promotional campaigns. These are the pillars of what Mbcp is today. As one of the major players in the Portuguese market, the next step was to go abroad. The bank currently operates in Mozambique, Angola, Poland and Switzerland.

BCP's shareholder structure is extremely scattered with only two shareholders with a holding of more than 5%. Mbcp's current organisational culture is a top-down hierarchy, with a board of directors that governs the day-to-day management and reports to the Executive Committee, by holding Commissions and Sub-commissions.

b. Market Overview

The financial crisis of 2008 rocked the banking system as we know it, and the too big to fail concept was brought to an end. For this reason, financial institutions lost the image of trust that customers deposited on them, where events such as Lehman Brothers, Citi Group, Banco Espírito Santo were just a small sample. This loss of confidence aligned with increasingly tighter regulations, was the trigger that many developers needed to build massive technology developments towards creating agile, simple, convenient and transparent financial products substitutes, so called FinTech

StartUps[1]. Banks reacted differently to the new kid on the block, some saw it as a possibility for differentiation others as a threat for the banking structure. Either way, given the accelerated pace of investment in FinTechs that led to a 200% YOY increase in funding of global FinTech, it is unquestionable that financial institutions are pressured to innovate in order not to lose market share. But there is an unfair advantage of FinTechs compared to banks when it comes to building innovative product offerings. Banks' possess old legacy systems, a broad-spectrum product portfolio leading to a lack of focus, complex and lengthy innovation processes, regulatory uncertainty compared to the low regulation applicable to StartUps and many other obsolete systems that will make it arduous for a bank to either build competitive product offerings as well as integrate FinTechs in their business models.

In Portugal, the FinTech scenario is still hindered. One reason stems from the delay in adoption of digital by the Portuguese market when compared to other more evolved countries. For instance, the Portuguese average in terms of new technology usage in banking is 29%, which is considerably lower than the world's average (appendix I). In fact, ATM's are the most popular banking channel in Portugal with 62% penetration rate. Secondly, the supply of quality FinTechs in the Portuguese market is scarce, as the most promising Portuguese FinTech StartUps tend to escape to more financial hubs such as London, where there is less regulation. Thirdly, Portuguese banks are still constrained by the outstanding debt to the state, having few or close to no financial capabilities to reinvest in innovation.

However, there are also three solid arguments for Portuguese banks to start embracing this disruption promptly. Firstly, according to Statista, Portuguese online banking

---

[1] FinTech StartUps or FinTechs operate in many different fields within the financial industry; they are usually split into 4 categories, digital payments (online B2B commerce, mobile wallet, mobile P2P money transfer and crypto currencies), business finance (lending platforms and crowdfunding), consumer finance (customer lending platforms and automated investment services) and insurance (usage based insurance and data capture and analytics)

demand will increase by 13.4% and digital payments by around 21% by 2020, which can be used as a benchmark for digital evolution awareness and adoption in Portugal. Additionally, Spanish banks have taken bold steps to take over the Portuguese banking system (Reis, A., & Montijano, M. M., 2016). Portuguese banks must bear in mind that these banks have made major investments in FinTech development and knowledge expertise, and will, in all likelihood, be the first movers to provide the growing digital population with FinTech offerings, obtaining Mbcp's market share.

Lastly, and most importantly, looking at the Portuguese market is no longer enough as competition can come from other countries as well. FinTechs, such as Number 26, a 100% mobile bank, are not setting boundaries to their expansion, according to the founder "It's here we start to build the first true pan-European bank". Henceforth, Portuguese banks cannot lower their guard.

c. Current client situation

Mbcp currently possesses key strengths in the market; such as its brand perception among the Portuguese population, as customers trust the bank and still build an image around the bank's success in the 90's. This capability is indeed hard to imitate, rare among the Portuguese market and irreplaceable. Moreover, it is a bank with international branches that ensure stability and allow for the integration of the entire existing worldwide expertise network.

Conversely, Mbcp was not exempt from the post financial crisis damage, requiring a bailout by the Portuguese state of €3 bn, an amount that is to be paid by the end of 2017. The crisis also led to several capital restrictions that limited the bank's ability to innovate and become more agile. Mbcp had to undergo strict restructuring measures that were capped by the state such the elimination of a vast number of branches and employee cuts. In fact, the bank's current employee structure possesses an average

age of 38 years and this is expected to increase. This destructive outlook did not help the bank manage the FinTech disruption that was felt internationally, on the contrary, leading the bank into survival mode, no re-investment in innovation, solely in maintaining the business, major divestments, slow reaction towards market trends, lengthy innovation processes, out-dated IT systems and no digital mind-set among employees. A risky position for Mbcp that is now between a rock and a hard place, as FinTech disruption slowly threatens the Portuguese banking system.

In the meantime, the bank has launched a transformation project that will last until 2017, suggesting new strategic priorities oriented to processes optimization and customer satisfaction. Nevertheless, it mainly focuses on growing through high revenue stream channels as a way to bring greater future cash flows, such as relaunching the affluent segment and leading the corporate segment. Little attention is paid to the digital side of the Bank, as it will require large investments and benefits are still uncertain considering the early stage of development.

If Mbcp wishes to maintain its market position and avoid dissipating the customer trust consumers hold on to, it should begin creating a strategic plan that encounters solutions to the FinTech disruption that lies ahead.

d. The Business Project challenge

For the purpose of the Business project, the CEMS team was asked by Mbcp to find an appropriate solution for the bank to approach FinTech StartUps with the aim of bringing value to Millennium's customers. In other words, to build a model that will allow Mbcp to have a continuous outlook of major changes taking place in the financial industry worldwide and, as such, avoid losing any eminent opportunities to other competitors, where the bank may actively take action.

2. REFLECTION ON THE WORK DONE

a. Problem definition

The challenge proposed by Mbcp encompassed the definition of detailed approach to FinTech, tailored to the bank's needs and concentrating on customers' centricity. Nevertheless, early in the project another problem was identified that if not corrected would compromise the outcome of our delivery. As a result of many internal meetings, it was clear that Mbcp did not have the necessary foundation to implement a sustainable FinTech approach. Which led to the decision to expand the scope of the project to address two problems, a stage zero, implement the necessary changes to make Mbcp FinTech ready, and a stage one, implement an optimal FinTech approach for Mbcp to bring customer value.

Many large corporations in the current economy are facing challenges given the ossified management process, old and narrow-minded metrics, a disfranchised front line, top down power structure, lack of diversity in the work place, punishment as a leadership method (Birkingshaw J, 2013). Mbcp as a large corporation, a conglomerate of many small banks, with offerings in a wide range of non-core products, 7500 employees in Portugal alone; is also facing these challenges.

After gathering information from internal interviews, it was clear that before defining a FinTech strategy the bank should be subjected to several inside transformations. As such, prior to defining a FinTech implementation plan for Mbcp, a comprehensive assessment of the bank's current state should be conducted, where potential shortcomings can be identified that could inhibit the bank from optimally embracing the digital disruption. The three main obstacles of future efficiency identified were Information technology, Governance and Human Capital. In so doing, framing a solid foundation, that will be tested on its current situation repercussions and fixed through a set of initiatives, in favour of building a corporation where innovation can be fostered and easily integrated; which is an important matter given the accelerated innovation flow in banking and particularly when dealing with technology.

Only once the bank is prepared, can it face the FinTech ecosystem that is being built around the financial system. For the past 20 years, Generation X and Y assumed a significant role in the financial industry, where preferences behind a financial institution were based on its stability, branch accessibility, fees and rates as well previous referrals. Now, the impact on the financial services industry is being driven by Millennials, a generation [1980; 2000] soon to begin their professional lives or at an early stage and currently looking for solutions to manage their finances in an efficient and simple way. They are defined by a distinct preference for state of the art experiences, looking for less time-consuming solutions that are at the same time convenient. This is the generation that will accelerate the adoption of many FinTech solutions. Given their lack of risk aversion and continuous search for new opportunities in a globalized world.

Thus, FinTech StartUps were built with the purpose of either reaching markets where traditional finance service companies do not serve, provide customers with improved and advanced personalized offers or allow for complete financial mobility. As such, constituting a threat to both new growth opportunities in banking as well as to incumbents' established market share.

Each disruptor usually tackles a specific financial offering, turning it into a customer centric, accessible, convenient, tailored and transparent product. Thus, quickly redrawing the competitive outlook of the financial system in many, if not all, directions within a bank's wide range portfolio. Consequently, there is still much uncertainty regarding the course of action, as little is documented about successful case studies. Given the urgency of the matter at hand, it is not enough to wait for other financial institutions to define the best route to take, but rather to define the optimal FinTech interaction as a way of properly understanding the new competitive outlook and allow the Mbcp to act accordingly.

b. Methodology

FinTech Readiness stage was developed with several internal interviews conducted at Mbcp's in mind, more precisely, with the departments of Processes, Regulation and Compliance IT, Human Resources and Marketing and CRM. Information was gathered and three main concerns emerged repetitively, Information technology, Governance and Human Capital. The information was assembled and structured in a visual and non-partisan way such that the most important gaps would not lose significance. Thus, a spider web of six central vectors (appendix II) was derived from the three initial sections. The vectors represent sub sections that require improvement. For each sub section an As-Is vs To-Be state was defined.

The spider web was used as a quantifiable basis to structurally challenge the As-Is state and propose initiatives with the aim of closing the gap and allowing the bank to reach the To-Be state. At this point, Mbcp is ready for the FinTech. The As-Is state was analysed and graded from [1-10], based on internal interviews and in-house information provided by the bank. Then, a set of initiatives was proposed aiming at reaching target grade between [1-10], such that the bank is qualified to proceed to *FinTech Approach stage*. Only after the To-Be state is reached, can Mbcp significantly reduce the risks of a FinTech interaction.

Directly after, follows the *FinTech Approach*, where a hypothesis-based methodology was used to test five out of the six alternative solutions identified through benchmarking the banking interaction with FinTechs. Each hypothesis was split into sub-hypotheses, which were intrinsically tailored to the bank's characteristics or FinTech environment specificities. After tested, the approval or refutation of the sub-hypothesis will provide grounds to decide the most suitable solution for Mbcp to tackle FinTech StartUps. A snapshot of the methodology to tackle the problems that were identified can be found in appendix III.

FinTech Readiness- Stage zero

The internal analysis was comprised of several interviews that provided an understanding of the bank's risk aversion, mind-set, know-how, processes, governance, IT, human resources, marketing and communication, etc. For the assessment of the bank a spider web diagram was used. Each pillar identifies a gap within the bank, IT, Digital presence, Mind-set, Know-how, Governance and Strategic positioning. A grading system for the As-Is state defined according to the quality of the current As-Is state and risk of blocking further phases to nourish FinTech Readiness, as well as a To-Be grade, defined based on crucial upkeeps that must be fostered within the bank to enable the bank to become competitive in the digital side of banking. A detailed description of Stage zero can be found in appendix IV.

FinTech Approach – Stage one:

For each of the 6 hypotheses a description, motivation triggers and best practices in the industry will be outlined.

1. Mergers or acquisitions

A merger or acquisition is the consolidation of two companies. Merging the two firms combines forces, while by acquiring a firm one will take over another. Given the early stage in development of FinTech StartUps and their small size, there is no indication of a merge between two firms; nevertheless acquisitions are a rising trend.

M&A allows the bank to grow inorganically either with the purpose of quickly enhancing their current product portfolio, acquiring the knowledge of a particular technology, or even tapping into new markets. From 2013 to 2015, the number of M&A transactions in FinTech has increased by 69% (Investopedia, 2016). An example of a recent FinTech transaction by a large financial institution was Holvi's acquisition by BBVA, with the aim of accomplishing knowledge transfer, as well as ideas through young talent acquisition.

2. Partnerships:

Definition partnerships are cooperative arrangements between two organizations where the profits and liabilities of the new venture are shared. There are two distinct types of partnerships, whose motivations will vary accordingly. First, the strategic alliances, which are used to reshape a company's processes, or upgrade systems, and are typically settled when a firm is losing track of innovation in their core business. Second, white label partnering allows firms to acquire external expertise of a particular technology of interest in adjacent products to the core, given the lack of know-how and cost benefit of learning the technology.

A survey revealed that partnering with FinTechs accounts for 32% of the strategic solutions corporations use to address StartUps. One recent partnership was between Union bank and Lending Club (peer to peer lending), a strategic alliance that allowed the bank to purchase personal loans from Lending club at lower operating costs and Lending club to enlarge its customer base.

3. Venture Capital Fund:

By definition a Venture capital fund is a provision of long-term, committed share of capital for early stage companies' growth. In exchange for the capital, VC funds receive a stake of returns proportional to the amount of equity to be owned.

In Europe, VCs have increased their investment in FinTechs by 30% from 2014 to 2015 (CB insights, 2015). The motivations behind this approach can either be the monetary return or the knowledge bridge between the bank and outside innovation. There are two examples in the market that show the diversity of banks that are looking at VC funds as a viable source of both returns and knowledge. The first is BBVA, which launched an independent Venture capital called Proper Venture Partners in February 2016. This VC fund was equipped with $250 mn and is investing in a very diverse portfolio of FinTechs. On the other hand, ABN Amro, a small Dutch bank, established a VC fund of €10 mn and mainly concentrates on products and operations that are in line with the banks core business.

4. Business Incubation

The business incubation approach can be split into two categories, accelerators and incubators. By definition, incubators[2] are facility centric and designed to foster the development and growth of ideas into marketable product. While accelerators[3] are advisory centric and aim at fast-tracking the growth established in early stage StartUps. Corporate incubators[4] are built with the purpose of strengthening a firm's core business, by tailoring first-hand ideas to the firms core business. In addition, they are also used as a marketing strategy, representing a more innovative culture tactic. It is a concept that better applies to firms in a competitive industry with a defined direction demanding continuous development of its core business. On the other hand, Corporate Accelerators[5] are designed with the purpose of transferring expertise and knowledge from promising innovations to the corporate side and thus promote

[2] Incubators provide a co-working space to startups where innovation can be fostered and shared; are often government-funded and generally take no equity
[3] Accelerators are fixed-term, cohort-based programs, that include mentorship and educational components and culminate in a public pitch event or demo day
[4] Corporate incubator is a program of a larger company that acts akin to an incubator
[5] Corporate accelerator is a program of a larger company that acts akin to a seed accelerator

business development through acquisitions, partnerships, etc. Hence, it is more useful for a disrupted industry in a wide range of products besides core business.

Corporations behind corporate incubators and corporate accelerators typically partner with an independent incubator or accelerator in the market that has experience in managing early stage ideas and businesses. Until today, there is still no corporate incubator in the banking industry built. The reason behind this is the lack of a clear future outlook for the banking system with significant disruptors in a wide range of products, which makes incubators less of an added value. Furthermore, as a mere shared workspace, the opportunity for a relationship between the bank and the ventures will be narrow and incentives will not be aligned. On the other hand, corporate accelerators have gained much traction in the banking industry. For instance, Barclays Accelerator in a partnership with Techstars. Barclays recognises the innovation that is cultivated among these clusters of new opportunities and tech expertise.

1. Research Centre

A Research centre is an additional administrative unit within the corporation. It fulfils the purpose of facilitating the market monitoring and business development.

Financial institutions, more than any other industry, have been increasing their investment in internal innovation and research. Reinvestment in innovation is surpassing the 84% of the overall money retained by firms (EFMA, 2015). The BBVA innovation centre is an exemplary research model. It is an invention cluster that leverages on the collaboration between employees, entrepreneurs, StartUps and developers to gather and build ideas to meet the challenges faced by the bank. It is a knowledge network that tracks and attracts major projects to the bank.

6. Product development

Product development involves the creation of technologies on the basis of internal know-how and expertise. A 100% independent product development approach undertaken by a bank is hard to trace, as product development in complex fields, such as technology, will require the bank to first implement one or more of the previous alternatives mentioned. Inclusively, the ultimate goal of any of the previously explained approaches are the opportunity to discover, test, develop and offer to the customer the latest products and services. Hence, in order to keep the project's hypothesis MECE, product development will be excluded for the hypothesis testing. For instance, ABN Amro bank is now testing a pilot project for the Grid App, which has been developed through the collaboration with a FinTech StartUp, Tink design.

i. Hypothesis

The hypothesis methodology allows one to decide on which of the alternative solutions Mbcp should focus on. By restricting the scope of the project to 5 alternatives, it is simpler to assess which approach creates the highest impact in the bank. A initial set of 5 hypotheses will question whether M&A, partnerships, VC fund, corporate accelerators and research centres are the right approach for Mbcp to tackle FinTech. From these hypotheses sub-hypotheses will be raised. If the sub-hypotheses are verified, the initial hypothesis is likely to be true.

ii. Analysis

First, in order for M&A to be a good fit for Mbcp, at least one of the two types of M&A needs to be beneficial in Mbcp's environment (absorption integration[6] or symbiotic integration[7]). To test this premise, one should assess whether the advantages behind M&A remain true for Mbcp. Regarding skills and know-how,

[6] Absorption integration requires a full integration of the acquired StartUp into the bank's operations

[7] Symbiotic integration implies that Mbcp keeps it as separate entity

Mbcp would be able to access information much better through absorption integration, as there would be no barrier in information flow. In monetary requirements, absorption comes with higher costs given the idiosyncrasies (information, leadership roles) in both companies that require additional financing support, while with a symbiotic integration, the operations will be managed in a decentralised way. In terms of culture clashes, symbiotic integration is usually more attractive for StartUps that are afraid of losing their culture and values by being merged with a large institution. The regulation ecosystem will also differ, as in a symbiotic integration the bank will be able to take advantage of the reduced regulations applicable to FinTechs, while in an absorption integration the regulations will be osmosis to the StartUp (Schweizer, 2005). Hence, the sub-hypothesis can be verified, assuming that full integration would allow Mbcp to attract StartUps and at the same time avoid restricting FinTechs to the same sluggish controls of banks.

The second sub-hypothesis assesses whether Mbcp has the IT capabilities to acquire a FinTech. Assuming the initiatives proposed in stage zero were carried on, and the legacy systems replaced, the new technology can be integrated within the system. However, there are other issues and complexities that tend to be disregarded, and, given the specificity, were not addressed in the *FinTech Readiness stage.* Such as distribution of IT roles going forward, which is crucial to make systems decisions quickly and transparently, while planning of efficient integrated operations during the merge will imply an increase in costs. Therefore, IT would require special attention upon an acquisition of a FinTech and the outcome is uncertain.

The last sub-hypothesis tests whether Mbcp has the financial capabilities to acquire a FinTech. Mbcp is expected to repay its state loans by 2017, only then will the bank release funds towards innovation. However, there are two obstacles to M&A

financing, firstly the high multiples[8] (30.7x EBITDA) evidenced in tech firms acquisitions in 2014, where the acquirers are paying a large premium and having low return on investment (Trendall, 2015). But since Mbcp has little capital available, it could be hard to finance large acquisitions with money, plus even if the bank considered finalising the transaction with stock, it would be unrealistic bearing in mind Mbcp's stock currently trades at €0.04. Summarizing, M&A through a symbiotic integration could be an approach for Mbcp, but considering the obstacle that IT complexity, post-merger integration and capital constraints entail it is not the right approach for Mbcp to address FinTechs.

Partnerships were the second hypothesis to be tested, under which two sub-hypotheses were raised. First, whether partnerships could increase Mbcp's customer base, and the results have shown that due to regulatory uncertainty, cultural and operational mismanagement and Mbcp's digital vision this would lead to its refutation. In particular, successful customer integration in both directions requires information to be shared which does not comply with regulations. In addition, there are many cultural clashes between banks and StartUps, different mind-sets, working habits, which would create an unstable environment for growth. Regarding Mbcp's risk aversion, which is an intrinsic characteristic of the bank, partnering with an early stage FinTech (risky by nature) would be hard to accomplish.

The next sub-hypothesis questions whether partnering with a FinTech firm is a viable option to ease proximity between Mbcp and game-changing technologies. Similar to the issues presented in M&A, technology incorporation implies many logistical and cultural complications that bring uncertainty as to the ability to be a cost-effective solution. On the whole, partnerships are not yet the right approach for Mbcp to

[8] A high transaction multiple such as 30.7x implies the acquiring firm would be paying 30.7 times over the earnings of the startups

address FinTechs, as there might be others with similar advantages at a lower cost benefit; as for instance Venture Capital Funds.

In order to test the hypothesis that VC funds are the right approach for Mbcp, one should question if VC fund's independence from Mbcp grants the best access to FinTechs. An independent VC fund[9] would allow Mbcp not to be restricted by financial institution regulation, which typically limits a bank's stake in a venture, therefore allowing it to have more control over the StartUp. The independent VC opens interaction opportunities between FinTechs that might not be interested in partnering with a bank due to cultural clashes. Additionally, by maintaining the fund's independence it can assess possibilities that might not fit under Mbcp's functions. All in all, it can be verified that an independent VC fund would grant the best access to FinTechs.

Whether an independent VC fund sets the focus on the right FinTech strategic positioning is another premise that should be calculated. An independent VC fund will foster an environment in which there is enough time to test and develop innovative ideas while still running the bank's normal operations. The financial exposure is limited to the VC, but the know-how is transversal, as the bank will get access to new business models and technologies.

Lastly, the final sub-hypothesis focuses on the VC's efficiency in engaging with FinTechs. First, considering a small independent VC team will be in place, it will allow for quick decision-making; a key attribute in the changing environment. In addition, the independent VC fund will not underlie the same regulations as the incumbent bank; being able to provide StartUps with the freedom banks are not capable of. Lastly, the focus of the fund is not limited to any industry, location or investment size, which provides a much larger set of opportunities to efficiently hold

[9] An Independent Venture Capital Fund is a capital risk fund totally owned by the bank but acting as a separate entity

disruptive ventures. All things considered, an independent VC fund seems to be an appropriate solution for Mbcp, as every statement was confirmed, proving to be an efficient and strategic solution.

The next type of interaction to be tested through the hypothesis method is the Corporate Accelerator. From it, three other sub-hypotheses were raised. One questioned the ability of corporate accelerators bringing Mbcp up-to-date with FinTech market development. First, according to the definition of an accelerator, it "acts as a knowledge hub of business-building expertise where good ideas are nurtured and from which knowledge is transferred to other units in the corporation" (Becker & Gassmann, 2006). Expressing the centricity of knowledge creation behind. In addition, the implicit cutting-edge thinking and information gathering provides valuable external input to the bank, which would be restricted for an Internal Research centre. Finally, every Accelerator culminates in a Demo day, where all StartUps pitch their junior business to investors. Hence the bank will be able to further invest in promising FinTechs and track where the investment is going.

The second sub-hypothesis regards Mbcp's capabilities to optimally support FinTech StartUps. There were two limitations identified at Mbcp, the lack of sufficient networking and connections within the FinTech industry, given that Mbcp does not detain serial entrepreneurial mentorship, tech experts and sufficient investor relations to fulfil the FinTechs requirements in the mentorship and funding offered. In addition, the decision-making amongst large corporations is lengthy and bureaucratic, which could hold back innovation amongst the StartUps. Nevertheless, these two limitations are often externalised through a partnership with a third party accelerator with expertise in FinTech, a common trend in recent financial institutions.

Finally, one should analyse whether Mbcp has the right brand to develop a corporate accelerator. Any accelerator should have an innovative brand attached to attract the most promising StartUps. Mbcp has been, over the past 30 years, known to be an avant-garde and dynamic bank (Millennium BCP, 2015), which, despite the financial constraints of the last ten years that constituted an innovation barrier, the bank is still perceived among the Portuguese as an innovative bank. Thus, Mbcp's brand can carry some positive influence in FinTechs.

Overall, it can be concluded that Corporate Accelerators through the collaboration with a third party accelerator can be a good approach for Mbcp to address FinTechs. By maintaining them with up-to-date information about the unknown territory of FinTechs, leveraging the bank's innovative brand to attract the best talent and, helping to maintain the innovative and dynamic brand perception.

Finally, Research centres, as an approach for Mbcp, should be tested. Initially, one should question Research centre's ability to quickly tap into FinTech disruption, as it takes time to implement and develop, requiring at the same time high investment, and Mbcp has neither one. In addition, for the Research centre to be impactful it requires a high level of integration of employees, which tends to fade with time, eventually becoming ineffective and losing its initial effect. The second sub-hypothesis regards the possibility of having in place a collaborative research centre, which would provide a faster implementation and better support. However, by having an open talent platform all research efforts will be given away to external collaborators. All in all, a Research Centre would make it impossible for Mbcp to keep pace with the industry.

In conclusion, out of the five tested hypotheses, an independent VC fund and a corporate accelerator in collaboration with a third party accelerator are the ones that would create the most impact and have the uppermost cost-benefit results.

c. Recommendations

The next step requires the proposal of an implementation plan for each of the most suitable solutions. This plan will be divided into the preliminary work, the formation process, the development of a diversified portfolio, the preparation to enter the innovation flow and the communication channels for bilateral strategy development.

Some preliminary work is required for the independent VC fund to be properly implemented in Mbcp, such as a team of FinTech experts who can identify promising ventures, whilst ensuring a clear innovation strategy is defined within the bank to align market trends and opportunities to fit its strategy. Then follows the formation process, where Mbcp should take advantage of EU sponsored funds for capital investment to help finance the fund. In addition, the VC fund should make it clear that the goal of the fund is know-how transfer not maximising returns. The third stage is the development of a diversified portfolio, which will imply the total freedom of the venture management in investing decisions (emerging trends, geographies, industries) but always considering realistic risk and return expectations. The forth stage is the preparation to enter innovation flow, where the synergies between the fund and the investee should be fostered and target a long-term supportive relationship. Paramount is the final stage, which defines the communication channels for bilateral strategy development. First, set up a consulting committee comprised of members of Mbcp's board, corporate strategy team and independent advisors. Then, have general partners participate in the annual strategic planning, and be integrated in the Tech panel responsible for the market updating during executive committees. And finally, create an interface with the Corporate accelerator, so as to offer as a service to the investees.

As for the implementation plan for Corporate accelerator, prior to the formation, Mbcp should align internal objectives and vision, where a FinTech community leaders' meeting should be arranged to solicit external opinion from individual experts and define cost expectations, sources of financing, etc. Moreover, a workshop for young ventures should be held to access their needs in order to grant them the necessary conditions upon implementation. Then, the formation process will involve the selection of a seed accelerator to partner, where experience in FinTech as well as shared values should be a prerequisite. In addition, the top manager of the accelerator should be the top manager of the cross-function digital unit proposed in Stage zero, as it allows for an overview of what is done in house and what is offered in the market. Further, the accelerator will focus on innovation integration meaning it will be a cost centre, therefore it is key to secure commitment from potential stakeholders (local government, EIB). Then, the third phase involves the development of a diversified innovation portfolio, which will be reached by settling the accelerator's location in Lisbon, as Lisbon's City hall plans to transform the city into a StartUp city fostering a strong flow of ideas and early ventures. The next stage is to prepare Mbcp for the innovation flow, which requires ensuring C level management is involved in the process, inspiring and leading the rest of the firm to bring results; and source part of cross functional digital unit to the accelerator management team. The communication channels for bilateral strategy development will be guaranteed by the cross-functional digital team, which manages internal and external innovation, in addition to the presence of the accelerator top manager in the Tech panel. Also, in reverse Mbcp's top managers could mentor some of the FinTechs. Finally, the accelerator and VC interface, as the VC can take advantage of the accelerator's inside information on the StartUps effectiveness and quality of the team, market size and products' traction, which would greatly facilitate VC's choice upon choosing the right portfolio of firms.

d. Shortcomings

There are of course some risks regarding each of the decided solutions. For instance, the inability for the VC fund to source the right FinTechs, the information asymmetry of the FinTech founders, lack of managerial involvement and limited financial resources. In addition, corporate accelerators also face the risk of not being able to attract talent, the top management not setting results expectations minimizing overall incentives to deliver and the inability to turn information into useful actions to bring customer value.

e. Individual contribution

As responsible for the market research, in the beginning of the project, my goal was to have a clear vision of where the market was heading. As I began researching I realised that banks were acting in completely distinct ways and I was not able to find a clear pattern in the way banks and FinTechs were interacting. The disruption scope was too large and too recent to identify the best practices, making it impossible to recommend, with any degree of certainty, the next big thing in FinTech to Mbcp. Therefore, I started to reflect on how the deliverable would be structured. I then understood what Mbcp needed was a guide on how to know what is the next big thing in FinTech. Therefore, I benchmarked BBVA, Santander, AIB and ABN Amro FinTech interactions and I realised there were 6 ways for the bank to settle a position within the disruption. I am convinced that my ability to look at the big picture rather than one scenario was critical to allow the group to tackle the question proposed by Millennium BCP and, therefore, the project's success and quality of the deliverable.

3. ACADEMIC DISCUSSION

The Business project's scope is inherently related to my area of study. Throughout the project there were numerous situations where a finance background was an asset, in particular issues related to FinTech StartUps valuation[10].

Despite having drifted away from each StartUp's utility to a more general positioning of Mbcp within the FinTech ecosystem, the project's problem definition required much market research. During this research, what caught my attention most was the market trend to over value Tech StartUps. There is evidence that Tech StartUps are being transacted at higher prices than the fair price. In this academic revision, I propose to analyse the reason behind Tech StartUps overvaluation in the market and high-priced Initial Public Offerings[11]. What are the triggers for investors to act irrationally? Are we currently in a tech bubble? How does this relate to Mbcp?

1. Funding Cycle of StartUps

The typical funding life cycle of a StartUp comprises a development stage, in which there is an idea that needs to be developed, requiring moderate funding needs to transform into a viable product, it is usually financed by the founders themselves. Then follows the seed stage where the product is closer to being complete and financing is required to do market research and assess consumer preferences, at this stage the venture might be funded by business angles[12], crowdfunding[13]or government support. The third, and most important stage, is the Growth stage, where the StartUp requires funds to set up facilities and commence production and marketing and create

---

10 [1]Valuation is the estimation the value of a company.

11 IPO (initial public offering) is the first time a company's shares are offered to a large audience of public investors in a market where they can be freely traded

12 [3]Business angels are high net worth individual who invests a portion of his wealth in startup companies aiming at profiting at exit

13 Crowdfunding is the use of small amounts of capital from a large number of individuals to finance new business ventures

a business model that will generate long-term profit. Within this stage many funding rounds can arise, Series A funding round is usually carried out by Venture Capitalists. This stage raises approximately $2 mn to $15 mn (Investopedia, 2016), but this number is increasing due to the high tech StartUp valuations and so-called Unicorns[14]. Subsequently comes Series B round, where investors will help firms expand their business and this is usually led by the same players of the previous funding round and other VCs that focus on later stage financing. Series C is used to perfect the business and scale fast, in this stage investors inject capital in efforts to achieve more than double the investment; typically these are players such as Hedge Funds, Private Equities and Investment banks. Finally, the harvesting phase, where the venture is close to maturity and investors want to abandon the business and cash out their returns. The two most common options are trade sales, in which a firm is transacted, merged or acquired by another firm; or an IPO, where the StartUp goes public.

It is important to understand that before each round, a valuation of the company pie is typically released, which is based on management thoughts (track record, market size, risk). In order to grow the size of the pie, a few slices need to be given away and auctioned off for funding.

2. The current Tech Market

There has been an exponential increase in the amount of Tech unicorns and it continues to rise. In 2010, there was only one tech unicorn; while in 2015 there were 77 unicorns (CB insights, 2016). Also note that FinTechs are at the top of this list (appendix V). Is this boom a warning that another Tech bubble is approaching?

The environment during the dotcom bubble was somehow different than the one felt today. In 2000, similar to the current trend in the tech ecosystem, the market began to

[14] StartUps valued at more than $1 bn

evidence a large boom in the value of tech firms, with valuations of 165% over the market. But at the time investment was focused on established public tech firms. Presently, the high Tech firms valuations are taking place in earlier funding rounds, to VC backed StartUps in a Pre IPO phase. It is not the public market but the private capital which is booming. Interestingly enough, recent data has shown that the most recent IPOs had overvalued opening retail price (pre IPO), but once they became public there was a steep decline in the share price (appendix VI). This comes to show how investors are looking at publicly traded StartUps as too risky an asset and are aware of its misjudgement in value. Shares in recently public tech firms are all trading below their initial public offering price today and without added pressure of an overall market decline. All in all, this evidences that the public market is not undergoing a tech bubble per se, as today's public tech valuations are roughly in line with the general market globally (Datastream, 2016). But what if the bubble is in the private capital side, the declines of post-IPO illustrates the path of companies whose previous rounds came above their eventual IPO prices. According to the definition of a bubble, "A surge in equity prices, often more than warranted by the fundamentals and usually in a particular sector, followed by a drastic drop in prices as a massive selloff occurs" (Investopedia, 2016) there is no mentioning that the price increase occurs within the public market. Hence, in my opinion, the Tech Startup ecosystem may well be experiencing a bubble.

3. How did the bubble unfold?

Both the number and size of venture investing has been increasing exponentially for the past three years (CB insights, 2016) (appendix VIII), therefore, funding sources, especially through VCs, are easily made available to StartUps. Further, the type of later stage investors are becoming more common, leading to more funding rounds and to larger Pre IPO funding rounds. Nevertheless, the question remains, why are investors setting such a high valuation for Tech StartUps?

On the one hand, this could be the result of the low valuation risk attached to VCs. Typically VCs and other later stage investors have deal terms that mitigate this valuation risk, such as valuation ratchets, liquidation preferences, dividends and management fees that create price protection. Conversely, IPO investors lack this price protection. This is the reason why the prices are only setting off when entering the public market. In the future, I expect repercussions to be reflected in the private market as well, and thus later stage valuations to decrease, making it crucial for a VC fund to carefully negotiate to the term sheet protections. On the other hand, the optimism of later stage investors, which do not impose a ceiling on the expectations of the Tech StartUp, is feeding this irrationality in Tech Startup pricing. These Startups do indeed have strong revenue growth, but there is a record net loss which led to a small net income. Appendix IX shows the most expensive Tech companies' ratio Net Loss over Income (in $mn) where virtually none has a positive ratio. This goes to show how investors' confidence in these companies' future growth is leading to an overvaluation.

4. How does this affect Mbcp's positioning?

In my opinion, this issue should be of interest for Mbcp, as it aims to open a VC fund. Nevertheless, given the expression of the Portuguese market, Unicorns are the least of the bank's concerns. As a recommendation, I would stress the importance of valuations of pre-IPO start-ups, as it requires special attention, when investing in later rounds. The VC should control the current term sheet and division of power protections, as it can define how the pie is split between investors in the end.

5. PERSONAL REFLECTION

a) Personal experience

In my opinion, the business project concept was a great added value to my academic experience and hopefully for every CEMS student regardless of the company or topic. One gets to interact with colleagues on a long-term project, involving a detailed structuring process, important decision-making and group dedication to allow for the project to succeed. Plus, one has to understand the responsibility of working in a team, having a common goal, arranging time and prioritising, managing advisors' expectations, etc. This, in my opinion, goes hand in hand with most future working environments that will await us. In accordance, the teamwork experience was, without doubt, a great preparation for the professional path.

i. Key strengths and weaknesses

Personally, my key strengths were my drive towards results and my communication capabilities. In specific, unlike other projects, the proposed problem did not have a clear solution from the start. Hence, it is important that one is able to always have a visualization of the deliverable in order to question the fundamentals of the methodology and not simply the details. Hence, every time a question arose it was important to check if it made sense within the scope of the question that was proposed by Mbcp.

On the other hand, there are some things I should improve. First, I tend to do exhausting research and many times I get lost in the amount of information that I collect. This has happened several times before, but this time it was exponential given the amount to time dedicated to it. In addition, despite being a very organised person, I usually do not dedicate as much time to proof reading as necessary, which sometimes leads to sloppy outcomes. As previous experiences have taught me, just one mistake is sufficient for one to doubt all the work behind the project and, in addition, to gain the trust back you have to work three times as hard.

ii. Plan to develop areas of improvement

I plan to organise my research in advance. I realised that before starting any research one should have a clear understanding of the problem. Once the problem is defined one should reflect on the building blocks that will help to reach the final recommendation in a way that the story flows. Each one of the blocks should have a governing thought and supportive evidence, thereby guiding the research, by reaching supportive evidence for small conclusions rather than aiming to reach a final solution with no clear boundaries to search for.

In addition, regarding the proofreading, I trust that by giving myself more time to read everything at least twice is important and will make a big difference. In addition, by having it printed one can have a better overview and attention to detail.

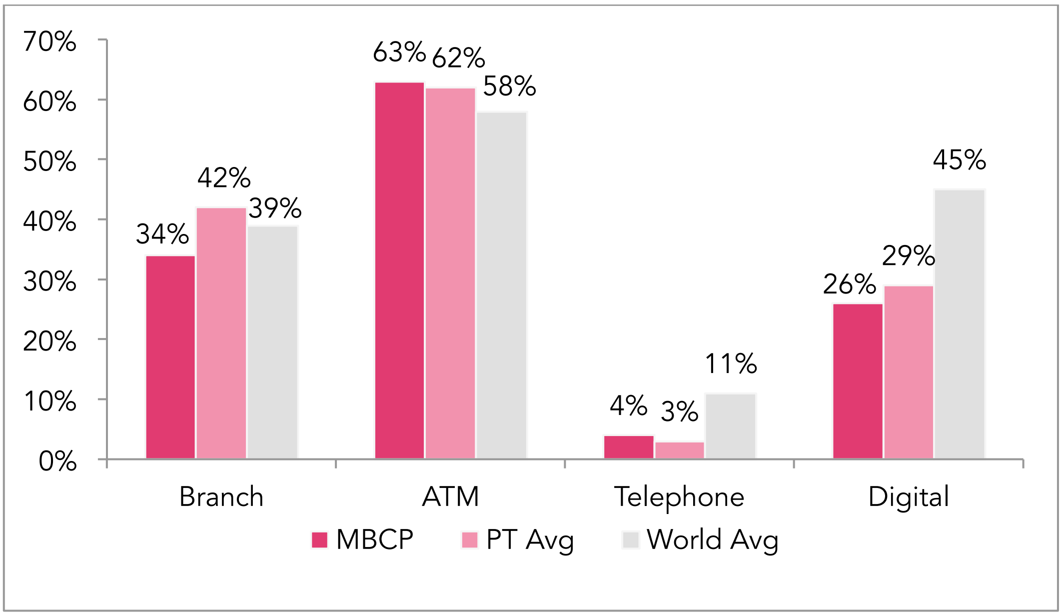
b. Benefit of Hindsight

Regarding the team in general, I believe six members in the group might be too much despite the fact that all team players added some value. Nevertheless, as no responsibilities were settled in the beginning it was hard to manage and distribute responsibilities evenly among every team member. In particular, because typically, those who had the idea were the ones who took the initiative and put the idea into practice, leading to a clear workload discrepancy between team members.

If I were to start the project again, I would allocate roles to each team member from the start as well as a fixed schedule each week for the team to update each other. In addition, I would try to engage in a profound problem definition discussion right from the start to align the team's purpose and reasoning.

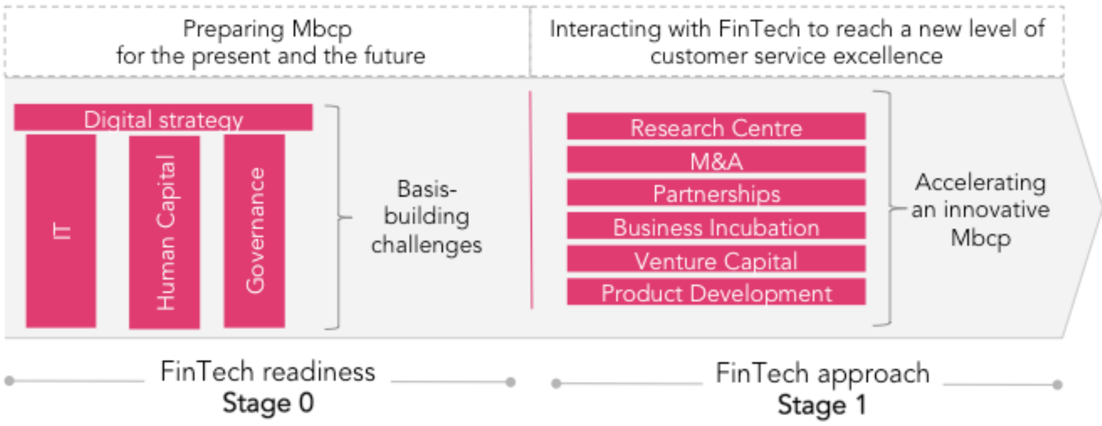
APPENDIX

Appendix I:



Appendix II: Spider Web diagram

Appendix III: Synthesised methodology snapshot



Appendix IV: *FinTech Readiness*: As-Is Vs To-Be analysis

Exhibit 1. Information technology	
As-Is	To-Be
Currently at Mbcp, IT contains an obsolete legacy system that requires high maintenance and operational costs and significantly harms the bank's agility to changes in the market. In addition, IT was identified as a bottleneck to innovation, providing an overload of ideas in the pipeline and thereby slowing	For Mbcp to become competitive in the market there are three foremost changes that must occur. Increase process agility in IT, enabling a quick reaction to the changes in the industry, for instance by setting up an effective development, operation and service delivery through a DevOps IT department.

innovation flow. Additionally, these same ideas are not prioritized at any stage of the innovation process, functioning in a FIFO approach[15]. IT budget has been continuously reduced since 2011, with focus being on maintaining the business rather than on innovation. By not allocating any budget to update the systems, the bank is at a clear disadvantage to FinTech StartUps whose IT agility is a competitive advantage. Hence, it is a priority to provide Mbcp with an IT system and personnel that allow it compete or integrate a FinTech into the bank's core-business. For these reasons, IT was graded at 5 points out of 10.	Secondly, increase adaptability to integrate FinTech StartUps in the process, where a Mbcp will have to restructure its insource/outsource scheme, to enable a clear understanding of the IT functions in place and allow a smooth interface where synergies can be realized with FinTechs. Finally, innovation should be fostered in IT as this is where responsibility for the digital context lies. In so doing, the desired score of 8 points out of 10 is attained.

Exhibit 2. Digital Presence	
As-Is	To-Be
Mbcp did not develop an approach to address the digital side of the bank. Any technological communication channel at Mbcp lacks presence, which means that the bank is losing traction amongst Millennials, the main target of FinTech StartUps. For the aforementioned reasons, Digital presence was graded 4 points out of 10	For Mbcp to become competitive in the market there are three foremost changes that must occur. Firstly, creating an online marketing plan involving activities that target Mbcp's customers that are aware of digital. Secondly, improving web presence, by taking advantage of the Search Engine optimiser to develop organic search results in Google, for instance. Lastly, improving social media presence by setting up a linked account on the most prominent social media platforms, maintaining it through current updates and promotional campaigns. Thereby reaching the desired score of 7 points out of 10

15 First idea in first idea Out

Exhibit 3. Mindset	
As-Is	To-Be
Mbcp's employees have, on average, been working in the bank for 20 years. Hence, they have a narrow-minded mentality, obstructing them from understanding the impact of digital. In fact, they consider the digital disruption of minor importance for future development. In addition, the bank follows the traditional structure of a large corporation with a solid hierarchical frame that moves slowly given the bureaucratic rules with which employees must comply. Mindset is crucial for the large corporation to smoothly embrace diversity and the young mentality culture in the bank, which would resemble the culture of FinTech Startups. Without it, it will be hard to cultivate innovation and attract FinTech integration, as they do not wish to be framed with an old incumbent for fear of having to change their culture as well. For the aforementioned reasons, Mindset was graded 4 points out of 10.	For Mbcp to become competitive in the market there are three foremost changes that must occur. First, the top management Mindset must be pushed towards Digital. For instance, through the attendance of FinTech events (Web Summit), or workshops on problem-solving innovations. Secondly, the overall Mindset must change to ensure commitment of all parties. This could be reached through, for example, reverse mentoring of older employees by young and tech savvy employees, or setting digital business simulations to foster contact among different departments or even through open hours with executives to discuss innovation. Finally, providing a solid foundation for innovation to be fostered. By organizing internal innovation competitions incentivizing a bottom up idea flow, or by hiring target-customer-like employees who have inside information of needs. In so doing, the desired score of 8 points out of 10 is reached.

Exhibit 4. Know-how	
As-Is	To-Be
Mbcp's employees have an average age of 45 years old, a large portion of them were not raised with the technological developments available today, which means many do not know their utility and therefore take the traditional, lengthier approaches to solving	For Mbcp to become competitive in the market there are three foremost changes that must occur. Ensure minimum technological know-how in the Top management level, which can be fostered by setting up a Tech panel which will report directly to the board.

problems. Mbcp has not hired since 2011, except some additional talent to be allocated in the risk office. Training budgets were cut short, hindering the present work force from the greatly needed digital learning experiences. The lack of understanding of technology limits the ability to lead and manage the changes that are being felt in the industry. Finally, the bank outsources key technical skills, which are managed by the IT department, leading to a high dependency on the bank's external knowledge and a lack of IT experts, endangering the efficiency of innovation integration. For the aforementioned reasons, Know-how was graded 5 points out of 10.	This tech panel will provide mainstream updates and movements in the industry. Alternatively, hiring a senior executive (Chief Customer Office) with a strong technology background who will be responsible for ensuring the best technology is driven by the delivery of the best customer experience. Secondly, promote common tech Know-how within the company, taking advantage of the HR academy and focusing the seminaries on digitalisation, tech usability and new tech trends. Finally, in order to keep track of the fast-paced industry, an attempt to scale up the available Know-how across the organisation by hiring new digital talent, implementing graduate programmes, partnering with universities or even hiring freelancer specialists to bring quick Know-how. Thereby reaching the desired score of 8 points out of 10.

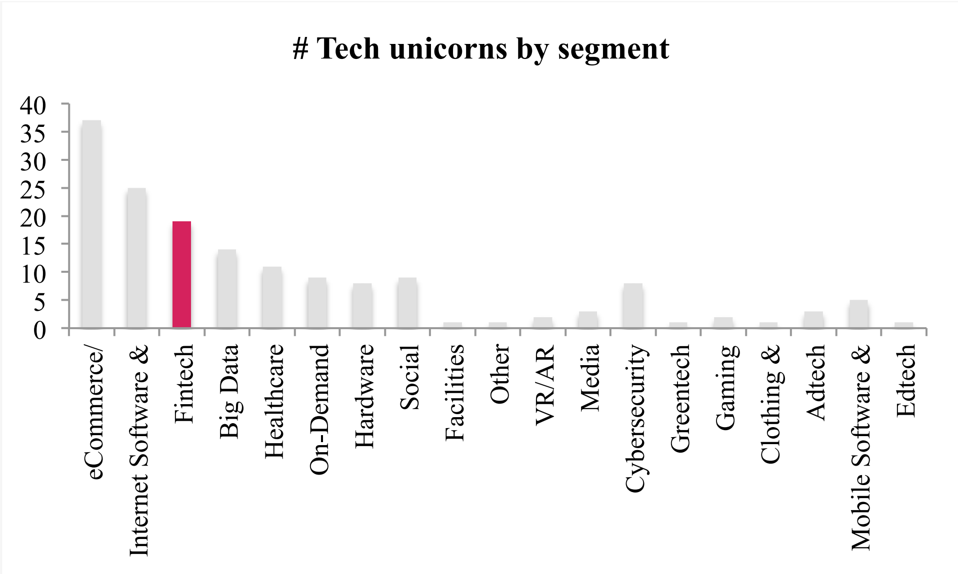
Exhibit 5. Governance	
As-Is	To-Be
Mbcp is a longstanding corporation, working with a traditional hierarchy and through much bureaucracy rules that are an impediment for information flow. Additionally, the innovation within the bank happens on a decentralised level with multiple departments involved from the idea generation to its release and there is no coordination amongst each department. As expected, Regulation and Compliance as well as IT departments are mandatory pit stops of ideas, which, given their risk aversion, constitutes another bottleneck to innovation	For Mbcp to become competitive in the market there are two foremost changes that must occur. First, governance must be structured in a way that supports the creation of ideas regardless of their source, manages the innovation effectively (bottom up idea generation). For this reason, a cross-functional digital unit should be built, where there will be a functional manager at every step of the innovation cycle, responsible for controlling bottlenecks and solving pending issues. The functional managers will report to the cross-functional team that gathers all

flow. For the aforementioned reasons, Governance was graded 4 points out of 10.	the innovation in-house and ensures there is no overlapping ideas, prioritizing the most important ideas to be released and assigning the budget accordingly. This team will have a project manager that will attend executive committees with the aim of updating the board with the current state of innovation. Finally, Mbcp should become more attractive to young talent, who prefer tech firms to working for large banks. Thus, setting up a tailor-made compensation scheme, benefits and working environment that is comparable to those of Tech companies. In so doing, the desired score of 7 points out of 10 is reached.

Exhibit 6. Strategic positioning	
As-Is	To-Be
Mbcp lacks a common vision within the bank. As the bank has been working in survival mode, the lines are blurry with regards to where the bank wishes to be positioned both in digital/FinTech markets as well as in the overall Portuguese Banking. This was mainly due to the state's impositions and restrictions that made the bank lose track. Strategic positioning is fundamental in any future strategy the bank will implement, as it will provide a shared goal to the overall organisation, thereby defining a clear purpose that will influence and direct every decision-making process in the firm. For the aforementioned reasons, Strategic positioning was graded 4 points out of 10.	For Mbcp to become competitive in the market there are three foremost changes that must occur. First, there must be business orientation, by tracking performance and making sure the desired results are implemented and achieved. This could be partially reached by creating a detailed business plan, a spreadsheet with supporting documentation which quantifies investments and returns over time. Secondly, the commitment of the top management has to be a driving force for the rest of the bank, a challenging goal that could be supported by settling open hours with top-level executives. Third, leveraging intellectual property creation, when initiatives start flowing it is important to secure them through quick patent applications or by setting a price for

	the value generated by innovation. In so doing, the desired

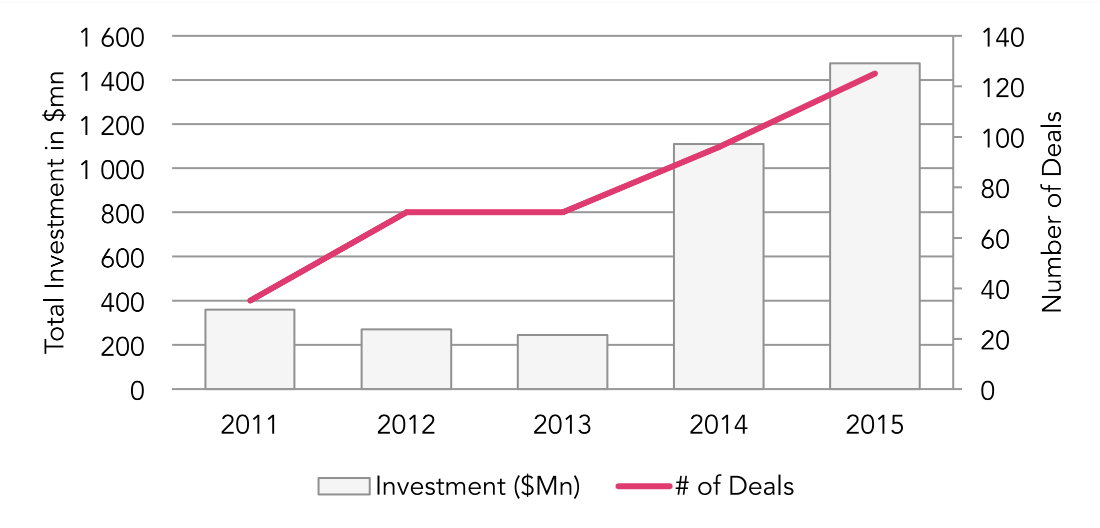
Appendix V: FinTech expression in the pool of Unicorns [2010; 2016]



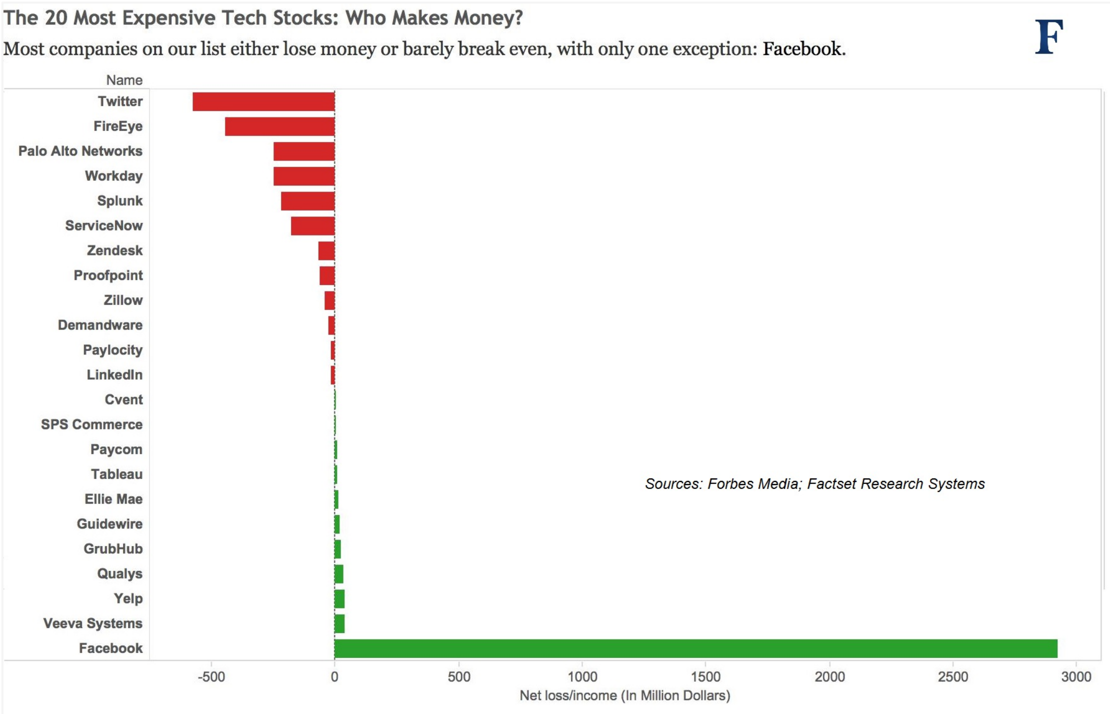
Appendix VI: Tech IPOs gone wrong

	Funding from IPO ($million)	Offering price	Opening price	Current price	Change %
On Deck Capital	$200,00	$20,00	$26,63	$8,00	-70%
Coupons.com	$168,00	$16,00	$32,43	$10,78	-67%
Lending Club	$870,00	$15,00	$23,43	$8,04	-66%
Go Pro	$425,00	$24,00	$31,00	$13,11	-58%
Rapid 7	$103,00	$16,00	$26,75	$12,62	-53%
FitBit	$732,00	$20,00	$30,40	$17,14	-44%
Ooma	$65,00	$13,00	$12,10	$7,12	-41%
True Car	$70,00	$9,00	$9,70	$6,05	-38%
Grub Hub	$200,00	$26,00	$40,00	$25,82	-35%
First Data	$2,56	$16,00	$16,39	$13,06	-20%
Atlassian	$462,00	$21,00	$27,48	$23,47	-15%
Mindbody	$101,00	$14,00	$16,22	$13,88	-14%
Alibaba	$22,00	$68,00	$92,70	$79,33	-14%
King Dig Entert.	$500,00	$22,50	$20,50	$18,00	-12%
Pure Storage	$425,00	$17,00	$16,01	$14,69	-8%
Appfolio	$74,00	$12,00	$12,15	$13,00	7%

Appendix VII: Venture backed FinTech investment



Appendix VIII: 20 Most expensive Tech Companies Net loss/ Income



References:

Becker B. & Gassmann O. (2006). *Gaining leverage effects from knowledge modes within corporate incubators.* Blackwell Publishing Ltd

Bort. J. (2016). *You'd have lost nearly 20% of your money if you bought these 21 hot tech IPOs of 2014 and 2015.* Business Insider: http://www.businessinsider.com/hot-tech-ipos-that-lost-money-2016-4

Brigl, M., Roos, A., Schmieg, F., & Watten, D. (2014, June 17). bcg.perspectives. Retrieved May 04, 2016, *from Incubators, Accelerators, Venturing, and More: How Leading Companies Search for Their Next Big Thing:*
https://www.bcgperspectives.com/content/articles/mergers_acquisitions_growth_incubators_accelerators_venturing_more_leading_companies_search_ne xt_big_thing/

Davila A. et al. (2003). *Staging Venture Capital: Empirical Evidence On The Differential Roles Of Early Versus Late Rounds* Stanford University: http://apps.olin.wustl.edu/workingpapers/pdf/2003-07-003.pdf

Deventhal. S (2016). Investopedia Retrived May 10, 2016 *Series A, B, C Funding: What It All Means and How It Works*: http://www.investopedia.com/articles/personal-finance/102015/series-b-c-funding-what-it-all-means-and-how-it-works.asp

EFMA. (2015). *Innovation in retail banking 2015.* Paris: Efma

Finextra. (2015). *Smartphone-only bank Number26 expands across Europe*. Published in news item: https://www.finextra.com/news/fullstory.aspx?newsitemid=28209

Former D. (2015, Nov 09). *Tech's big valuation correction means the system is working the way it's supposed to*: http://qz.com/554500/techs-big-valuation-correction-means-the-system-is-working-the-way-its-supposed-to/

Investopedia (2016) Retrieved May 10, 2016: *Bubble term*. From the term sheet: http://www.investopedia.com/terms/b/bubble.asp

Birkinshaw. J. 2013. Fortune Magazine. Retrieved May 10, 2016: *Why corporate giants fail to change*? http://fortune.com/2013/05/08/why-corporate-giants-fail-to-change/

PMG Enterprise and CBInsight. (2016). *Venture Pulse Q1 2016: Global Analysis of Venture Funding.* KPMG International Cooperative.

Reis, A., & Montijano, M. M. (2016, April 29). Bloomberg Technology. Retrieved May 04, 2016, from Spanish Banks Circle Capital-Hungry Portuguese Lenders: http://www.bloomberg.com/news/articles/2016-04-29/spanish-banks-circle-capital-hungry-portuguese-lenders

Statista. (n.d.). Statistics and facts on Fintech. Retrieved May 04, 2016, from http://www.statista.com/topics/2404/fintech/

Trendall S. (2015). *M&A view: stable tech firms commanding 'ludicrous premium'.* Channelnomics: http://www.channelnomics.eu/channelnomics-eu/news/2393908/m-a-view-massive-multiples-in-ludicrous-premium-on-stability