



Scenario Planning with Mobile Payments in Emerging Markets

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1255

Individual Report for Business Project: “What is the Role of Mobile Operators in the Mobile Payment Ecosystem?”

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Context of the Business Project: What is the Role of Mobile Operators in the Mobile Payments Ecosystem?

Company: Vodafone

The Vodafone group, headquartered in London, is the world's 2nd largest mobile telecommunications company in terms of revenue and had about 453 million subscribers as of June 2013. (CNN, 2013) This global enterprise offers business-to-business (B2B) services, as well as business-to-consumer (B2C) services and operations are present in Africa, the Middle East, the Americas, and the Asia-Pacific region. The operations comprise of networks owned in 21 countries, partner networks in over 40 countries, and IT and telecommunication services in over 65 countries. Vodafone Portugal is one of the 21 networks owned by Vodafone Group offering services to consumers and businesses around the country (Vodafone, 2014). For information on company values please see Appendix 1.

Market Overview

Vodafone Portugal currently holds a 39% market share in Portugal, rivaled by competitors, MEO with 42% market share, and Optimus, at 19%. Despite having a lesser market share than MEO, Vodafone is attractively positioned in the Portuguese market as an innovative and “young” company. (Vodafone, 2014) More specifically, regarding the mobile payments market in Portugal, Vodafone is currently considering making a mobile wallet available to Portuguese consumers. Vodafone Portugal has identified opportunities and is seeking participation in the growing mCommerce market. However, this market remains fiercely competitive with players like mobile network operators (MNOs) such as MEO, as well as retailers, banks, payment providers, technology companies, and handset manufacturers. In the mobile payments market in Portugal, the main competition includes various players such as SIBS (payment processor), banks, MEO, credit card providers, and PayPal.

Current Client Situation

Currently, Vodafone Portugal is focusing on analyzing mobile payment “ecosystems”, which are rapidly developing into complex, challenging, and competitive environments for all players. Vodafone Portugal is scoping out opportunities in this developing sector, and has identified a possibility for MNOs to generate value by creating a mobile wallet that will target challenges such as changing consumer habits in payment solutions. The goal of the company is to provide an offering that enables customers to pay in a fast, safe, and easy way and to set the standard as

the main solutions provider. (Vodafone, 2014) In order to develop the Vodafone Wallet, Vodafone Portugal is focusing its efforts on partnerships with Visa and other financial players in the Portuguese market.

The Business Project Challenge

The challenge involves identifying Vodafone Portugal's role in the start of mobile payment methods in Portugal and to create a business plan accordingly. The methodology used to conduct this in-depth analysis was an international benchmark, a scenario analysis, competitor analysis, a consumer survey, SWOT analysis, and a partner identification process. The results of the numerous methodologies were analyzed to form a strategy for Vodafone Portugal.

Summary of the Conclusions

The methods of in-depth analysis yielded results that lead to various conclusions highlighting the way Vodafone Portugal should proceed in the Portuguese Market. It was concluded that Vodafone Portugal should ensue launching the mobile wallet in the Portuguese market for three reasons. First, consumers will regard Vodafone Portugal as an innovative brand as one of the first to launch a mobile wallet in Portugal. This strategy is aligned with the company's core values of speed, simplicity, and trust, (see Appendix 1) as well as its image as an innovative brand. Second, the Portuguese mobile payments market demonstrates potential for growth. Third, the launch of the wallet will encourage more service providers to make their cards available on the Vodafone Wallet, thus making the wallet sustainable and driving long-term revenues for the company.

In addition an analysis of the industry yielded that mobile payments markets in developed markets tends to give way to collaboration between competitors, as certain market demands require cooperative efforts between players. In the case of the Portuguese market, there is strong consumer concern for security and data privacy, as well as a strong affinity for safety in the role of SIBS and Portuguese banks for transaction processing. Therefore, a partnership with these agents is necessary for the success of the Vodafone wallet. The most important outcomes of the SWOT concluded that Vodafone could meet threats and opportunities by capitalizing on its access to group level assets, data security skills, large market share, and preparedness to launch the Vodafone Wallet. The strategic plan outlined for Vodafone Portugal's launch of the mobile wallet is to focus on mainly on ensuring security and data privacy as well as leveraging the main characteristics that distinguish this payment method from the traditional ones: higher

convenience, ease of use, and speed. It was also mentioned that Vodafone Portugal should offer initial incentives to foster adoption and implement a solid user base. Factors for success include creating lasting partnerships, establishing trust with end users, providing a fluid multichannel customer experience, and accommodating possible technological shifts.

Topic Development

Original Approach: Outlining the Development of Mobile Payments in Mature Markets

Scenario Planning is a strategic thinking tool for outlining possible strategies for uncertain market progressions. This tool was implemented in our group business plan as a way to show the comparative development of the mobile payments industry internationally. Scenario planning should be used in situations where change and uncertainty is high, possibly resulting in market changes that may prove cost intensive or detrimental for the future of the company (Schoemaker,1991). Since the mobile payments market meets these criteria, scenario planning proves a useful tool to gain foresight on market changes.

The detailed process of scenario planning is outlined in Appendix 1, taken from the Harvard Business School outline. This particular framework for scenario planning is based on a comparative analysis of various frameworks for strategic thinking. (Garvin et al. 2006) The process involves rehearsing possible future scenarios for the purpose of developing a solution for the outcomes of changes in the industry. The result is four “ready to launch” responses in the form of a matrix, in the case the market develops as such. The result of a quick response strategy is the ability to act quickly in foresight, and retain competitive advantage in the industry despite ever evolving changes and uncertainties.

For the purpose of the report however, the scenario planning exercise was used as a way to highlight the mobile payments industry development of the countries analyzed in the international benchmark table. The scenarios displayed were of current situations, and the exercise was used to highlight the projected path of Portugal in comparison to the position of more developed mobile payment markets such as the United States, Australia, Spain, Germany and Russia. The current situation of each country was then plotted on a matrix with a corresponding narrative for each quadrant. The narratives relate to the description of the axes and communicate details of the industry situation in each scenario. The matrix and related narratives are presented in Appendix 11. The full scenario planning process for the case of mobile payments in emerging markets will be detailed throughout this report.

The Main Limitations of Original Approach

Due to the specificity of the subject matter and the results-oriented framework of the business project, there were some changes made to the scenario-planning framework. First, the scenario-planning exercise was not used to predict *future* scenarios; rather, it was manipulated to display *present* scenarios of various mobile payment markets. Second, gathering from the present scenarios of international mobile payments markets, the future of mobile payments in Portugal was obvious, and a likely projected path for Portugal was outlined. This was conducted with more certainty than regular planning exercises, because it focused on *present* markets and trends, rather than possible *future* trends. The progression of mobile payment markets in developed countries enabled our group to bypass the strategic thinking process making concrete conclusions focusing more on *strategy planning* and *strategic development* (See Appendix 2 for definitions). The conclusions corresponded to a relatively certain description of the future of the Portuguese mobile payments market based on the progression its international counterparts.

The limitations of this exercise were that it only explored from the key focal issue until the narrative (see Appendix 3), and since they were present scenarios, the exercise did not require analyzing all implications and options as well as early warning signals, a critical part of the strategic thinking process. Those parts were made evident by the developmental outcomes and best practices implemented by other mature mobile payments markets in the international benchmark. The analysis conducted for the business project preceding the matrix and narratives highlighting the key focal issue, driving forces, critical certainties, and scenario framework can be found in Appendix 11.

Topic Focus: Mobile Payments in Emerging Markets Using Scenario Planning

This report will focus on scenario planning as a *strategic thinking process* instead of a *strategic development* and *strategic planning* process (see Appendix 2). The difference between these processes lies in the end result. The primary goal of strategic thinking is implemented when there is ambiguous information, and it focuses on generating possible options for different end scenarios through exploration. Development and planning, (the two main processes used in the business project) focus on the end results, such as decisions and actions, that involve assessing tangible options and implementing strategy. (Conway, 2007)

In order to use the strategic thinking process, it is necessary to focus on a situation that is ideal for scenario planning where change and uncertainty is high. With further research on the subject

of mobile payments, it was found that the development of the mobile payments industry in emerging markets is vastly different than in mature markets. This is attributed to the differences in the main driving forces (political, economic, social, and technological) and critical uncertainties between the two markets. This analysis will engage in strategic thinking by implementing the Harvard Business School Framework for scenario planning on mobile payments in emerging markets, where the situation for mobile payments is rapidly changing, and uncertainty is high. Through scenario planning which anticipates and details market changes, the will firm can increase its responsiveness, flexibility, and competitive advantage in an uncertain environment.

Scenario Planning Process for Mobile Payments in Emerging Markets

Mobile payments are gaining rapid popularity in many emerging markets as a safe and easy way for consumers to engage in peer-to-peer money transfers (P2P). The rapid adoption of mobile payments, especially P2P payments, can be attributed to limited infrastructure from banks. In fact, about 60% of the population in Kenya uses M-PESA, a mobile payments service launched by Vodacom and Safaricom, which are both partly owned by Vodafone. (Economist, 2014) Vodacom and Safaricom launched the mobile payment service in 2007, long before launching their strategy for mobile payment services in Europe (Jack et al, 2010). Now 43% of Kenya's GDP per year is channeled through M-PESA according to Safaricom (Economist, 2014).

According to McKinsey, other mobile payment schemes such as MTN in Uganda, Vodacom in Tanzania, FNB in South Africa, and GCASH and Smart Money in the Philippines have reached scale. The combination of rapid development as well as the uncertain progression of mobile wallets and payments makes emerging markets ecosystem very susceptible to change. Due to the volatility of this environment, MNOs with existing mobile payment systems or those considering launching mobile payments in emerging markets should engage in strategic thinking. Strategic thinking will enable MNOs to explore and synthesize future situations that may be disruptive to their strategy. Using incomplete or ambiguous information with a creative mindset will allow exploration of various future scenarios. With each of these scenarios, options for the firms' response will be generated.

To develop the strategic thinking process, the HBS structure of scenario planning is implemented (see Appendix 3 and 4). This involves identification of the key focal issue in stage one, followed by the driving forces in stage two, proceeding with identification of the critical uncertainties and

scenario framework. In stage three, the scenarios are plotted on a matrix, and narratives are formed. The options for the firms' response are developed in stage four, and lastly the early warning signals giving indication direction to a particular narrative is outlined in stage five. The implications, options, and early warning signals correspond to the initial question regarding the key focal issue.

The key focal issue is important for orientation involving the ambiguities of the future. For mobile payments in emerging markets in this case, the key focal issue is identified as "How should MNO's implement a mobile wallet in emerging markets taking into account relevant factors, changes, and uncertainties?" (see Appendix 5). This is an important and applicable question that must be considered by a firm entering the mobile payment ecosystem of a dynamic market.

The next stage involves exploration of the driving forces. Research on mobile payments in emerging markets was conducted and organized in the form of a PEST analysis. (see appendix 6) In the political analysis, it was found that in emerging markets governments see mobile technology as a way for financial inclusion among the rural and poor, government to person (G2P) payments have been identified as a segment for opportunity, and governments may put restrictions on the banking roles of MNOs. (Gupta, 2013) The economic analysis yielded the perspective that firms see emerging markets as an opportunity to grow and reach more customers. In addition, it was deduced that levels of corruption could impact the use of mobile payments and trust. Lastly, it demonstrated that low-income people store and transfer money on informal networks that have high transaction costs and are susceptible to theft (Colbert et al, 2012).

A social analysis of emerging markets presented the possibility that in many areas it is not safe for consumers to carry cash, making mobile payments a viable option. In addition, high mobile phone penetration, experience with mobile banking, and large youth population eases adoption of mobile payments in these markets. It was also found that urban areas have high number of migrant workers that need to send money to their family in the rural areas (Colbert, 2012). Lastly, the technological analysis showed that emerging markets have limited infrastructure for banking, which makes mobile payments very valuable to consumers. It was also found that in many countries, distribution at a low cost could be achieved through small rural stores that act as

airtime resellers. In addition, emerging markets typically have a low penetration of bank accounts (for now), but high adoption of mobile phones. (Gupta, 2013)

Each of the driving forces in the full PEST analysis, are ranked in importance and the critical uncertainties for the scenario framework are identified (see Appendix 7) The first critical uncertainty is identified as the governments' support towards MNOs launching their own banking operations, thus affecting possibility of service offerings. This is listed on the vertical axis as limited vs. many service offerings possible. The second critical uncertainty addresses bank account penetration, banking infrastructure, and the role of banks, where the horizontal axis displays level of banking infrastructure, and displays the role of banks in making payments (high banking infrastructure, low banking infrastructure).

The next part of the strategic thinking process is stage three, scenario and narrative creation (See Appendix 8). Scenarios are credible and alternative hypotheses about how the world may develop, and are explicitly intended to underline risks and opportunities facing the organization. Scenarios cannot be correct or incorrect, because they are merely an educated guess of what the future may entail. (Garvin et al. 2006) The scenarios are then formulated into four narratives, one in each matrix that corresponds to the description on the axis. Each of these scenarios were named according to their particular situation for easy reference and recall.

The scenario in quadrant one, called "Race to the Top" describes a world where banking infrastructure in emerging markets has increased and become very sophisticated and the government has declared that MNOs can proceed to launch a mobile wallet that serves as a payment processor. The scenario in quadrant two called "More for Banks, Less for MNOs" depicts a situation where banking infrastructure in the emerging market has unexpectedly increased, but the government has declared that MNOs cannot play a role as a payment processor, forcing MNOs to limit service offerings in their mobile wallets. The scenario in the third quadrant titled "No Banks, No services" portrays a scene where bank infrastructure in emerging markets continues to be low and banks are unable to expand to provide the necessary services that the population needs. In addition, the government does not support the role of MNOs as a financial service provider, so MNOs can only launch mobile wallets with limited service offerings. The fourth quadrant depicting the last scenario called "No banks, No problem", describes the scenario that is closest to the current one: a state where mobile wallets have many

service offerings and bank infrastructure is low, so there is no competition from the banks for customers.

Stage four involves options consideration, or the firms' response to the possibility of each narrative occurring (see Appendix 9). This stage serves to address gaps in competences, as well as further research for essential actions and important decisions. (Garvin et al. 2006) If the firm is faced with a "Race to the Top" scenario, it is essential to gain consumer trust to use MNOs for their daily transactions to gain market share. First mover advantage is also important because distribution to rural areas will aid in the adoption and consumer loyalty when competing against banks. In addition, service offerings should be made so that consumers prefer using MNO mobile wallets versus the banks' offering. In the case of "More for banks, less for MNOs" scenario, MNOs should highly consider partnering with banks or credit card providers to increase their service offerings or offer a mobile wallet pre-paid service that enables consumers to charge wallet at specific locations and make money transfers.

Should "No Banks, No Services" occur, MNOs can consider partnering with an informal network to increase their service offerings, but should be wary of corruption and high transaction costs. They can also launch mobile wallets with limited service offerings through pre-paid contract and lobby for the government supporting their role as financial service providers. Lastly, in the case of a "No Banks, No Problem" situation, MNOs should ensure to extend the service offering in their mobile wallet to be on par with the service offering at a traditional bank. Customer service, walk-in locations, and assistance, should be made available for wallet holders and MNOs should set up the necessary infrastructure throughout the country to ensure that the full population can use their services.

As the last part of the strategic thinking process, early warning signals addresses integration of scenario planning and are the first indicators that signal the possible shift into a particular scenario (See Appendix 10). If they are well planned, the signals can give a company competitive advantage in the form of an early reaction to a shift in the ecosystem. (Garvin et al. 2006) Early warning signals for "Race to the Top" consist of banks beginning their development of mobile wallets and forming alliances to block out the possible role of MNOs, as well governments showing interest in MNOs developing mobile payment schemes. For the second scenario, "More for banks, less for MNOs", possible early warning signals involve negation of FDI from MNOs relating to setting up payment systems, lower corruption rates, and investment

in banking infrastructure. Early warning signals for “No Banks, No Services” are identified as corruption in the country continuing or increasing, as well as eruption of war resulting in lack of stability, and no signs of change in a cash or barter economy. Lastly, early warning signals for “No Banks, No Problem” entail political entities allowing MNOs to create a banking structure through their mobile services, high technological interest and adoption of consumers, and demand for banking services from consumers due to lack of local infrastructure.

Reflection on Learning

Previous Knowledge Learned in Masters Program

The Vodafone business project and this individual assignment required structured and strategic-oriented thinking processes. I was able to implement various organizational tools I learned in the Masters program to organize my thinking process and ideas in a coherent manner. One of the tools required in the business project was a SWOT analysis. I first heard of a SWOT analysis in my Marketing Planning course, which was a requirement for the masters at Novasbe. Since I was not a business student for my undergraduate education, learning to use a SWOT during my first semester, proved very useful for the duration of Masters. This tool is critical for an in-depth assessment of a company, taking all factors into account.

Another tool I used during this project was the strategic planning tool that I further developed throughout the course of this report. I learned of strategic and forward thinking during a 7-credit strategy course at Novasbe. This tool proves very useful when analyzing trends that directly or indirectly affect the company strategy. In addition, case studies featuring future thinking, proved how deeply important it is for businesses to continuously look ahead and anticipate change.

Furthermore, throughout several courses at Novasbe, in addition to studying innovation, I was required to come up with creative solutions for service offerings in order to meet a consumer or society needs. This encouraged me to think creatively, while maintaining a realistic perspective on the objective. This also aided me in the business project when it was necessary to come up with new solution for the company. In addition, my previous knowledge of creating a business plan also served to present creative solutions to a client in a logical way that allows the client to extract the most value.

New Knowledge

New knowledge learned from the business project consists of using survey software such as Qualtrics, SPSS, and some excel functions for interpretation of the results. In addition to interpreting survey data, I learned the importance of structuring surveys in a manner that extracts

the most information from the respondent and obtains results with minimal bias. New knowledge also included specificities regarding the mobile payment industry and mobile payment technology. It was necessary to learn various technical terms and banking process to understand how mobile banking and payments operate. Lastly, previous to the business project, I had not performed a SWOT analysis to the extent presented. The SWOT is very detailed and identifies every possible element that affects company performance.

Personal experience

The Vodafone business project enabled me to learn through a practical application of my previous knowledge in addition to learning new concepts. I was able to work with grey areas—a topic that was heavily discussed as a concern for our team in the beginning. Since with practical situations and real life the answer is not always obvious, our team had to use our previous knowledge, as well as research new ways to find possible solutions for a particular matter.

In addition, working in a team for a period of four months enabled me to learn each team members personally, as well as their work ethics. I learned that teams generally require a leader, so we alternated a leadership role every two weeks, which was a successful solution for this issue. In addition, team members encouraged me to use project management tools requiring us to plan ahead and new methods of time management, which helped me, since that is one of my weaknesses. I also learned that setting an agenda for our weekly meetings was essential to keep focused on the task at hand. Although this knowledge is more practical than academic, I feel that it improved my work ethic and applied business knowledge, which will prove useful in the future.

Benefits of hindsight

In the business project, one of the subjects that added the most value was the matrix with the scenarios involving the international benchmark based on the method of strategic planning. It was not asked of us as a requirement for the business project, but when we started finding a pattern of development among the mature mobile payments markets, we decided to plot their path and illustrate their situations through various narratives. Doing so enabled us to cluster the countries and better understand and predict the natural progression of their markets. Something that should have been done differently in our business project involves the section on revenue streams and costs. This was a requirement of the business project, yet there was insufficient information provided by the company to compose a detailed report of revenue streams. The result was a general recommendation of how to generate revenue for the company. Our business

project team should have been more insistent on obtaining the information needed from the company. Our emails went twice unanswered, yet, if we had been more persistent, we would have had the potential to add more value to the business project.

Appendix

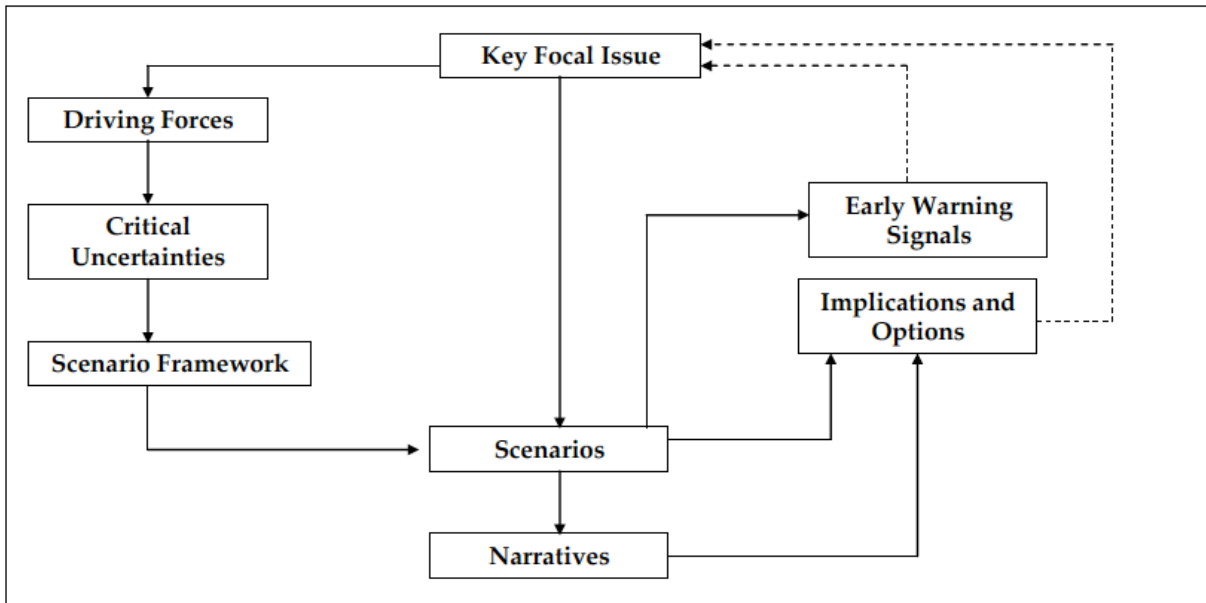
Appendix 1: Company Values

Vodafone is centered on the mission of innovation for the purpose of “making peoples’ lives easier”, and their vision for the future focuses on data services, products, and customer service experiences. Vodafone’s core values are identified as speed, simplicity, and trust. Speed means being the first-mover in bringing innovation to market. The company identifies simplicity as “making things easier for “customers, partners, and colleagues. The third value, trust, means that the company values transparency and reliability. These values are important when considering the reasons this company wants to be among the first to provide its customers with a fast, simple, and reliable mobile wallet. (Vodafone, 2014)

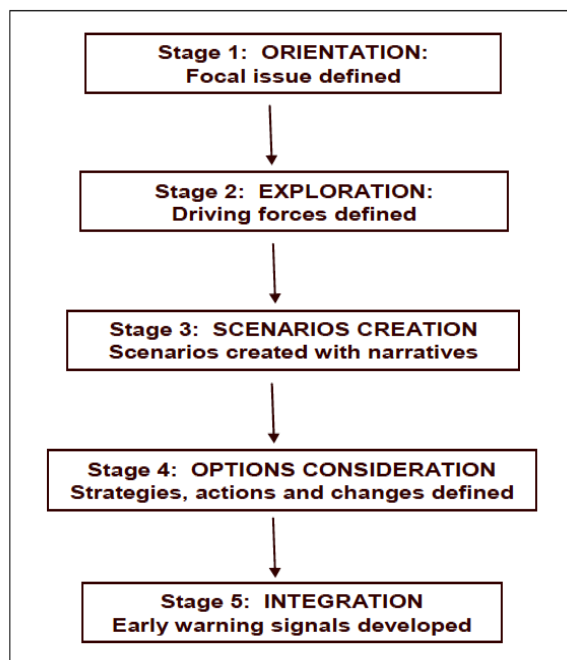
Appendix 2: The Strategic Processes



Appendix 3: Harvard Strategic Planning Process



Appendix 4: Stages of Harvard Strategic Planning Process



Appendix 5: Key Focal Issue

| Key Focal Issue |
|--|
| How should MNO's implement a mobile wallet in emerging markets taking into account relevant factors, changes, and uncertainties? |

Appendix 6: Driving Forces in Emerging Markets

| Driving Forces: Emerging Markets | |
|---|--|
| P | <ul style="list-style-type: none"> • Governments see mobile technology as a way for financial inclusion among the rural and poor (Gupta, 2013) • Some governments have MNO-friendly regulations that allow MNOs to take on many of the banking operations, however, many governments require a banks involvement for transactions making the affecting the service offerings of mobile wallets • Government to person payments (G2P) has been identified as a segment for opportunity |
| E | <ul style="list-style-type: none"> • Firms see emerging markets as an opportunity to grow and reach more customers • Levels of corruption can impact the use of mobile payments and trust • Low-income people store and transfer money on informal networks that have high transaction costs and are prone to theft (Colbert et al, 2012) |
| S | <ul style="list-style-type: none"> • In many areas it is not safe for consumers to carry cash, making mobile payments a viable option • High mobile phone penetration, experience with mobile banking, and large youth population eases adoption • Urban areas have high number of migrant workers that need to send money to their family in the rural areas (McKinsey, 2012) |
| T | <ul style="list-style-type: none"> • Limited infrastructure for banking makes mobile payments an added value for consumers • Small rural stores that act as airtime resellers serve as a way for technological distribution at a low cost • Emerging markets typically have a low penetration of bank accounts, but high adoption of mobile phones, however, the role of banks may increase (Gupta, 2013) |

Appendix 7: Critical Uncertainties and Scenario Framework

| | |
|-------------------------------|---|
| Critical Uncertainties | <ul style="list-style-type: none"> • Some governments have MNO-friendly regulations that allow MNOs to take on many of the banking operations, however, many governments require a banks involvement for transactions making the affecting the service offerings of mobile wallets • Emerging markets typically have a low penetration of bank accounts and banking infrastructure, but a high adoption of mobile phones, however, the role of banks may increase (Gupta, 2013) |
| Scenario Framework | <ul style="list-style-type: none"> • Vertical axis displays the governments' support towards MNOs launching their own banking operations affecting possibility of service offerings (limited vs. many service offerings possible) • Horizontal axis displays level of banking infrastructure, and displays the role of banks in making payments (high banking infrastructure, low banking infrastructure) |

Appendix 8: Narratives

| Quadrant II: “More for banks, less for MNOs” | Quadrant I: “Race to the Top” |
|---|--|
| In this world, banking infrastructure in the emerging market has unexpectedly increased. People are opening up bank accounts at a very rapid rate and depositing all of their money with a high degree of trust. Since bank infrastructure is high, people are using banks to make money transfers and ATMS, debit, and credit cards are now widely available. Banks are installing payment terminals all over the country from cities to rural areas. The government has declared that MNOs cannot play a role as a payment processor, so MNOs must limit service offerings in their mobile wallets. | In this world, banking infrastructure in emerging markets has increased and become very sophisticated. Payment terminals are widely available for debit and credit cards. ATMs are also available and these services have spread from cities to rural areas. The government has declared that MNOs can proceed to launch a mobile wallet that serves as a payment processor. The mobile wallet can have many service offerings, including serving as a credit line and account holder. MNOs are now competing with national banks racing to make the latest payment technology such as NFC, BLE, or HCE available for use. |
| Quadrant III: “No Banks, No Services” | Quadrant IV: “No Banks, No Problem” |
| In this world, bank infrastructure in emerging markets continues to be low. People do not generally trust banks and banks are unable to expand to provide the necessary services that the population needs. The government does not support the role of MNOs as a financial service provider, so MNOs can only launch mobile wallets with limited service offerings. These mobile wallets can only be used if the user has a bank account because it is necessary to link to the wallet. Most people store and transfer their money through informal networks because of the lack of banking infrastructure and services. | In this world, the government has declared that mobile wallets have many service offerings including extending credit to consumers and offering consumers accounts to hold their money. Bank infrastructure is low, so there is no competition from the banks for customers. Mobile networks have high infrastructure, and mobile banking becomes the norm among consumers, so most payments are processed primarily through MNOs. MNOs set up the necessary infrastructure to make the latest payment technology available for consumers throughout the country. |

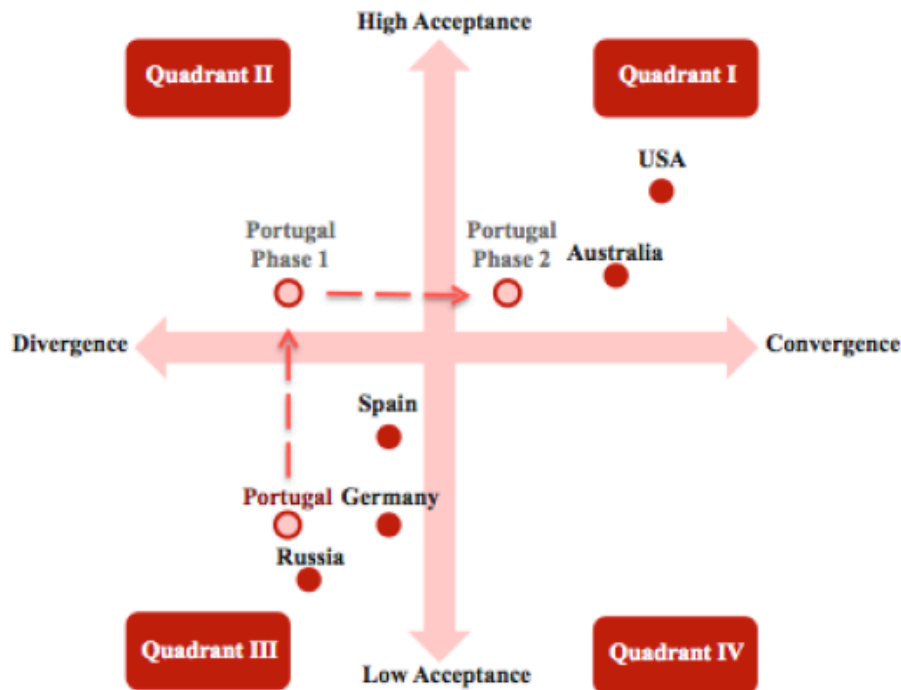
Appendix 9: Implications and Options

| Implications and Options | |
|--|---|
| Scenario I: “Race to the Top” | <ul style="list-style-type: none"> • MNOs will be facing competition from the banks, so it is essential to gain consumer trust to use MNOs for their daily transactions • First mover advantage is key here, distribution to rural areas will aid in the adoption and consumer loyalty when competing against banks • Service offerings should be made so that consumers prefer using MNO mobile wallets versus the banks’ offering |
| Scenario II: “More for Banks, Less for MNO’s” | <ul style="list-style-type: none"> • MNOs should highly consider partnering with banks to increase their service offerings • MNOs can choose to offer a mobile wallet pre-paid service that enables consumers to charge wallet at specific locations and make money transfers • Mobile operators can partner with international credit cards such as Visa, MasterCard, or American Express and serve as a “wallet” for these cards |
| Scenario III: “No banks, No Services” | <ul style="list-style-type: none"> • MNOs can consider partnering with an informal network to increase service offering, but should be wary of corruption and high transaction costs • MNOs can launch mobile wallets with limited service offering through pre-paid contract • MNOs can lobby for the government supporting their role as financial service providers due to the country’s lack of significant banking infrastructure |
| Scenario IV: “No Banks, No Problem” | <ul style="list-style-type: none"> • Since MNOs are the main financial service providers, they should ensure to extend their service offering in their mobile wallet to be on par with the service offering at a traditional bank • Customer service, walk-in locations, and assistance, should be made available for wallet holders, since MNOs are now playing the roles of a banks • MNOs should set up the necessary infrastructure throughout the country to ensure that the full population can use mobile wallets |

Appendix 10: Early Warning Signals

| Early Warning Signals | |
|--|--|
| Scenario I: “Race to the Top” | <ul style="list-style-type: none"> • Banks begin developing mobile wallets • Government begins to show interest in MNOs developing a mobile payment scheme • Banks begin forming alliances to block out role MNOs |
| Scenario II: “More for Banks, Less for MNO’s” | <ul style="list-style-type: none"> • Government becomes hostile to Foreign Direct Investment or MNOs as financial providers • Corruption rate begins to decrease • Banks begin investing in infrastructure |
| Scenario III: “No banks, No Services” | <ul style="list-style-type: none"> • High corruption in the country continues or increases • War erupts and lack of stability makes environment unsuitable for FDI or government shows hostility towards FDI • Cash or barter economy shows no signs of changing |
| Scenario IV: “No Banks, No Problem” | <ul style="list-style-type: none"> • Government shows interest in FDI and allowing MNOs to create a banking structure through mobile services • Consumers are becoming very technologically advanced and a majority owns smartphones • Consumers begin to demand banking services |

Appendix 11: Scenario Planning Process from Business Project



Development of the International Mobile Payments Market: Scenarios

| Quadrant II | Quadrant I |
|--|---|
| High retailer and user acceptance of mobile wallets and payments, all competitors converge in both the capabilities and product dimensions to create the best possible solution for mobile payments. Consumers possess a single mobile wallet. Major retailers begin to show interest in co-developing the technology to facilitate the use of mobile payments in their stores. The use of cash drastically decreases in the short term. Consumers begin to show uninhibited trust in the new technology, and develop a feeling that these payment methods are indeed safer than traditional payment methods. This is the likely scenario for a developed mobile payments market. | Market is highly fragmented, and there is high retailer and user acceptance. However, competition is fierce amongst all players and users have all different types of mobile wallets. Merchants and retailers will be selective about which mobile wallets they accept due to high competition for strategic partnerships between competitors, resulting in a lack of collaborative agreements. As a consequence, consumers collect more than one mobile wallet so they have the option of paying with their mobile phones at all times. Scenario is likely, but not long term because it will quickly develop into scenario I, as one or two top competitors gain higher market share. |
| Quadrant III | Quadrant IV |
| Retailers and users do not accept mobile payments, and instead adhere to traditional payment methods. Market continues to be highly fragmented and competitive due to emerging players. Players compete for first mover advantage with retailer acceptance, but face scepticism and low degrees of adoption from both retailers and consumers. Consumers are concerned with security and do not view mobile payments as a secure payment method in comparison to traditional payment methods. The value proposition of mobile payments is not yet apparent or widely accepted. Scenario is very likely for a young mobile payments ecosystem. It should eventually move to quadrants II and I. | Market converges and most competitors collaborate to create the perfect user-friendly mobile wallet. Consumers and retailers do not accept this type of payment system and are insistent in using traditional methods. Although mobile wallet offers a variety of features, the value proposition is not apparent to consumers and retailers. This scenario would occur as a result of over anticipation of market demands and a low degree of competition in a new mobile payments market. Scenario not likely. Should consumers and retailers change and gain quick trust and acceptance of mobile payments, it is likely to quickly evolve into scenario I. |

| Key Focal Issue |
|--|
| How to best implement the Vodafone wallet in Portugal taking into account all relevant factors |

| Driving Forces in International Benchmark | |
|---|---|
| P | <ul style="list-style-type: none"> • EU integration laws fostering attractive environment for mobile payments across Europe • Laws against hacking and fraud are being developed to accommodate changing world • Government interested in tracking payments through fiscal numbers, incentivizing government support in mobile payments infrastructure |
| E | <ul style="list-style-type: none"> • Major credit card providers incentive to create a “cashless” society • Banks are distributing contactless payment cards and setting up necessary infrastructure for payments • Recession is coming to an end, encouraging consumer spending |
| S | <ul style="list-style-type: none"> • Mixed consumer/retailer demographic regarding acceptance from early adopters to skeptics • Retailers want to engage in target marketing and new ways to advertise to consumers, omni-channel experience growing in popularity • Consumer trust and interest in mobile payments increasing |
| T | <ul style="list-style-type: none"> • Collaboration between few strong players or fierce competition between many players can lead to monopolies or market fragmentation, respectively. • Contactless payments are increasing • Increased Smartphone penetration |

| | |
|-------------------------------|--|
| Critical Uncertainties | <ul style="list-style-type: none"> • Mixed consumer/retailer demographic regarding acceptance from early adopters to skeptics • Collaboration between few strong players or fierce competition between many players can lead to monopolies or market fragmentation, respectively |
| Scenario Framework | <ul style="list-style-type: none"> • Vertical axis displays acceptance level of users and retailers (high vs. low) • Horizontal axis displays levels of competitor collaboration or market fragmentation as (convergence vs. divergence) |

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