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Definition, Implementation and Management of m.Commerce Apps and Services

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Abstract

This report aims to analyse the Definition, Implementation and Management of Vodafone Portugal's Apps and Services, so that possible ways of improvement can be suggested. To do so, Vodafone's strategy regarding the development/ implementation of specific Apps and Services, as well as the strategy of its competitors are going to be analysed. This analysis is going to be complemented with insights from some key-persons of Vodafone's Consumer Business Unit team in Portugal. Findings suggest that Vodafone is ahead of its competitors when it comes to developing the most innovative Apps and Services, but there is always room for improvements, especially when it comes to communication.

Keywords: Vodafone, Apps, Services, strategy, innovation, customer

Table of Contents

Introduction

Vodafone Portugal (Vodafone) started changing the telecommunications market in 1992 with its entry in a market that had been exclusive to a single operator. Vodafone changed the prevailing perception of the mobile phone, up till then regarded as a symbol of social status or instrument reserved for high purchasing power elites, by presenting a new concept of useful service, which is accessible and appropriate to the various customer needs.[1]

In addition to the typical mobile services, Vodafone also offers services whose pioneering nature, and in some cases uniqueness, lead to the company's leadership in innovation and customer satisfaction.[2] What leads Vodafone to invest in innovation? What is the company's strategy regarding Apps and Services? What can be done to improve it? In order to answer these questions, the following thesis is going to be divided into two parts: the first begins with an analysis of the telecommunications' industry in Portugal, further focusing on Vodafone's strategy; and the second is focused on Apps and Services in particular. Thus, both Vodafone's and its competitors' strategies regarding Apps and Services are going to be deeply analysed.

It is important to mention that this thesis is all about the **consumer business unit**, since the internship took place in that unit. The experience as an intern was essential to drive final conclusions about possible improvements, since some issues about an organization can only be understood when actually working there.

[1] Vodafone.pt, (n.d)
[2] Marktest.com, 2011

PART I – TELECOMMUNICATIONS MARKET IN PORTUGAL

THE PORTUGUESE SCENARIO

In order to analyse the overall scenario of the telecom market in Portugal, one first has to acknowledge the major participants in the industry, which can be identified as: users; user equipment vendors (e.g. Apple, Samsung, Sony, etc.); infrastructure equipment vendors (e.g. Ericsson and Huawei); and operators.

When it comes to users, despite of having an effective mobile rate of penetration[3] of 123,5 for 100 people in the second trimester of 2015[4], Portugal has a mid-sized, yet highly advanced mobile telecom infrastructure, with only three mobile operators in the market: Vodafone, MEO and NOS.

COMPETITION IN THE TELECOM MARKET

Competition exists in the Portuguese telecom market since the beginning of Global System for Mobile Communications (GSM) mobile telephony. TMN ("Telecomunicações Móveis Nacionais, S.A" and current MEO) started operating in Portugal in 1989 with C-450 Analog technology and at that time it was the only player in the industry. In 1992, Telecel Portugal (currently Vodafone Portugal) started its commercial activity, immediately making available a GSM cellular communications service fully operational, which was able to cover 57% of the territory and 83% of the population.[5] With the installation of the cellular network, exactly one year after obtaining its operating license, Telecel set the world record for the fastest installation of a GSM network. This made Telecel quickly gain market share, and as a consequence TMN started to lose revenues. With the entrance of Optimus (currently NOS) in the market in 1997, the revenue market share of TMN stayed almost the same, while Telecel suffered a significant revenue drop. Since the market was already saturated, one can conclude

[3] This is calculated by dividing number of subscribers by number of active phone numbers.
[4] Anacom, 2015. Serviços Móveis - Informação Estatística 3.º trimestre de 2015.
[5] Vodafone.pt, (n.d.)

that Vodafone lost customers to Optimus. One possible reason for this might be Telecel's market entry strategy of targeting enterprise customers, which was also Optimus's strategy.

In April 2007, the European Commission gave an ultimatum to the Portuguese government regarding the 500 golden shares pack that it owned on Portugal Telecom, which enabled special veto powers to the government on vital issues. In November 2007, Portugal Telecom spun off its media assets (PT Multimédia), including TV Cabo[6] and Lusomundo Cinemas[7], meaning that PT was no longer able to provide TV service.[8] To overcome this issue, it created a new brand with a new fixed infrastructure: MEO. In January 2014, MEO merged with TMN, becoming a single brand: MEO – Serviços de Comunicações e Multimédia, S.A. This shift was part of PT's strategy to promote its 4P[9] plan (M4O), introduced in January 2013, which was already being offered by MEO and had 1,5 million subscribers. As a result of this change, MEO, which was already the 3P[10] market leader, became the number one brand in mobile in Portugal with a 46,3 percent share of the market.[11]

TV Cabo, after the split off from PT, became ZON Multimédia – Serviços de Telecomunicações e Multimédia, SGPS, S.A., an independent brand.[12] In August 2013, Optimus was incorporated in ZON Multimédia, whose name changed to ZON Optimus, SGPS, S.A..[13] In May 2014, the two brands – ZON and Optimus – were merged into one single brand, NOS, whose main objective was to be associated with fixed and mobile telecommunications at the same time.[14] This was accomplished by taking advantage of the best that ZON and Optimus had: fixed and mobile telecommunications, respectively.

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[6] The third cable operator to be founded in Portugal (the first was the regional Cabo TV Madeirense, which was founded in 1992, followed by Bragatel early on in 1994).

[7] Portuguese integrated media corporation founded in 1953, which has major interests in movie distribution, cinema theaters and media assets.

[8] Anacom, 2008

[9] Triple play service of broadband Internet access, television and fixed voice combined with mobile voice.

[10] Triple play service that consists on broadband Internet access, television and fixed voice.

[11] Eurocomms.com, 2014

[12] Nos.pt, (n.d.)

[13] Anacom.pt, 2013

[14] Publico.pt, 2014

Currently, the market can be considered as competitive, since the three operators are competing for revenues and the penetration rate is so high that the market is over-saturated, meaning that the **main objective of the operators is to make customers switch from their old network operator**. As far as market quota is concerned, MEO is the leader, with a quota of 44,3%, followed by Vodafone, with 33,5%, and NOS, with 20,6%. Though, NOS is the only Mobile Network Operator (MNO) whose market quota increased in relation to the previous trimester (see appendix 1 for more detailed information).[15]

VODAFONE'S DIFFERENTIATION STRATEGY

Network externalities[16] are becoming less and less relevant, due to the fact that communication to other MNOs is almost free (free calls and SMS, even if limited, are included in almost all tariff plans in the telecom market), meaning that the choice of family and friends in terms of operator will no longer be a relevant factor when choosing a MNO. This, along with the fact that customers do not perceive significant differences between MNOs, leads operators to invest in different strategies in order to attract new customers. Vodafone's strategy, at this point, is based on three pillars: **increase quota on fixed telecommunications services**; **innovation**; and **customer satisfaction**. Through the interaction of these three pillars, Vodafone is able to establish an emotional connection between clients and the brand, as well as being associated with a high quality portfolio of services and equipment.

QUOTA ON FIXED TELECOMMUNICATIONS SERVICES

In terms of fixed telecommunications services, Vodafone is the MNO with the smallest market share. This happens because the core business in telecommunications' industry has

[15] Anacom, 2015. Serviços Móveis - Informação Estatística 3.º trimestre de 2015.
[16] A phenomenon whereby a good or service becomes more valuable when more people use it.

dramatically changed over the last three years. If three years ago MNOs were completely focused on the mobile sector, nowadays there is a convergence between fixed telecommunications (TV + internet + fixed voice) with mobile telecommunications.

Due to their origins, both MEO and NOS were well prepared to compete in both sectors (mobile and fixed). On the contrary, Vodafone had always been focused on the mobile business only, and so, as a brand, it was not ready for this change. Therefore, it was not immediately associated to a fixed telecommunications service provider. Actually, three years ago Vodafone's Spontaneous Notoriety Index regarding fixed telecommunications was really low, meaning that when asking customers about TV network providers, Vodafone was almost never in their mind. Besides, Vodafone's network was not able to reach as many customers as the one from its competitors. This also had a direct impact on the mobile telecommunications' quota, since Vodafone's customers changed to the other MNOs that provided the complete pack (fixed + mobile telecommunications).

In order to invert this, the company is making a great investment on increasing the penetration of fixed services. An example of this investment is the price that Vodafone charges for the traditional pack TV + Net + Fixed Voice, which is the lowest in the market (€25,9 per month, while competitors provide this pack for €41,49). By doing this Vodafone is trying to attract new customers and at the same time to make competitors' customers change to Vodafone. Another example is the 125 million of euros investment in network capability that the company is going to make until 2017, which will enable it to reach more 550 thousand houses.[17] Through all of this investment, Vodafone is achieving notorious results, as the increase in the Spontaneous Notoriety Index, which is now in line with the one from the other MNOs, and the growth of the quota on fixed telecommunications. In the end of the third trimester of 2015, MEO had a quota of 51,1% (-0,8% than in the homologous period), NOS

[17] Economico.pt, 2015

had a quota of 32,3% (+0,4% than in the homologous period) and Vodafone had a quota of 11,8% (+0,7%).[18] Overall, Vodafone is the MNO with the highest increase in terms of quota (see appendix 2 for more detailed information). However, when it comes to 4P services, Vodafone is way behind MEO and NOS, which are currently offering M4O e NOS4, respectively. This happens because mobile business is still Vodafone's core business and main source of revenues, and in order to offer a 4P plan, some of these revenues would be lost. In conclusion, Vodafone and its competitors have different ways of approaching convergence. This happens because Vodafone has fewer customers on the fixed business, so it is much more aggressive in that business. The opposite situation happens with both MEO and NOS.

INNOVATION

One of Vodafone's values is "**Innovation Hungry**". Following this, the company has been investing a lot in innovation, with proven results not only at national level, where it is the market reference, but also at international level, being the responsible for launching pioneer products and services worldwide.

Vodafone's goal when it comes to innovation is trying to create relevant products that make consumers' lives easier. In order to do this, Vodafone uses internal sources of innovation such as the release of extra/ complementary services, either to fixed or to mobile communications, as the launch of an HD projector[19] – for the fixed – or the release of the most modern speech technology the VoLTE (Voice over LTE)[20] – for mobile.

Innovation also means bringing the right people together in the right place at the right time, and letting them be creative. Vodafone believes that many innovative ideas come from

[18] Anacom, 2015. Informação Estatística do Serviço Telefónico Fixo 3.º trimestre de 2015.

[19] Equipment that enables the projection of Vodafone TV, with HD quality, on a screen or wall. In addition to the possibility of projection, it also has a screen, which can be used as a tablet or smartphone.

[20] Also known as 4G Voice, VoLTE is based on industry standards, allowing voice and data to be carried quickly and efficiently over a next generation network specifically designed and optimised for the future.

outside and therefore it differentiates itself from its competitors by supporting external innovation (projects and ideas that are born outside of the company). The perfect example of Vodafone's investment on external innovation is **Vodafone Power Lab**, a program that aims to foster the creation of technological projects through contests of ideas, mentoring, and workshops. For instance, in May this year Vodafone launched a challenge that aimed to stimulate the development of new applications or services that would improve customers' television experience: Vodafone TV Innovation Challenge. Vodafone then selected the two more innovative and useful projects to be developed and tested during 3 to 6 months at Vodafone Power Lab incubator, in Lisbon. BIG Smart Cities contest is another example of the commitment on this segment. This initiative was born in 2013, under the name of Lisbon BIG Apps and it fosters the creation of technologies that improve the lives of those who live, work and/ or visit the cities. This program results from a partnership between Vodafone Power Lab and Lisbon Municipality. Lastly, Vodafone Mobile Data Challenge is a technological competition aimed for university students, and it intends to stimulate young entrepreneurship, as well as the proximity between the academic community and the business community. Actually, it was a gateway to Discover Vodafone Graduates. [21]

Usually, Vodafone does not financially support these projects or acquires share of start-ups, because it would lead to loss of autonomy to its creators, a characteristic that is highly valued by the company. Instead, it defends a partnership approach that ensures benefits for both parties. On the one hand, after the products are developed and brought to market, Vodafone seeks to adopt, whenever possible, innovations born of these projects in its offer. On the other hand, start-ups must have a banner or any other reference stating that they are powered by Vodafone Power Lab.

[21]Vodafone recruitment program, which aims to select young people with high potential for the company's staff.

A great example of a successful project that was created in partnership with Vodafone Power Lab is the App inviita, which gives customers the best of each city, creating tours that match their mood (see appendix 3 for a clear vision of the App). It also allows customers to customize these tours by adding new places and share them with friends. Apart from having been made available and promoted to Vodafone's customer base, the Apps' technology has been used in other services. For instance, it was integrated in the official App of Vodafone Mexefest 2015 (see appendix 4 for a clear vision of this integration). inviita's success is proved by the title of "Best New App", given by Apple.

This proximity to the entrepreneurship ecosystem contributes to Vodafone's forefront position regarding technological trends, which is translated into a **competitive advantage**.

CUSTOMER SATISFACTION

Another of Vodafone's key-value is its "**Customer Obsessed**" view. When it comes to this value, since the time Vodafone started operating in Portugal, customer care has always been a priority, even though at that time improving customer service experience was not so trivial. One can take as an example, the launch of an integrated customer care online platform, in 2010, which aimed to reduce the number of direct customer interaction with representatives and to increase online activity, as well as its attractiveness. In fact, Vodafone was the first Portuguese company to provide a Customer Support Service available 24 hours a day, every day of the year, which allowed the company to maintain a close relationship with its Customers.[22] Furthermore, to respond to customers' changing needs and preferences, in addition to the usual telephone call centre service, Vodafone also offers Customer Care services via video call, SMS and online. It also provides help lines for customers with special needs and in other languages, such as English and Russian.[23] Nowadays, handling customer issues online still seems like a simple incremental addition to traditional call centres and retail

[22] Vodafone.pt, (n.d)
[23] Vodafone - Press Releases, 2008

stores, but McKinsey research shows that, when well done, it can represent a relevant increase in customer satisfaction.[24] Vodafone might be considered a specialist in Digital Customer Care (eCare), as it has all kind of ways of contact available: it answers to customer complaints in App Stores (see appendix 5 for a concrete example); customers can contact customer care by email; and customers can also live chat with Vodafone's support teams.

All of the efforts mentioned so far are reflected in Vodafone's leadership in terms of brand consideration and customers' satisfaction.

Besides that, Vodafone is aware that for a brand to be remarkable it has to be alive and present in its customers' lives. In order to ensure this, the company invests in powerful campaigns, such as the one with the baby and the goat that brings the message "Estar mais próximo de quem mais gosta. É isso que a melhor rede 4G do país faz." which means that it is possible to be closer to the loved ones thanks to the best 4G network in the country.

PART II – ANALYSIS OF VODAFONE'S APPS & SERVICES

VODAFONE'S STRATEGY REGARDING APPS AND SERVICES

As above mentioned, Vodafone is always trying to differentiate itself from its competitors. In order to do this, Vodafone makes a huge investment on Apps and Services that bring **innovation** and lead to an increased **customer satisfaction**, so that it can be recognized as the brand that provides **superior consumer experience.** In order to achieve this, Vodafone is always looking for situations where the customer can use mobile phone and it tries to create content solutions, so that the phone can be used in that situation. For instance, Vodafone knew that people could take advantage of their phone during Vodafone Mexefest, by having the poster, schedules, and other content in their phone, instead of carrying paper. Therefore, the company developed Vodafone Mexefest's App. There are several other strategic moves that Vodafone does in order to provide a superior consumer experience: doing strategic

[24] Mckinsey.com, 2013

partnerships, such as Spotify and Netflix, even if it may cannibalize existing Apps and Services (e.g. Spotify cannibalized Vodafone Music[25]); taking advantage of existing sponsorships, as Lisbon Municipality (e.g. Vodafone developed the App "A Lisboa de Almada" to celebrate Almada de Negreiros's 120th birthday); developing Apps, such as SOS Saldo, whose purpose is customer support; and developing institutional Apps, such as Praia em Direto, which allows the customers to know what the meteorological conditions at their favourite beaches are at any point in time.

Overall, Vodafone has a well-diversified portfolio of Apps and Services, which can be divided into seven categories: customer support; communication; leisure; payments; security; TV; and utilities (see appendix 6 and 7 for more information about all the Apps and Services). These Apps and Services are developed by Vodafone Group, or locally if required to satisfy the needs of domestic market. Furthermore, Vodafone tries to be associated with partners that are evolved with technological offerings and which are recognized in the market, so that it offers customers the most advanced solutions developed by the best national and international companies (such as the ones mentioned above).

REASONS WHY VODAFONE INVESTS IN APPS AND SERVICES

First of all, and in line with its strategy, Vodafone invests in the Apps and Services that help to **enhance a superior consumer experience**. In order to do this, Vodafone adds quality and relevance to core services (mobile telecommunications), so that customers are attracted and retained. For instance, Vodafone did not have any App associated to social events and hence the company decided to develop Mexefest's and RockInRio's Apps. Another example is Vodafone m.Ticket. Vodafone had a technological partner which offered the necessary resources to make payments via mobile, so it looked for use cases where that technology could be used. When Vodafone first started selling tickets through the App, the main

[25] App that allowed customers to stream or download songs and videos across all music categories.

objective was to innovate and give customers something useful. Nowadays, this App also has another important objective, which is to make revenues.

Another reason for Vodafone to invest in certain Apps and Services is the fact that there are some areas, such as music, where it is too hard to compete with existing service providers. For instance, Vodafone knew it could not compete with Spotify, because in order to create a similar service, it would have to make huge efforts and there would always be the possibility that future revenues would not cover the investment. Instead of taking such a big risk, Vodafone decided to make a partnership with this player, promoting Spotify to its customers and sharing revenues.

In order to decide if it is worth to invest in each App or Service, Vodafone makes market research to analyse their potential, being the most important things to **increase brand awareness and revenues.** This is the reason why some Apps are paid and others are not. If the objective is brand awareness, then an App is created to show customers that Vodafone has relevant technological solutions for free. On the other hand, if the objective is to generate revenues, then the App is paid. Nonetheless, an App may be created with both objectives. For example, Vodafone Quiosque has two main objectives: brand awareness, by providing a useful solution to customers; and revenues, which are enhanced by the utilization of cellular data and m.Advertising (companies pay to have banners in the App).

In conclusion, Vodafone’s main objective when developing Apps is to meet the needs of its customers and the market, combining these developments with an image of innovation. The company also adopts Apps developed by Vodafone Group, taking advantage of the synergies between different markets with a huge number of customers. Finally, Apps are also developed if they can bring revenues for the company, with business models often being defined case by case.

GO-TO-MARKET STRATEGIES

When deciding how to introduce Apps and Services to the market, Vodafone has to take into account the trade-off between costs and number of people affected by the various channel choices. For instance, TV advertising reaches a large group of customers, but it is expensive. Thus, Vodafone would only use it for Apps and Services that have a big target, since it may not compensate to make such a big effort if the App or Service only targets teenagers, for example. Besides, these Apps and Services should be paid, because otherwise the investment cannot be recovered.

Furthermore, when deciding which channel to use, Vodafone also analyses whether it has existing potential customers. One may take the example of the App inviita, which requires Internet access and is appropriate to people who like to travel. In cases like this, Vodafone is able to send SMSs promoting the download of the App to a group of potential customers (e.g. customers who have roaming service activated and who spend more than 500MB of cellular data).

Currently, Vodafone uses several channels to communicate Apps and Services: banners, which can be found in many different places, such as Vodafone's homepage, Vodafone's Services and Leisure web page, Vodafone's Apps web page, as well as in the Apps developed by the company; outdoors and in store advertisement; online publications through social networks, such as Facebook, YouTube and Twitter; TV references (in the daily news); contests (e.g. "among people who share RockInRio App in Facebook, one will be randomly chosen to win a ticket for the festival"); SMSs (e.g. "Download the latest version of m.Ticket and go to the cinema without spending time in lines"); and push notifications through the App Vodafone Updates. Lastly, an important channel is word of mouth, since for most people hearing from a friend that he/ she is having a great experience with an App or Service, is the best way to lead them to be interested in trying it as well (great effectiveness).

How Apps and Services are managed at Vodafone

In order to make management easier, Apps and Services are divided into five main categories: Communication (includes Apps such as Vodafone Call+); Contents and Entertainment (includes Apps and Services, such as Spotify and Ringdings); Apps and Data Services from Vodafone Group (e.g. Vodafone Backup+); Local Apps (Apps developed in Portugal), and m.Commerce, which includes m.Advertising and m.Payments. There are one or two Product Managers per category. While the ratio of Product Managers per category might seem quite fair at first sight, the truth is that each category includes several projects. Product Managers have the freedom to adopt the strategy they find to be the most suitable one to manage all of their projects. So, while a Product Manager may want to give the same attention to all projects, another may prefer to prioritize projects and leave the least important ones in "self--management". On the one hand, Product Managers who adopt the first approach have the advantage of knowing all the projects included in their category, meaning that even if they are paying more attention to a couple of projects, if someone approaches them about any other project, they will know exactly what was done and what is still to be done. On the other hand, they may not give enough attention and time to more relevant projects, because the truth is that different projects have different relevance for the business and for the customers. Product Managers who adopt the second approach can be sure that the most important projects will not lack in attention and focus, meaning that these projects will have a closer control than they would with the first approach. This leads to a faster accomplishment of results and timelines. On the other hand, other projects will lack attention, meaning that if someone comes to the Product Manager and asks something about that project he/ she may not be able to answer immediately.

Advantages of being part of Vodafone Group

The pace of change and development within the telecommunications market is accelerating and consumers' desire for better products is intensifying. To move the market forward, Vodafone is always focused on developing new and innovative services, which are often beyond the average customers' imagination until they are launched. This aspect is also enhanced by Vodafone Group, because in opposition to its competitors, Vodafone is part of an international company, which is constantly looking for possible ways of innovating using both existing and new technologies, especially when it comes to developing new Apps and Services. Vodafone has access to Apps and Services developed by Vodafone Group, and in such cases it only has to design the proper go-to-market strategy, as well as to keep the right product management. Furthermore, Vodafone also has access to higher-level partners than its competitors. For instance, a national competitor would hardly have access to Dropbox, which is associated with Vodafone Backup+. Another great example of a service that competitors would hardly develop, since it demanded a huge investment at network level, is Vodafone Secure Net. This is a service that protects users against viruses, dangerous files and harmful websites, by blocking unsafe downloads and alerting them via SMS. Secure Net could be an App, which would be much more affordable, but in that case it would not be possible to anticipate network threats. Vodafone Group only decided to make such investment because that service would be sold across all local markets (economies of scale).

Furthermore, it is important to keep in mind that Vodafone Group has teams whose job is not only to look for potential factors of innovation, but also to make sure to follow market trends, something that MEO's and NOS's teams have to do by themselves.

Lastly, while MEO and NOS only take into consideration the telecommunications' industry, Vodafone Group has a broader view about indirect competitors.

By grouping all of these factors, it is possible to explain why only Vodafone invests in Apps such as Vodafone Call+, which fills the place of indirect competitors (such as Whatsapp) in the market. Perhaps this situation will change with the purchase of MEO by Altice[26], since they are now part of a huge group as well. However, for the time being, both MEO and NOS have a much more conservative strategy regarding innovation, giving more focus to the promotion of their core business (mobile and fixed).

DISADVANTAGES OF BEING PART OF VODAFONE GROUP

Regarding the implementation of Group's Apps and Services, Vodafone Portugal **may lack in decision-making autonomy**. For instance, it does not make sense to make huge investments, as the one that was made in the case of Dropbox, and then allow each country to decide whether or not they want to adopt the solution. In order to take advantage of economies of scale several decisions are taken at a central level. However, countries have the freedom to make the final decision. For instance, due to legal restrictions, Vodafone Start could not be adopted by The Netherlands. Vodafone Group also takes into consideration if the local market is mostly pre-paid or post-paid oriented. In the case of Vodafone Backup+, all countries had to adopt it, but Vodafone Group allowed them to determine the most suitable price to be charged in each of them.

Another disadvantage of being part of Vodafone Group is the **lack of communication**. During the internship, I was part of two projects that demanded a lot of communication with Vodafone Group and I felt that, for several times, we were not synchronized. One of the possible causes of this problem is the fact Vodafone Group has to manage the relationship with several local markets. As Portugal is a small but efficient market, they give more attention and tend to be better synchronized with larger markets.

[26] Altice Group is a multinational cable and telecommunications company with a presence in France, Israel, Belgium & Luxembourg, Portugal, French West Indies/ Indian Ocean Area and Dominican Republic ("Overseas Territories") and Switzerland.

Lastly, **local markets cannot shape Vodafone Group's Apps and Services according to local needs**. For instance, Call+ could be more appealing if it was called "Falaparatodos", but Vodafone does not have the autonomy to make such a change.

COMPETITORS' STRATEGY REGARDING APPS AND SERVICES

Even though all MNOs have some similar Apps and Services (e.g. Vodafone has Ring Dings, MEO has Waiting Rings and NOS has Calling Rings, but they all are the tones that people hear when they call someone), both MEO and NOS have a much smaller portfolio of exclusive Apps and Services than Vodafone. While MEO has a portfolio of Apps and Services that can be considered as diversified (see appendix 8 for more information about MEO's portfolio of exclusive Apps and Services), with a couple of differentiating Apps and Services, namely True Kare and PT Magic Contact, NOS only has few exclusive Apps and Services and any of them is particularly innovative or encourages the usage of mobile phone. Actually they are all related with fixed communications (see appendix 9 for more information about NOS's portfolio of exclusive Apps and Services). Besides, NOS is in disadvantage when it comes to developing new Apps and Services, since it has a smaller target – young population, which only represents approximately 20% of the Portuguese population. This means that while Vodafone is able to take advantage of economies of scale, implying that costs may be diluted by customers, not only from Portugal but also from other countries, for NOS it is much harder to recover the investment. This explains why NOS has been promoting existing Apps and Services, instead of creating its own. For instance, NOS's WTF tariff plan[27] offers the most used Apps such as Instagram, Snapchat, Viber, Whatsapp and Facebook Messenger, meaning that targeted customers do not spend cellular data on the most used Apps. Besides Web traffic, WTF also includes 500 minutes to use for calls, which allows

[27] Tariff which targets young people aged 15 to 24 and is characterized by having the main focus on Internet communications, rather than the traditional approach of unlimited calls and SMS. WTF offers communications in Viber, WhatsApp, Skype, Facebook Messenger and BlackBerry Messenger.

about 8 hours per month. Communications are free to any network, on the contrary to what happens with Moche, MEO's tariff plan for the same segment, or Yorn (Vodafone's brand responsible for this particular segment). Besides, it is much more valuable for customers to have their favourite Apps for free (i.e. without spending cellular data) than having more cellular data, which will be spent in those exact same Apps. Actually, the most used service (after SMS) is browsing, which is mainly used to access email and social networks, such as Instagram, as well as to instant messaging (see appendix 10 for more detailed information regarding the most used services). Even though NOS communicates this tariff plan effectively, it does not communicate other Apps and Services. The same happens with both Vodafone and MEO, which also do not invest in communicating their Apps and Services.

In conclusion, even though Vodafone is much more innovative when it comes to developing new Apps and Services, which allows the company to provide its customers with more relevant and useful Apps and Services, NOS's strategy regarding the youth segment is currently much better, allowing it to increase its quota in this segment (although Yorn is the leader since 2000). Furthermore, MEO and NOS do not invest in innovation and so it makes sense not to invest in communicating Apps and Services. However, Vodafone makes a huge effort to be innovative and still is not effective regarding communication.

SUGGESTIONS

When it comes to **innovation**, Vodafone is clearly ahead of its competitors. For instance, no other MNO has a program like Vodafone Power Lab, which was created specifically to support innovation. Even though the main objective of this program is exactly to support innovation and give contestants total autonomy over the project they are developing, I think that Vodafone is losing a great opportunity to generate profits. It would not be a constraint for start-ups if there were predetermined conditions that in case of success they would have to share between 5% and 10% of their revenues with Vodafone (higher revenues would mean higher revenue share). Furthermore, Apps such as inviita only make few (and small in terms of space occupied) references to Vodafone Power Lab and these references are mainly present in non-relevant places, such as “About us” (see Appendix 11 and 12 to have a clear vision).

Vodafone should also contact Vodafone Group in order to make Vodafone Power Lab an international program. This would allow synergies between countries and it would also reinforce Vodafone’s competitive advantage in terms of innovation by ensuring the company’s access to products and services developed in other countries. This would also be meaningful for other local markets where the company could increase its competitive advantage as well. Lastly, there should be a higher connection between internal and external innovation. Currently, Vodafone relies on different sources of innovation, but it should not imply to rely also on different and unconnected people and spaces. For instance, there should be a common space (physical and online) where both Vodafone’s corporate staff and Vodafone Power Lab’s contestants could share their ideas and communicate with each other. In this case, a Vodafone Power Lab’s contestant can discuss possible improvements about a product or service that is being developed at corporate level, and vice versa.

Vodafone is known for its high level of **customer satisfaction**; however there is always room for improvements. For instance, Vodafone is well aware that it is necessary to increase customers’ loyalty, so that they stick to the company and ignore competitors’ offers. In order to do this Vodafone should appeal to customers’ emotional side, by sending them a birthday message, offering a special discount, for example.

In terms of **Apps and Services**, even though Vodafone has the most innovative portfolio, it is not effective at all when it comes to communicate it. If Vodafone has several differentiating Apps and Services, then there should be a proper communication of them, since it is useless to have the most innovative Apps and Services if customers who could be interested in them, do not even know that they exist. This can be done using part of the several means of communication that were already mentioned, but which are only properly used during the launch of an App or Service. For instance, there should be publications on Vodafone's Facebook page, outdoors, or in store advertising. One advertisement could actually contain information about more than one App or Service (it would not be sustainable to communicate every single existing App and Service individually). Besides, Vodafone could also get in touch with bloggers, such as "A Pipoca Mais Doce", who has the second most read blog in Portugal, being only beaten by the football blog "Visão de Mercado".[28] For instance, if she said that m.Ticket is a great App that makes her life much easier, it would definitely increase the number of downloads of the App.

When it comes to **Vodafone Group**, many Apps and Services are developed and managed with them. However, communication between Vodafone Group and Vodafone Portugal is not as efficient as it could be. In order to improve this, there should be an update call per week with Vodafone Group, so everybody could be always aligned. In general, each Product Manager does not manage more than a couple of Apps or Services along with the Group, so it should be doable for everyone to find a slot of one hour to make the call. Even though this is already supposed to happen, most of the times Vodafone Group postpones the calls. Thus, there should be a rule that sets these calls as mandatory. One of the reasons why Vodafone Group postpones calls with local markets is because they probably do not get the importance of these calls. This happens because Vodafone Group's notion of what happens locally is also too theoretical, and most of the times much different from the reality. In order to overcome this problem, Vodafone Group's corporate staff should visit a local market where they could see how everything works. This visit should last between one and two weeks, so they could have enough time to interact and meet both corporate and retail realities. For instance, during the first week (or days), they would be in a store and have meetings with staff from the stores

[28] Blogometro.aventar.eu, 2016

and call centres to better understand their functions and their concerns. During the other week (or remaining days), they would have meetings with corporate staff with the same purpose, as well as "deep dive" meetings, which would be "individual meetings" only between each Product Manager and Vodafone Group's responsible for the same projects. This would allow people who are constantly communicating to actually know each other, which will increase empathy between them and hence, facilitate future interactions.

Regarding **competitors' strategy in terms of Apps and Services**, Vodafone is well ahead when it comes to innovation, but it is getting behind in terms of offer, especially to the youth segment. Yorn, even though keeping its position as market leader, is currently losing customers for WTF. This happens for many reasons. For instance, while WTF has a great portfolio of Apps, which customers can access without using their cellular date, Yorn offers Spotify Premium access in the higher range package (currently customers can opt for 500MB for €1,80 per week; 1GB for €2,35 per week; or 5GB for €3,90 per week). However, it does not offer the data attached to it, meaning that every time a customer accesses to Spotify Premium, he/ she will always be using cellular data. In order to be more competitive, Yorn could offer this Service, as well as other Apps and Services (as Facebook and Whatsapp).

It is important to mention that all of these ideas have an associated cost, but these costs cannot be estimated due to lack of information and relevant variables that would have to be taken into account.

CONCLUSION

In conclusion, Vodafone seeks to exceed the expectations of its customers through superior product and service's offerings, so the company's ultimate goals can be achieved: the satisfaction of its customers, shareholders and employees. In an over-saturated market, Vodafone should do everything in its power to retain current customers and attract new ones. Even though this report is focused on mobile Apps and Services, fixed telecommunications is definitely the business unit in which there is more room for improvement. It has already been proved that customers who have Vodafone's fixed services are satisfied and do not intend to change to another operator. So, Vodafone has to focus its strategy on attracting new customers, by creating a 4P offer, for example. Regarding Apps and Services, Vodafone has a competitive advantage in relation to its competitors, by having the most innovative offer. However, there is no communication of these Apps and Services, which is inhibiting their profitability. Besides, a huge opportunity of being recognized as the most innovative operator is lost. Hence, Vodafone should make sure that Apps and Services, especially the most innovative and relevant ones, are properly communicated. Lastly, the company should consider the inclusion of the most used Apps in some tariff plans, namely Yorn's higher range packages, so it can be more competitive in terms of offers.

REFERENCES

Altice, (n.d). Altice Group - Altice. http://altice.net/altice-group/ (accessed October 20, 2015)

Anacom, 2008. Entendimento do ICP-ANACOM sobre o spin-off da ZON Multimédia e o seu impacte ao nível das análises de mercado e obrigações delas decorrentes.

Anacom.pt, 2013. ANACOM - Prestadores do Serviço de Televisão por Cabo (SDC). http://www.anacom.pt/render.jsp?categoryId=340394 (accessed October 19, 2015)

Blogometro.aventar.eu, (2016). Blogómetro - As estatísticas dos blogues portugueses. http://blogometro.aventar.eu/ (accessed January 3, 2016)

Brito, Ana. 2014. "Soma da Zon e da Optimus dá origem à marca NOS". PÚBLICO. http://www.publico.pt/economia/noticia/soma-da-zon-e-da-optimus-da-origem-a-marca-nos-1636292 (accessed October 19, 2015)

Hyder, G. 2014. "Portugal Telecom continues transformation as MEO brand replaces TMN.". Eurocomms.com. http://www.eurocomms.com/industry-news/9585-portugal-telecom-continues-transformation-as-meo-brand-replaces-tmn (accessed October 19, 2015)

inviita, 2015. inviita - feel the world. https://inviita.com/ (accessed November 10, 2015)

Marktest.com, 2011. Vodafone: lider no ranking de Satisfação e Lealdade Voz Móvel: Notícia - Grupo Marktest. http://www.marktest.com/wap/a/n/id~1762.aspx (accessed October 19, 2015)

Mckinsey.com, 2013. Higher satisfaction at lower cost: Digitizing customer care. http://www.mckinsey.comclient_service/marketing_and_sales/latest_thinking/digitizing_customer_care (accessed October 21, 2015)

MEO, (n.d). MEO. https://www.MEO.pt/l/aderir/MEOlv1?gclid=CKGt5tSvqckCFQgcwwod8c4J0w&kenshoo_id=b2062919-69ee-40be-b39b-36ece276de33 (accessed November 20, 2015)

Nos.pt, (n.d). Pacotes NOS - NOS. http://www.NOS.pt/particulares/pacotes/todos-os-pacotes/Paginas/pacotes.aspx?gclid=CLbmldSvqckCFdU_GwodoKQB7Q#tab2 (accessed November 20, 2015)

Nos.pt, (n.d.). ZON history - NOS. http://www.nos.pt/institucional/EN/about-nos/about-us/Pages/zon-history.aspx (accessed October 17, 2015).

Simões, Cátia. 2015. "Vodafone vai investir mais 125 milhões na rede de fibra.". Económico. http://economico.sapo.pt/noticias/vodafone-vai-investir-mais-125-milhoes-na-rede-de-fibra_235837.html (accessed December 22, 2015)

Vodafone - Press Releases,. (2008). "Vodafone Portugal unveils Customer Care application on mobile phones.". http://press.vodafone.pt/en/2008/12/17/vodafone-portugal-unveils-customer-care-application-on-mobile-phones/ (accessed October 16, 2015)

Vodafone.pt, (n.d). A História da Vodafone Portugal. http://www.vodafone.pt/main A+Vodafone/EN/Who+are+we/history.htm (accessed October 5, 2015).

Vodafone.pt, (n.d). A oferta Vodafone. http://www.vodafone.pt/main/A+Vodafone/PT/ Produtos_e_Servicos/ (accessed December 18, 2015)

Vodafone.pt, (n.d). A Vodafone Portugal - Vodafone. http://www.vodafone.pt/main A+Vodafone/PTQuem+Somos/a_vodafone_portugal.htm (accessed October 5, 2015).

Vodafone.pt, (n.d). Costumer Support. http://www.vodafone.pt/main/A+Vodafone/EN Who+are+we/VodafoneProfile/Costumer+Support.htm (accessed October 16, 2015)

WTF – Tá-se tudo a passar, (n.d). WTF – Tá-se tudo a passar. http://www.wtf.pt/ (accessed November 18, 2015)

YORN – É Vida Que Nunca Mais Acaba, (n.d). YORN – É Vida Que Nunca Mais Acaba. http://www.yorn.net/YORN/tarifario/yorn-x/index.htm (accessed November 18, 2015)