Developments on the e-health Portuguese sector

Case Study about ConsultaClick´s approach

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Preface

Upon writing the present dissertation - "Developments on the e-health Portuguese sector - Case study about ConsultaClick's approach" - I want to share with all of you the main motivations behind the final academic work of my Master studies focus on Strategy and Entrepreneurship.

Since the beginning, I had no doubts about the choice of the broad subject *Entrepreneurship for Development*, once it is a very interesting field of study in my personal and professional life. However until the final decision of the dissertation's theme several ideas were coming up in my mine. After a deep reflection, my advisor Professor Susana Frazão Pinheiro - to whom I sincerely thank for all support and orientation during these 4 months - suggested the case of an entrepreneur Portuguese company - ConsultaClick (CCK) - that aims to bring innovation to the health sector through the online appointments booking service, which I had the unique opportunity to work. Even if the e-health developments are only entering in Portugal nowadays, it was a theme that raised my attention. When I started to read more about this sector more I understood the wide range of opportunities around it, which gave me the motivation to, somehow be involved on it. For this reason, I realized that I could try to contribute by studying and making known one of the thousands of initiatives that could become part of our lives.

Once more I would like to thank my advisor for all motivation and enthusiasm, which was essential for the development of all my work and Duarte Champalimaud, Alexandra Hernández and Maria Xavier, from CCK for all information and availability provided.

Moreover, I would like to thank my family, specially my mother, stepfather, brother and sister to being a source of love and trust.

Finally, I would like to thank all my friends, in particularly, Carlota Azevedo e Silva for all the patience and for keeping me believing.

List of Acronyms

B2B	Business to Business
B2C	Business to Consumers
CCK	ConsultaClick
CEO	Chief Executive Officer
CSR	Corporate Social Responsibility
CTO	Chief Technology Officer
EHR	Electronic Health Record
EMR	Electronic Medical Record
EPR	Electronic Patient Record
FHU	Family Health Unit
GP	General Practitioner
GDP	Gross Domestic Product
ICT	Information and Communication Technology
KPI	Key Performance Indicators
MP	Medipédia
MQ	MedQualy
NHS	National Health System
OOP	Out-of-Pocket payments
PT-ACS	Portugal Telecom, Associação de Cuidados Médicos
ROI	Return on Investment
SAMS	Serviço de Assistência Médico-Social
VHI	Voluntary Health Insurance

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Abstract

Title: Developments on the e-health Portuguese sector - Case study about ConsultaClick´s approach

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The main goal of this dissertation is to analyze how a recent Portuguese start-up within the health sector can bring some developments and innovation to the National Health System, at the same time that it tries to integrate Corporate Social Responsibility (CSR) to contribute for a better society. Written in the form of Case Study, the dissertation shows how CCK´s service can be helpful for the Portuguese population, through the study of its business model.

The dissertation is structured in five chapters: (1) Introduction, which deeply describes deeply the present study and the motivation behind it; (2) Literature Review, explaining the main theoretical concepts within the Portuguese National Health System and e-commerce sector; (3) Case Study which illustrates CCK's best practices; (4) Teaching Notes, making an interesting analysis to the company's business model; and to conclude (5) some Future Guidelines are presented as well as the dissertation's Limitations.

Resumo

Titulo: A evolução do sector de e -health em Portugal - O caso de estudo sobre a abordagem da ConsultaClick

Autor: Rita Maria Pape

Esta dissertação visa, como objecto principal, analisar de que forma é que uma recente *start-up* Portuguesa, no sector da saúde, consegue trazer desenvolvimentos e inovação para o Sistema Nacional de Saúde, tentando, concomitantemente, integrar alguma Responsabilidade Social de modo a contribuir para uma sociedade melhor. Escrita sob a forma de um Caso de Estudo, esta mostra, através do estudo do modelo de negócios da CCK, como é que o seu o serviço pode ser útil para a população Portuguesa.

A dissertação está estruturada em cinco capítulos. Iniciada por, uma Introdução que descreve de forma aprofundada o estudo em causa e a motivação por trás do mesmo, seguida de uma Revisão de Literatura (2ºcapítulo), que explica os principais conceitos teóricos dentro do Sistema Nacional de Saúde Português, bem como o sector dos negócios online. O Caso de Estudo, descrito no 3º capítulo ilustra as melhores práticas da CCK e precede as Notas Explicativas (no 4º capítulo), que fazem uma análise ao modelo de negócios da empresa. Este estudo é concluído (5º capítulo) com algumas orientações futuras, advertindo para as suas respectivas limitações.

Table of Contents

Chapter 1: Introduction

CCK was the first company to implement an online appointment booking system in Portugal. The main aim of this dissertation, written in the form of case study, is to analyze how this company's business model can affect the Portuguese population's habit at the same times that brings innovation to the health market.

Initially, in order to give a theoretical background, through a Literature Review, the actual Portuguese situation is explained, starting with the description of the National Health System and it main players, followed by the e-health developments and the internet market. Moreover, the definition of e-commerce is presented, as well as its main drivers and future trends. In the third sub chapter a brief illustration of how organizations can gain consumers' trust through online business is showed. Finally, is provided a definition of CSR and how can it make companies more competitive.

The third chapter introduces CCK's main practices, describing since its origin until its approach in the Portuguese health market. The case study shows the organization background making reference to its mission, vision and structure, as well as its service and strategic objectives for the next years. Then a summary of the main economical, social and political Portuguese health aspects are referred, followed by the description of the key market players. Afterwards, CCK's approach is presented by the explanation of its business model, considering its customer value proposition, revenue model, key resources and processes. In conclusion, there are illustrated the company's future strategy plans, such as "ConsultaSolidária"[1], the idea to address CSR.

In the next chapter, the teaching notes are prepared to support the professors analysis. A summary of the case study is in the first sub chapter, in order to make a brief overview of the company. The following five teaching questions are also present with the respective explanation of the learning objectives.

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[1] Solidarity Appointment (translation)

TQ1 - What are the main challenges that CCK is facing?

TQ2 - State CCK's Key Success Factors. Analyze the company's position comparing it with the main competitors, specifying which is the competitive advantage of the company.

TQ3 - How can CCK increase patients' trust? Do you think that a new Marketing Strategy will be helpful for that? Justify.

TQ4 - What will be the main advantages and disadvantages of "ConsultaSolidária"? Is the company more competitive implementing it?

TQ5 - What will be your final recommendation to optimize CCK's business model?

The discussion and analysis of those questions is present as a guideline for the professor's orientation.

Finally, the last chapter of the dissertation provides its conclusions and future research, as well as its main limitations.

Chapter 2: Literature Review

2.1 The Portuguese Situation

2.1.1 National Health Care System

2.1.1.1 A Little Overview

In Portugal, the health care system is divided in three different systems: the National Health System (NHS), special public and private insurance schemes for certain professionals - named Health Subsystems - and private Voluntary Health Insurance (VHI). Barros & Simões (2011), present these programs that are connected and operate at the same time in order to make the existence of the health care system possible.

There are several institutions, organizations and bodies, such as the Ministry of Health, Public and Private Hospitals or Pharmacies, which constitute the system and deliver health care services to people. (See in detail the HealthCare System in annex 1).

The head of the system is the Ministry of Health, and is responsible for planning, coordinating and financing all health care public services. The Portuguese population can choose from using either public or private providers, that have significant differences between them, namely in financial terms. Public Service is by law[2] tendentiously free for the whole population; however Out-of-Pocket payments (OOP) still represents a significant portion of the public financial flows. Additionally, Portuguese citizens have the possibility to decide between two health care insurances - NHS and VHI - or either use both. In statistical terms, according with the National Health Survey (2005/2006), approximately 20-25% of the population is also covered by health subsystems, which, in some cases, is mandatory such as the bank workers. These schemes, offer a higher reimbursement if patients use private providers.

In the recent past, Portugal has seen improvements in its health indicators (Barros & Simões, 2011), but also a wide range of measures and reforms aimed to improve NHS

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[2] 1979 - Article 64.°, n°2 a), Constitution of the Portuguese Republic.

efficiency and effectiveness, namely: reform of primary health care, with the extinction of health sub-regions, the creation of Groups of Health Centers and the new organization of the health centers, where Family Health Unit (FHU) has an important position; new drug policy, in other words, a set of measures that aimed to reducing prices and encouraging the use of generics to in order to decrease drug expenditures. In the private sector, the last years were marked by the appearance of several hospitals and the long planned operationalization of Public-Private Partnerships, as in Braga and Cascais hospitals.

Portugal is still facing important challenges that could lead to problem solving solutions in order to have a more sustainable, organized and manageable system. Those challenges are (Barros & Simões, 2011):

- reduce the number of **health expenditure** and control costs;
- improve medical practices with **information technologies** solutions;
- reduce **mortality rate** and increase life expectancy, through modifying lifestyles;
- implement indicators that better reflect the **clinical activity**.

2.1.1.2 Current Situation

In Portugal, there is a huge focus on patient's empowerment, namely related with patient information, choices and pathways. Its emphasis comes from the fact that it was considered one of the five important issues on Ottawa Charter for Health Promotion (WHO, 1986).

In the health system there still are several sources of information, such as websites, with specific patient areas and availability services information, for example *Portal da Sáude*; call centers used by all Ministry of Health institutions to immediately respond specific questions, namely for the part of the population that still don't have internet access, for example *Linha Saúde 24* that operates since April 2007.

In the NHS, patients can only choose the institutions according to their geographic residence and they have to register with a general practitioner (GP) or family doctor that works in their FHU. Patient's choice responsibility is reduced because the State is still inclined to be the responsible for Portuguese health care status and delivery (Barros & Simões, 2011).

Although, there are some citizens that have special treatment due to the fact that they are included in private health subsystem: *Portugal Telecom, Associação de Cuidados Médicos* (PT-ACS) for telecommunication employees and *Serviço de Assistência Médico-Social* (SAMS) for bank employees. These systems have their own management, and in the case of PT-ACS members are not covered by NHS since they signed an opting-out contract with the Ministry of Health.

Patient's first step in health care service is the contact with GP/family doctor, who theoretically act as a gatekeeper and decide the next patient step. GP could treat the patients or send them to an hospital, where they will receive medical diagnosis and treatment. What is really happening is that people go directly to emergency departments independently of the type of appointment they need, which creates a delay in waiting times (Barros & Simões, 2011). Bentes et al., 2004 say that it is estimated that 25% of people that are attended in emergencies do not need immediate care. (See more about emergency numbers in annex 2). For patients covered by the health subsystem this process will take a different path, since they are able to go directly to private hospitals or clinics.
Although patients have some choice in their health path, there are still some areas, such as dental care, that are not very well covered by the public hospitals.

Concerning total health expenditure, annex 3 shows the Portuguese evolution from 2005 to 2011. Financed by private and public sources, this percentage has been increasing over the years; the percentage of the private source coming from OOP, VHI, non-profit-making institutions serving families and other private funds; and the public coming from taxation, around 90% (Barros & Simões, 2011).

Furthermore, with the technology evaluation some public hospitals and health institutions start to adhere to electronic processes, such as online booking appointments. However this concept is still being developed and it will be a long path to became a norm within the NHS; see section 1.2

2.1.1.2 Voluntary Health Insurance

Health insurance has been present in recent years, as an extremely important development, and is nowadays a reference unavoidable in the health care system in Portugal. Private health insurances take a supplementary nature comparing to NHS. Since 1990, the population covered by private health insurances has suffered significantly changes (see in annex 4): the total number of persons insured has been increasing, reflecting the importance that this insurance type has assumed in social protection; the tendency of the individual insurance started in 2000, but only in 2005 the number of individual insurances was bigger than the group insurance; finally in 2008, around 20% of the Portuguese population had already taken some variety of VHI, although this percentage is still less than the European average - 22% (Thomson & Mossialos, 2009).

Additionally, in the private health insurance sector there are three main market conditions: the price must be reachable; the demand has to be positive, which means that it is important to have some risk averse individuals; and it has to be technically possible to supply insurance. Furthermore, the demand is influenced by the probability of current illness and the individual income, taking into account the country conditions. In Portugal, generally the people that buys private insurance are individuals living in urban areas, between 25-54 years old, working in medium/large companies having an medium/high income (Thomson & Mossialos, 2009). Considering sellers, commercial insurers represents almost all the market with three main companies having a market share of 80%. There are 19 insurances company in Portugal (Thomson & Mossialos, 2009). It is considered a concentrated market associated to low prices for diagnostic tests that consequently, will be able for companies to establish and have some price power. It has been noted that there is a tendency for increasing this concentration through companies mergers, namely in the banking and insurance sector.

VHI market can operate taking into account different aspects, such as policies, benefits or costs. Regarding policies, in Portugal, the type of contract used for both, companies and individuals, is annual contracts, normally purchased by individuals with less than 60 years old. Finally, insurers can establish premiums depending on risk, measured firstly by age and occasionally by health status, but there are some restrictions for this benefits normally

associated with co-payments, co-insurances and balance billings (Thomson & Mossialos, 2009).

2.1.2. e-health

Electronic patient records is not still well developed in Portugal, although in approximately 60% of GP there is some type of patient's information that is already stored in electronic support. There are some regions of the country where computers are not yet available for practice medicine and according with Costa Pereira et al, only 77% of consultation rooms have a computer. Moreover, in around 63% of these practices, a computer is present during a medical appointment between a doctor and a patient. For example, it can be used to search information or to show graphs and studies in order to help the doctor explaining to his patient all possible treatment and help in the decision process.

2.1.2.1 Deployment of e-health applications

Annex 5 shows a summary of Portugal's hospitals e-health profile. According to the European Commission, there are five medical issues where Portugal performs better than European Union average, such as the single Electronic Medical Record (EMR) shared by all departments or e-prescription system. (European Commission, e-health benckmarking III, 2011). The objective to use Information and Communication Technology (ICT) appears in Portugal for the first time in 2003 and since then it has been considered as a national priority. E-health technology is supported by Electronic Health Record (EHR), Electronic Patient Record (EPR) and EMR. EHR is the electronic record that includes or virtual interlinks individual data in both EPR and EMR. EMR is an individual electronic record in a clinic or doctor's office. EPR is an individual electronic record in a hospital or healthcare institution (Costa Pereira et al, 2010). Since 2009 it has been planned and developed a National EHR System, where patient summary health information would be included, such as GP record; laboratory results or electronic medication record. In this process, some hospitals and primary care providers have been involved in the main pilots.

e-Prescription can be defined as an electronic transference of a prescription between a health professional to a pharmacy where the medicine can be bought by the patient. (epSOS - European Patients Smart Open Services). Since 2004, in Portugal, it is possible for health care providers to issue a prescription through an electronic application with access to a drugs database. However, an electronic transmission of these prescriptions from a doctor to a pharmacy still does not exist (Costa Pereira et al, 2010). What is happening nowadays is that patients still have a prescription paper that they need to take to the pharmacy. On the other hand, Portugal is one of most developed countries regarding the availability of computerized system for e-prescription, with around 80% (European Commission, e-health benckmarking III, 2011; see annex 6).

Telemedicine is understood by the European Coordination Committee of the Radiological[3] as "*the delivery of healthcare services through the use of ICT in a situation where the actors are not at the same location"*. In Portugal, there are several telemedicine activites in both regional and local approaches, however there isn't a national plan for those activities. Since the 90s there are some projects going on especially in dermatology, radiology and cardiology areas, which include primary and secondary health care services. Additonally, Portugal has been involved in some recents international projects, namely related with the north of the country and Galicia and also with some African countries, especially Portuguese speaking ones. Nowadays, in a national level, the Ministry of Health creates *Linha Saúde 24*. This call center service had been founded to provide screening, counselling and referral to patients, though a phone or a chat. It also help illness people with generic health information.

2.1.2.2 Legal Issues

Regarding regulatory and legal issues, confidentiality and data-protection are present within the main challenges to implement e-health processes and applications. In Portugal, there is

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[3]COCIR Glossary of terms
Website: www.cocir.org/uploads/documents/-
883cocir_telemedicine_glossary_of_terms_17_february_2010.pdf

only a data protection for generic law[4] and another one for genetic data.[5] The National Commission for Data Protection is responsible for controlling data protection, (counting with clinical data) and to impose laws' compliance around the entire country. On the other hand, patients do maintain the right to the protection of their privacy, namely respecting to health care information.[6] Additionally, the patient has the right to know about his information medical records, but a doctor of his choice will be the intermediary for this process.

2.1.3 Internet

The study conducted by the Communication Observatory, shows that the household is, for Portuguese people, the main Internet access point, in a country where the penetration rate of hardware like smartphones and tablets is residual. The increase is 5.8 percentage points between 2010 and 2011, from 51.2% to 57%. Moreover around 54.3% of Portuguese men were Internet users in 2011, while in women it was 44.2%. The use of Internet has a tendency to decrease in reverse age: is in the range of 15 to 24 years which is the largest portion of Internet users, followed by the next phase of the 25 to 24 years (annex 7).

On the other hand, the main reason given by non-Internet users for not using it is related to a lack of interest or the impression that the Internet is not useful to them - 38.9% (see annex 8). The digital illiteracy is the second reason given for non-use and lack of access to computer or Internet is the third one (9.1%), closely followed by economic reasons that relate to the high cost (Communication Observatory, Internet in Portugal, 2012).

Regarding reliance on the information available online, it is smaller in the case of users than in non-users. For users, the average confidence in the information available on the internet exceeds confidence in the journals/magazines, being lower than the stated confidence on the TV news (annex 9).

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[4]Law of Personal Data Protection - National Commission for Data Protection 1998
[5]Genetic information and personal health information - Assembly of Republic, 2005
[6]Basic Law on Health (nº48/98) and the Patient Rights and Duties Chart.

Considering internet usage, the activity carried out by the widest portion of users in Portugal is sending and receiving e-mails (87.3%) (see annex 10). Social networks are the second most widespread communication activity among them, used by 73.4%. The instant messaging services are used monthly or more often by 63.2% (Communication Observatory, Internet in Portugal, 2012).

Finally, in the category of goods and services, the most popular activities are rather related with search for information than with electronic transactions. For example, 90.4% never make Internet purchases, 77.2% never use the Internet to take advantage of e-banking services, 72.5% never book or purchase travel tickets and 69.8% never use the Web to purchase goods or services. Moreover, in the informational categories, the rate of non-use is much lower (Communication Observatory, Internet in Portugal, 2012; see annex 11).

2.2 e-Commerce

2.2.1 Definition

In 1997, Kalakota et al argued that "*depending on whom you ask, electronic commerce has different definitions"*, mainly regarding business process, communications, service and online necessity; claiming that e-commerce is so simple that "*buying and selling over digital media*" (Kalakota and Whinston, 1997). Timmers soon after came up with a similar definition, highlighting that the implementation of new technologies will facilitate business models. In 1998, the author made clear what for him would be the definition of e-commerce "*any form of business transaction in which the parties interact electronically rather than by physical exchange or direct "physical contact*". He underlines that different types of e-commerce initiatives differentiate among eleven typologies such as e-shops, making possible to order and pay through a electronic bases; e-procurement, describing electronic tendering and procurement of goods and services; or third party marketplace, which refers when a company want to leave web marketing to someone else (Timmers, 1998).

Complementing these definitions above, it is also beneficial to look at the contribution of Rayport in 2002 who stated that e-commerce is an "*exchange mediated by the technology between several parties (individuals, organizations or both), as well as the electronic activities inside and between organization that facilitate these exchanges*" (Rayport, 2002). One year later of Jeffrey's contribution, Zorayda Ruth Adam had already stating, in agreement with Kalakota, that e-commerce covers a large variety of online business. The author defines it as "*the use of electronic communications and digital information processing technology in business transactions to create, transform, and redefine relationships for value creation between or among organizations, and between organizations and individuals*", empathizing that there are five different types of e-commerce: business-to-business (B2B); business-to-consumer (B2C); business-to-government (B2G); consumer-to-consumer (C2C) and mobile commerce (m-commerce). According to Zorayda, B2B refers to business between companies and B2C refers to business between companies and consumers. Other authors share the same thought regarding these concepts. For example, "*The exchange of products, services or information between businesses on the Internet is B2B e-commerce*" and "*any business selling its products or service to consumers over the Internet for their own use*" is given as the definition of B2C (Bajaj et al., 2004).

2.2.2 Drivers of e-commerce

Zorayda Ruth Adam (2003) present that there are at least three main drivers for e-commerce: *economic forces*, *marketing and customer interaction*, and *technology*; and the path to achieve success will be directly related with the interaction of these elements. Regarding economic efficiency, it is considering as one of the most advantageous when companies are present in e-commerce business models. Low-cost technological infrastructure, advertising and communication costs or cheaper customer service alternatives are the result of it. Additionally, for companies it is also recommend to use internet to promote and support their business mainly in relation with marketing or customer services issues, due to the fact that it will be easy to provide more information in a easily way and if they are planning to enter in a different market segmentation. Finally according with Zorayda, technology is the key for e-commerce growing. With a constantly

evolution, it has been quickly developed in order to make possible a more efficient and economical communication. (Zorayda, 2003)

In addition, Kalakota and Whinston (1997) also state that there is one more e-commerce driver: "*time spent*". In other words, the authors use the expression "time compensation" to demonstrate that business cycle can be shorter though e-commerce capacity.

2.2.3 Future trends

"Companies need to be able to manage the site at the executive level, at the network level and the service level. The only thing that matters to the customer is the service, so service level management is very significant"

Fred Harris, Sprint's director of network planning and design

In 2000, Kalakota et. al. argued that traditional companies started to realize that new electronic firms take away some part of their markets and began to feel threatened by those firms. With globalization and technological evolutions, innovation is becoming increasingly competitive, however, the most part of the companies still cannot see it well, in other words they "*don't take the digital world seriously*" which means that these companies can start to see this "digital era" as something normally and usual. Successful companies need to find and apply business models that take them to a winning place, in order to be able to evaluate the best market opportunities and proceed to a fast decision making (Kalakota and Robinson, 2000).

Additionally, at the same time that technological innovations are changing, its cost continues to decrease and the normally required intermediaries tend to disappear (Sardoni, 2005). Moreover, internet access is still growing in an unlimited scale, which means that consumers tend to follow it, and simultaneously, it encourage companies to benefit from information, services or products developed through internet. All this, will create a larger and richer worldwide e-commerce market (Sardoni, 2005).

In 2006, Gehl added his argument saying that it is also important consumer's role when it comes to e-commerce market trends, suggesting that if companies want to increase their online business, they must take care of their consumers.

2.3 Online trust

Recently, Ardion Beldad et al. (2010), came up with a literature review on the antecedents of online trust, concluding that organizations should understand how online business works and can be develop, in order to acquire their clients' trust. Thus, the growth of online trust can be affected either by organization-based trust antecedents, or client-based or still by web-based, which will be the only referred in this chapter.

Which will be the difference between people's trust when it refers to offline and online environment? Corritore et al. (2003), said that it is important to understand offline procedures in order to be possible to apply them in online environments. However, Marcella (1999), Shankar et al. (2002) argued that there are several differences between offline and online trust, namely related with the "object" that is behind it. In the offline case, there is a presence of an organization; whereas in online context is technology (through Internet) that is behind it. From a marketing point of view, in the opposite way to traditional business, being the objects represented by organization (Doney & Cannon, 1997), consumers in e-business need to trust in the website itself, but also in the company that it belongs and, principally, for security's reasons (Boyd, 2003).

Perceived ease of using a specific technology, is considering for Davis (1989) as one of the most important factors in technology acceptance model. Some years late, Chau, Hu, Lee, and Au (2007) added that search for information within a web-site can be one of the variables to influence consumer's trust, particularly during the first time that they do it.

Furthermore, considering information quality within a web-site, according to Liao, Palvia and Lin (2006), on e-health services it is one of the most important variables for consumers, since they neither tough or feel the online item, so they need to have understandable and clear information to decide for use it or not.

Privacy issues have been considered as important factors when it comes to e-commerce trust (Hoffman et al., 1999). There issues include entering in unsecure pages, receiving spam mails or feeling that their confidential information can be accessed by other entities. In other hand, a different study showed that security is ranked higher than privacy, which means that companies should be careful and include the best possible security features in order to increase consumers' trust (Yoon, 2002). Additionally, according to Laure & Deng (2007), as stronger as possible that the privacy policies could be, it will improve company's trustworthiness in consumers' point of view.

Finally, Doney et al (1998) also pointed out that there are two different tools for the configuration of trust in the transference process - recognition of proof sources and the set up of relations between the unknown entities and the known ones - taking into account that the those known entities act as proof sources are truthful.

2.4 Corporate Social Responsibility

For a long time and for several authors, CSR has been defined and considered a subject of debate. For the Commission to the European Parliament it is "*a concept whereby corporations integrate environmental and social concerns*" and it cannot be seen as a solution for society problems. (Commission to the European Parliament, The Council and the European Economic and Social Committee, 2006). Additionally, it was also defined as "*a business organization's configuration of principles of social responsibility, processes of social responsiveness, and policies, programs, and observable outcomes as they relate to the firm's societal relationship*" (Wood, 1991). The author also added that CSR is not something that should be separated from the business core activity performance in order to not be seen as something that companies need to have (Wood, 1991).

On the other hand, Prof. Archie B. Carroll's classic definition considers four different components of CSR: economic, legal, ethical and philanthropic responsibility. This framework starts with the reason for companies creation –to be profitable. Simultaneously,

it is necessary to take into consideration that businesses operate within a society, which means that they have to obey the law. Additionally, the same society expects business to be ethical, which means that it is expected that companies do what is fair and right. Finally, both financial and human resources contributions are expected in order to be able to achieve a sustained and increased quality of life (Carroll, 2004).

Furthermore, for the CSR defenders it should include four different perspectives: *moral obligation*, in the sense "to do the right thing"; *sustainability* centered on "meeting the needs of the present without compromising the ability of future generations to meet their own needs" (Norwegian Prime Minister Gro Harlem Brundtland, 1980s); *license to operate* since companies need authorization to implement their business; and *reputation*, concerning companies' profiles (Porter and Kramer, 2006).

Moreover, for successful companies it is also fundamental to have a productive and efficient workforce inserted in a healthy society, but at the same time, the same society wishes to have successful companies. Social factors and social conditions belong to every competitive context, which always influenced companies' capacity to achieve their market approach or their strategy. Thus, Porter and Kramer, divided competitive context in four different sectors: *quantity and quality of available business inputs*; *the rules and incentives that govern competition*; *the size and sophistication of local demand*; and *the local availability of supporting industries*. For them it is the basis for companies' innovation and imagination to address and improve CSR initiatives (Porter and Kramer, 2006). Besides that, companies can understand which specific CSR problem they are able to be involved, in order to increase the maximum possible competitive benefit, always taking into account that they are not obligated to solve world's problems (Porter and Kramer, 2006).

Chapter 3: Case study

3.1 Introduction

"Your time is limited, so don't waste it living someone else's life. Don't be trapped by dogma - which is living with the results of other people's thinking. Don't let the noise of other's opinions drown out your own inner voice. And most important, have the courage to follow your heart and intuition. They somehow already know what you truly want to become. Everything else is secondary."

Steve Jobs

As an entrepreneur, Duarte Champalimaud wasn't afraid of the economical and financial current crises to start his own business. CCK the first Portuguese company to offer online booking medical appointments, based in Lisbon, Portugal, has developed a very simple but very innovative appointments booking approach. Since the beginning, Duarte and his friends understood that a service to complement the existing one was necessary. This started mainly in the capital but with a fast spread around the country and after outside it.

The number of no-show appointments is still high in Portugal[7], so it was the time to make CCK a reliable service to allow people to book their medical appointments in an easy and quick way. Moreover, the fact that the company was still unknown in the Portuguese health market could be a great opportunity for Duarte to implement his idea.

The company is still aware of the several details and deep procedures in this market, mainly related with information and medical protection, however they are willing to take the risk and try to change the Portuguese mindset. This case study aims to analyze CCK's business model, as well as the main key factors for the future especially the one related with social responsibility, in the Portuguese healthcare market. In the end, it will emphasis the innovative, sustainable and mission-driven purpose of CCK's.

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[7] In first trimester of 2012 was 11.9% - Health System Central Administration.

3.2 Organization's Background

3.2.1 Origin and Story

"We belong to a generation that needs internet to book holidays and shopping. We are active people who work hard and come home late."

Duarte Champalimaud , CCK's CEO

There are misfortunes that appear to change our lives, and it was the case of Duarte Champalimaud, one of the founders of CCK. He has been working in a solid and quiet company until he decides to modify his lifestyle with a creation of a risky business. The idea comes during the two month that he spent in a hospital trying to recover from a serious car accident. It was a period where his life was limited by a computer. During all this time he recognized that there isn't a channel that allowed the doctors and patients to communicate through the internet, emails were the only option to book his physiotherapy appointments.

He was inspired by two different sources. From his youth Duarte learned that life is made of opportunities, and that should be optimally exploited, in order to be able to leave to others, whether children, grandchildren or friends, different opportunities in a better or equal world, in the most sustainable possible way. In this sense, with the creation of CCK - a platform for booking medical appointment through the internet - the founder wants to transform his ideas and values within a very important market for the entire population in order to give futures possibilities, opportunities and sustainability in this industry. The second inspiration was based on some well-known and existent business models in aviation and hostels sectors. However, later during research he found out similar projects in other countries, especially in United States of America. This only emphasized his belief in this new project.

The idea is to facilitate people's life in terms of health, but a simple question automatically came up: how is it possible? In Duarte's view, the answer is not difficult - with CCK, which makes possible the instantaneous appointments booking, twenty four hours per day.

Innovation and technology are present within the entire business model (among which access to doctors agenda and taking into account free places) patients are able to choose the best day and time for them. This also includes research professionals by specialty, geographic area, or contracts with insurance and availability.

This new model took about a year and half to form rather and the platform was released in May 2011. For patients the service is free, while doctors who want to join it, will have a monthly charge (the average of two normal appointment) between 70€ and 120€.

Until March 2011, the three founders (Duarte, José Carlos Gomes and Francisco Lufinha) (see exhibit 1) had already invested 250.000€, mainly in the platform development, done by RIS 2048, a Portuguese company based in Aveiro. At the same time, the company accounted for about 100 doctors already registered. By the end of 2011, the total amount increased by 500.000€ already with the business expansion, that began in Madrid, Spain and then followed up for Sao Paulo, in Brazil.

Each step is taken with extreme caution remembering how much money implies a simple decision and Duarte knew it wouldn't be easy to make and create a start-up, although he had the conviction that the fact of having a small portion of money to spend didn't have to be a barrier to business, quite the contrary, it would force the company to has a greater criteria decision making. Since then, CCK starts to offer its service to several Portuguese doctors and patients and profit and non-profit organization working in Portugal.

3.2.2 Vision, Mission and Organization Structure

At this time, CCK has been increasing their brand awareness in the Portuguese healthcare market. For this to be possible they always have been focus on their vision *"Health and Wellness for the whole population"*[8]. It is a long path to achieve health and wellbeing in people's lives but the company will not do it alone; to complement CCK's defined its mission *"promoting health and wellness for all population through development and the using efficient information technologies"*[9].

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[8] CCK website: pt.consultaclick.com/docmedia/statement.pdf
[9] CCK website: pt.consultaclick.com/docmedia/statement.pdf

Additionally, CCK bases and leads their business according to transparency, respect, confidentiality, legality and social responsibility, which are the values present in the core business (see exhibit 2).

Based in Lisbon, CCK is also present in Europe and South America - namely in Madrid, Bucharest, Brussels and São Paulo - where its value proposition is identical to the Portuguese, with the necessary adaptations to these countries. Since the beginning, Duarte only focus was in Portugal. Yielding then the right to use its brand, patent, know-how and the exclusive distribution rights of its service, it is the way to get about 15% per year of the business outside Portugal.

CCK management team is composed of a chief executive officer (CEO), a chief technology officer (CTO) that together with a Financial Consultant, decide the development of operational, strategy and financial decisions. There is also an Advisory Board Company counting with the presence of two medical doctors, one in private sector and another in the public sector (see exhibit 3).

3.2.3 Service

"Everything is easy when all goes well. However, problems happen, and how many times you don't know who to call when having a health problem? Which is the nearest doctor? Which is the best doctor? Which is the best for your problem? Which one can see you first? Now everything is easier, ConsultaClick.com answers all of these questions! Search a doctor by specialty, by area, or by insurance plan. Find the nearest doctor on the map and search the most convenient time on doctor's live agenda. Know more about your doctor, see the photo, the accepted insurance, find the doctor office on the map and know the doctor's profile and availability. Choose a time for doctor's live schedule, check all the appointment details and that it, appointment booked!! Access consultaclick.com, once registered access your personal area. Here you can see all of your appointments, their current status and easily canceled. View your favorite doctors. It has never been of easy to book an appointment." [10]

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[10] www.youtube.com/user/consultaclick?feature=results_main

Since the beginning Duarte and his team define that CCK will operates in two different perspectives, offering services to patients and to doctors. In the next table it is possible to see the main advantage for both.

Table 1 - Service offered to patients and doctors

For patients	Fast and free service to find a medical appointment according to their needs; Access to Personal Area that archive passed information; Constantly information about promotions and activities sustained by doctors and clinics.
For doctors	Operational tool: real time management and updates agendas whenever an appointment is canceled or booked; Valuable tool: complete profile with curriculum vitae, pictures, insurances agreements and appointments schedule availability. It includes a rating system and previous patient's feedback that both represent the doctor's visualization and patients retained accomplishments; Personalization of SMS and/or email to send to patients[11].

Additionally, clinics management (and also users) can account with a software integration that offers the possibility to combined agendas, doctors and patients and control it as a whole. This option creates the opportunity to patients check and book their appointments at the same time that doctors are able to manage their agendas. To complement this aspect of the service, CCK helps both doctors and patients if they find difficulties related with booking appointments and with the advisement to manage the doctor's profiles, having a phone line.

To conclude, the patients use the service in a very easy and intuitive way. By accessing the ConsultaClick.com performs its registration, providing data such as name, sex, date of birth, email and password, telephone (with a code to validate) and postcode. From this step

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[11]This comes from the fact that CCK wants to improve the doctor-patient relationship by supplying, with Google Adwords and SEO, an online marketing service, so patients after booking an appointment receive a confirmation email with all details and also this personalized SMS.

is able to make your appointment scheduling through the platform. On the home page choose the doctor quickly through the medical specialty you need, area of the country, and health insurance. Soon then comes a list of doctors which provide their schedule appointments. Simply display the time that suits you and click.

3.2.3 Strategic Objectives[12]

"CCK is committed to providing an informative and intuitive portal with the best healthcare professionals, which is a reference in the sector. We will be active in its development to create new and improved features that add value to the user."[13]

Until 2014, Duarte and his team, have very clear objectives that they want to be achieved. Considering that the number of registered doctors was, at the end of June 2012, around 1.100 and the number of registered patients around 8.300, the company wants to increase them to 4.000 and 50.000, respectively. At the same time, they only have 150 appointments booked per month, on average. Since their main goal is to increase business volume, they want to achieve 600 appointments per month. Due to the fact that they have the most complete database, it is very relevant for the company's success to achieve those numbers.

On the other hand, taking into account the general market, the company wants to reinforce the positioning strategy as a marketing tool, as well as to look for new and different market opportunities, distribution and selling channels.

Finally, by the time that the company was growing and entering in the market, they developed three different key performance indicators (KPI), as it is possible to see in the following table.

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[12] CCK website: pt.consultaclick.com/docmedia/1ano.pdf
[13] CCK website: pt.consultaclick.com/docmedia/statement.pdf

Table 2 - KPI Definition

KPI	Definition
New patients Registration	# of new registers as new patients
Appointments booked with complete registration	#of visitors that didn't intent to register but only book an appointment
Appointments booked	# of website users that booked an appointment

In the exhibit 4, it is possible to see the conversion and abandonment rates for all these KPI. For CCK, the ones that have the more strategic importance to increase are the last two, since they want to increase to 10%.

3.3 Portugal: Healthcare industry

3.3.1 Political[14]

The country has been standing up to a serious economic and political crisis since the last four years. Consumer's purchasing power has been decreasing ever since, which creates development barriers to all industries. Healthcare market is not an exception of this situation, although population is always concerned and worried about their health status.

Regarding healthcare governance in Portugal, Central Governance is responsible to plan, regulate and manage the NHS, through the Ministry of Health and it is also its functions the *developing health policy and overseeing and evaluating its implementations.*
Nowadays, Ministry of Health is developing an e-health strategy that depends on a benchmark of Europe's best practices and is co-financed by the European Union. However, legally there are several different and strict laws concerning the data protection and confidentiality about the patient's treatment.

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[14]Oliveira and Pinto, 2005, Health care reform in Portugal: an evaluation of the NHS experience

3.3.2 Economics[15]

Although the economical crisis, healthcare market in Portugal is not so affected as it could be by the fact that health expenses are normally one of individual's main priorities. In 2010, consumer expenditure in health goods and medical services was 604€ per capita, which increased around 5.6% from 2009. Additionally, being one of the lowest of the European Union, consumer health market growth was 3.17% from 2005 to 2010.

However the private health expenditure as a percentage of the total health expenditure stays on 31.7%

3.3.3 Social[16]

Despite the installed crisis, society will always need healthcare institutions and doctors' services to take care for their health problems. In this sense all the healthcare system constantly needs a different approach and strategy for what is going on in the society.

Portugal has an ageing population, namely due to the fact that the mortality rate has been increasing - in 2010 was 9.96[17] (per thousand habitants) - and the fertility rate has dropped significantly - in 2010 was 1,4 babies per woman[18]. (see exhibit 5). Moreover, the life expectancy at birth in the same year was 79 years and has been enlarging leading to an older population. (exhibit 6) The fact is that the main causes of death in 2010 were diseases of the circulatory system, malignant neoplasm and diseases of the respiratory system (exhibit 7)

On the other hand, it is showed in exhibit 8 and 8.1 the main health indicators (doctors, pharmacy professionals, laboratory pharmacists, pharmacies) as well as its evaluation in 2010. Since 2000, the number of nurses and doctors has been growing, on the other hand the number of pharmacies remained the same. Furthermore, taking into account the

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[15]Euromonitor International, 2012, World Consumer Lifestyle Databook
[16] National Institute of Statistics (NIS)
[17]www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_indicadores&userLoadSave=Load&userTableOrder=4490&tipoSeleccao=1&contexto=pq&selTab=tab1&submitLoad=true
[18]NIS - Estatística no feminino - Ser Mulher em Portugal 2001-2010, page6

number of medical appointments in Portugal, the region "Alentejo" appears in the first place with 4,6, followed by Lisbon with 4.5, and orthopedics being the specialty with more external appointments in hospital ambulatory clinic, during 2009 (see exhibit 9 and 10).

3.3.4 Principal key players

In the Portuguese health sector, the Ministry of Health is the entity responsible for regulating, managing and planning all health policies, including private health services providers even if they are not incorporated into NHS. Within this industry the main stakeholders are: medical doctors, clinics, patients, insurance companies that are directly involved with CCK core business.

Additionally, the company is facing some direct competition, as it will be shown in the next session. However, Duarte is still not concerned about those companies due to the fact that the market is not so competitive and CCK's value proposition is formulated in a quite different way from those companies.

CCK's key partners are fundamental for its business model success and development since through them the company is able to sell and distribute its service.

Finally, others market players such as pharmacies and laboratories are still present and involved with CCK business plan.

3.3.4.1 Competitors

CCK is not alone in this online market and the actual tendency is to be more and more competitive since the internet usage in Portugal has been increasing[19], as well as the society evolution in terms of technology.

Medqualy

In April of 2012, a new Portuguese online company was founded, where their clients can choose a health professional, using community's evaluations to directly schedules the appointment through the internet. This company is called MedQualy (MQ).

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[19]LINI - Lisbon Internet and Network Institute, Utilização da Internet em Portugal, 2010, pag7

With a very simple system to look for a doctor and book an appointment, MQ gives five different options of research in their website: by doctor, by specialty, by city or by insurance company. Professional doctors benefit for a quickly service to show their good clinic practice, to establish and keep relationships with new patients and to increase productivity and clinic performance. On the other hand, for patients this online service helps choose a health professional and to book an appointment in the appropriate time.

MQ has one important and relevant partnership with Alzheimer Portugal[20], a patient association that promotes the quality of life for people with dementia. At the same time, they also have a Blog that is really helpful for patients to better understand their conditions and the possible treatment prescribed by the doctor. The company prices are shown in exhibit 11.

Medipédia

Based in Instituto Pedro Nunes[21] in Coimbra, Medipédia (MP) provides valuable health information and a service that allows users to book their appointments convenient and instantaneous without any cost. MP provides this kind of service with the simple slogan "Fast, Simple and for free, book your appointment". The company also offers a health search engine with the possibility to find out which pharmacies are on call every day. By the time that MP was present in the market they waged in offer a full directory of healthcare services - diagnosis, doctors and clinics, medicines, health establishments, alternative Medicine, hospital support services, and several more (exhibit 12).

Additionally, and also related with their culture, they provide the appointment prices in the process of scheduling. With the absence of one fixed amount to pay, it will depend on the doctor, as well as the reason of the appointment and the type of insurance. In summary, the indicated value will correspond to the maximum amount the patient will pay taking into account if they will or will not have any special agreement or health plan.

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[20]Private Institution of Social Solidarity founded in 1988.
[21]Association for Innovation and Development in Science and Technology

3.4 ConsultaClick Approach

Portugal's healthcare system has been facing several problems and challenges during the past few decades. In the last years, most of them were related to the limitations in pursuing technology and innovation opportunities and new ideas. The relationship between doctors and patients is extremely important for both and that's how CCK became the perfect partner in the healthcare market enabling, with its service, to achieve all stakeholders.

3.4.1 Business Model

Costumer Value Proposition, Profit Formula, Key Processes and Key Resources are the four interconnecting components that, together, can create and capture value for the market.

3.4.1.1 Customer Value Proposition

For CCK the target consumer is divided in two different approaches: B2B and B2C. The B2B targets doctors from all medical specialties available, also other health specialties such as nutritionists, nurses, physiotherapist and therapists, and private clinics. In B2C segment the company is targeting the widest range of patients and potential patients - between 25 and 40 years old - (See more about target characteristics in exhibits 13, 14 and 15) which clearly represents every individual who needs an appointment or those who may not need one but are aware of the importance to control his health, and finally who may have access to internet.

CCK gambled in healthcare market because saw within it an opportunity to solve and complete a consumer's need - being an intermediary to construct and improve the relationship between patients, doctors/clinics and insurance companies. Moreover, they want to complement it through a parallel relationship with Patient Associations; for example, *Liga Portuguesa Contra o Cancro.*[22] To well link these two stakeholders, the

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[22]Portuguese National Entity that supports oncology patients and family, promote health, the prevention of cancer and stimulate education and research in oncology.

company will offer a platform that contains several services as it is possible to see in exhibit 16.

3.4.1.2 Revenue Formula

After completed one year in June 2012, CCK could account with 1.106 professional's doctors, 60 clinics and 8.235 registered patients. There were booked 14263 appointments (online and offline[23]), being dental medicine, gynecology or obstetrics and nutrition the most sought specialties (exhibits 17 and 18). Currently the company offers around 479.485 appointments to be booked.

CCK offers two different possibilities to doctors/clinics subscription: basic payment: 3€ per consultation with insurance/6€ per consultation without insurance; plus payment: 50€ per month or 365€ per year. (see more details in exhibit 19)

On the other hand, the company will also receive revenues from advertising - it offers a fixed rent to pay fixed costs - which is optional and it will be restrict only for companies/services in health industry. However, doctors can still benefit from it since this service is completely dedicated to health. Additionally, once the platform achieves a considerable number of patients and doctors, return on investment (ROI) can even be higher. In the follow table it is possible to observe those prices.

Table 3 - CCK's prices for advertising

Top Banner	100€
Home L REC	80€
Search	120€

Source: CCK's website: pt.consultaclick.com/VCPublicidade.aspx

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[23]There is the possibility of a doctor receive a call from a patient to book an appointment and register it within the platform, which CCK consider as a offline appointment.

3.4.1.3 Key Resources

Once **human capital** is an extremely important factor in company success, CCK has committed and experienced people working to achieve objectives through their knowledge, competencies, social and personal attributes and creativity. Whilst being a relatively small team operating in Portugal, they are conscious about the importance of the ability of each employee's need to produce and create value for the company. Additionally, CCK also incorporates in its business model a Web page presence that fits the content, graphic image, functionality and **technology** to support it.

Until now, there are two different **distribution channels**: the web page and the *call center*. The company has a directed contact number to support users in booking process and it has also outsourced a Contact Center. They also hired a promoter's team in order to reduce costs to be able for them to meet the objectives. Additionally, CCK formulated four different **selling channels**: website; blogs; facebook and Google. CCK's website is the most direct one, where doctors and patients can easily register and start to use it. Secondly, they have a blog and also all those blogs who collaborate with them and put their links and widgets inside their web pages. (exhibit 20). Thirdly, being part of e-business industry, the company uses Google to sell their service, through Google Adwords for searching and directly refer CCK's website. Finally, facebook page with links and direct applications to their website is also considered by CCK a selling channel.

Regarding **partnerships**, CCK can count with *Start-Up Lisboa*, founded in 2011, that was incorporated as a private nonprofit association, by Município de Lisboa, Montepio Geral and IAPMEI[24] with the mission to support the development of entrepreneurship through a combination of infrastructure and specialist support services. To this end invites projects with innovative features and great development potential.
RIS2048 is a reference company in information system and it is thanks to the close collaboration between the development team of this partnership with the mentors of the

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[24]Instituto de Apoio às Pequenas e Médias Empresas e à Inovação/Institute for Support to SmallandMediumEnterprisesandInnovation

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project, that it has been possible for CCK to lead innovation processes of medical appointments.

Being one of the oldest Students Associations, AEFML[25] saw in CCK an important innovation relationship between doctors and patients. For the company it is also a huge opportunity to join the country's future doctors and be helpful to launch their careers. Finally, *Take The Wind*, is a digital content creation company in health and wellness, headquartered in Coimbra. The company has applications and content to help medical decision and encourage the best involvement between patients and doctors. They develop a digital platform – VITASALUTIS – that provides health information, combining personal indicators evolution and proposes customized solutions to achieve balanced and lifestyle management programs specific to pregnancy, diabetes or hypertension. This platform is added to a set of remote monitoring services and specialized support having partnerships with health care providers in each geography reference. What CCK wants with this partnership, patients and doctors involvement in a continuous offering of the most advanced solutions available in the market.

Lastly, CCK is the first company in the health sector in Portugal offering this kind of service. This gives the advantage to possible gain control in the market to be able to deliver the value proposition to the targeted segment, through their **brand**.

3. 4.1.4 Key Processes

As any e-business company CCK uses Search Engine Marketing through Search Engine Optimization techniques to **advertise** their service. The company has managed to effectively use Google Organics which represents a great competitive advantage since a lot of marketing expenses have been saved. In the beginning, Duarte was interviewed by all Portuguese TV channels presenting the results of the first month in the market. The goal was, once more, to advertise their service to become better known the in the health market. Moreover, taking into account that internet is also one of the most used tools to share opinions, CCK's Forum, want to improve doctors and patients relationship through several real time questions and answers in open space webpage. Additionally, the company thinks

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[25]Associação de Estudantes da Faculdade de Medicina de Lisboa/Student Association of the Faculty of Medicine of Lisbon

that "*blog is an indispensable tool to be able to give to our final customer wide information on health subject. Nowadays the prevailing model of social organization is the network.*"[26] Furthermore, and still related with internet advertisement, with facebook, CCK intends to create fast brand awareness since it is one of the most visited websites. Finally, the company is also present in daily or weekly Portuguese journals/magazines to address its target.

Internally in CCK there isn't a prepared and formulated **training** program for new employees. When someone starts to work there, this person will be advised and informed about the main processes and politics within the company. However, this is not considered a problem but a challenge to learn with each other as most as they can to better understand the company's business model.

CCK outsourced an integration functionality via webservice, to facilitate the integration of agendas management software with online portal for booking medical appointments. They seek with an Application Programming Interface, a rapid and immediate synchronization of calendars, and thus allow online booking to be immediately reflected in doctors/clinics internal management systems, as well as the hours that are already occupied, are not free for online booking.

3.5 Future Strategy Plans

After less than two years in the market, CCK has been showing some developments within the e-health sector. However, they are still facing an enormous path in order to be helpful around the country since there are many rural cities and villages that do not even have internet access or can receive medical treatments. For this reason CCK is working hard to ensure its service in the main cities, such as Lisbon, Oporto and Coimbra, and to move forward with the necessary market strength to smaller cities. To faster achieve this, Duarte wants to create as soon as possible, partnerships with clinic management software houses

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[26]Maria Xavier - Marketing Responsible

and insurance companies; in medium term, the aim is to invest, as much as possible, in digital marketing to reach and attract new patients. Those goals will also complement and help achieve CCK's strategic objectives.

On the other hand, the company wants to address some activities in the field of CSR. After several conversations between Duarte and some doctors and clinics that have partnerships with CCK, he understood that doctors want to participate in voluntary work within the health sector. The CEO thought that he could make a change to be able to meet those needs, bringing at the same time added value to CCK, through the creation of "ConsultaSoliária". Duarte's idea is to propose to doctors that they would have some free appointments for people that don't have financial conditions to afford it. He believes the best way to implement this would be that doctors would take free appointments when they would not have patients. For example, up to one hour prior to performing the appointment, if there is no booking for it, CCK proposes that the doctor would give his/her time to help someone that needs medical assistance and cannot pay for it. The company will establish rules and conditions for those that want to apply for this service. This idea is still being developed and it will only be implemented when the company achieves its strategic objectives that were mentioned before.

3.6 End Notes

In the last two years, since its foundation, CCK has been developing different approaches to better achieve it target. However they still believe that there are several ways to improve its service in order to become more competitive in the market. In particular, the company recognize that the idea of "ConsultaSolidária" will be an important issue to be implemented.

Will CCK be the pioneer of the regular utilization of online booking appointments in Portugal? How can they convince the Portuguese population to changes their old habits? Will the company be more competitive addressing its future plans?

3.7 Exhibits

Exhibit 1 - CCK's Founders

Exhibit 2 - CCK's Values	
Transparency	Transparency and ethics in all established contacts and relationships
Respect	Respect for all clients, employees, suppliers and partners, keeping education and courtesy
Confidentiality	Confidentiality of the company's information as well as the information related with our clients, employees, suppliers and partners
Legality	Strict compliance with the law and regulations of the sector in all business decisions and institutional
Social Responsibility	Promotion of a safe workplace, protection and support to employees, appeal to the sense of justice and commitment to sustainable development of the individual and the institutions

Source: CCK's website: pt.consultaclick.com/docmedia/statement.pdf

Exhibit 3 - CCK's Team	
Duarte Champalimaud **CEO and founder**	Duarte manage the team, promoting within the stakeholders and optimize the service
José Carlos Gomes **Financial Consultant**	Responsible for financials subjects
Francisco Lufinha **Chief Technology Office**	Focus on scientific and technological issues
Maria Xavier **Marketing and Communication**	Head of marketing center in CCK's blog and its partnerships
Alexandra Hernández **Marketing and Communication**	Focus on facebook and forum patients communication
Sara Catalão **Responsible for Website marketing**	Responsible for the website structure to improve the ranking on Google and also formulates how the communication is made.
Isabel Monteiro Grilo **ExternalConsultant**	Consultant with *know-how* in healthcare sector
Luis Mota Capitão **ExternalConsultant**	Consultant with *know-how* in healthcare sector
Orlando de Carvalho **ExternalConsultant**	Consultant responsible for organization and strategies projects

Source: Interview with Duarte Champalimaud

Exhibit 4 - CCK's Key Performance Indicators			
Key Performance Indicators	**Those who start the process**	**% of users that dropout in the middle of the process**	**Conversion Rate**
New User Registration Process	2,9%	80,5%	0,6%
Complete Registration with Appointment Booked	2%	29,5%	1,4%
Appointment Booked	13,7%	88,5%	1,6%

Period (Years)	Mortality Rate (‰) per gender; Anual			Child Mortality Rate (‰) per gender; Anual		
	Resident local			Resident local		
	Portugal			Portugal		
	Gender			Gender		
	MF	Male	Female	MF	Male	Female
	(‰)	(‰)	(‰)	(‰)	(‰)	(‰)
2011	X	x	x	3,12	3,52	2,67
2010	9,96	10,53	9,42	2,53	2,5	2,53
2009	9,82	10,36	9,32	3,64	4,13	3,13
2008	9,82	10,42	9,52	3,25	3,41	3,08
2007	9,76	10,4	9,16	3,44	3,53	3,35
2006	9,64	10,44	8,88	3,31	4,87	2,72
2005	10,19	10,87	9,55	3,49	3,5	3,49
2004	9,71	10,47	8,99	3,77	4,31	3,2

Exhibit 5 - Main Mortality Indicators in Portugal

Source: NIS's website

Exhibit 6 - Life expectancy at birth, total

79 2010

Portugal ■ High income: OECD
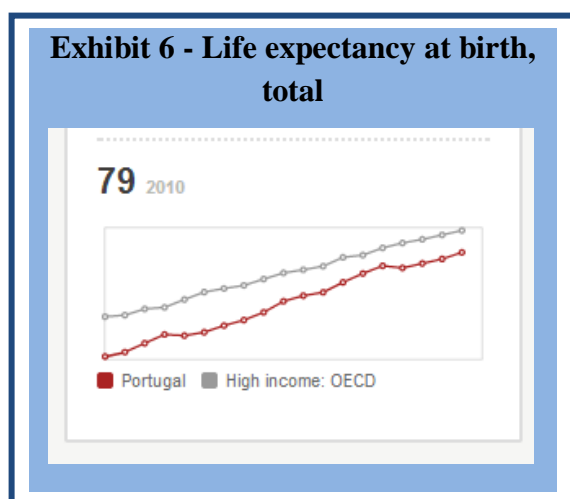
Source: Worldbank's website: data.worldbank.org/country/portugal

Exhibit 7 - Main death causes in Portugal, 2009

		%	
1º	Doenças do aparelho circulatório	31,9	Diseases of the circulatory system
2º	Tumores malignos	23,2	Malignant neoplasms
3º	Doenças do aparelho respiratório	11,6	Diseases of the respiratory system
4º	Outras causas por doenças	11,3	Other causes resulting from diseases
5º	Sintomas, sinais, exames anormais, causas mal definidas	9,4	Symptoms, signs, abnormal findings, ill-defined causes
		%	

Source: NIS - As pessoas, 2010, page 22

Exhibit 8 - Health Indicators in Portugal, 2009

Enfermeiros por 1 000 habitantes / Nurses per 1 000 inhabitants
Farmácias e postos de medicamentos por 1000 habitantes / Pharmacies and mobile medicine depots per 1000 inhabitants
Médicos por 1 000 habitantes / Physicians per 1 000 inhabitants
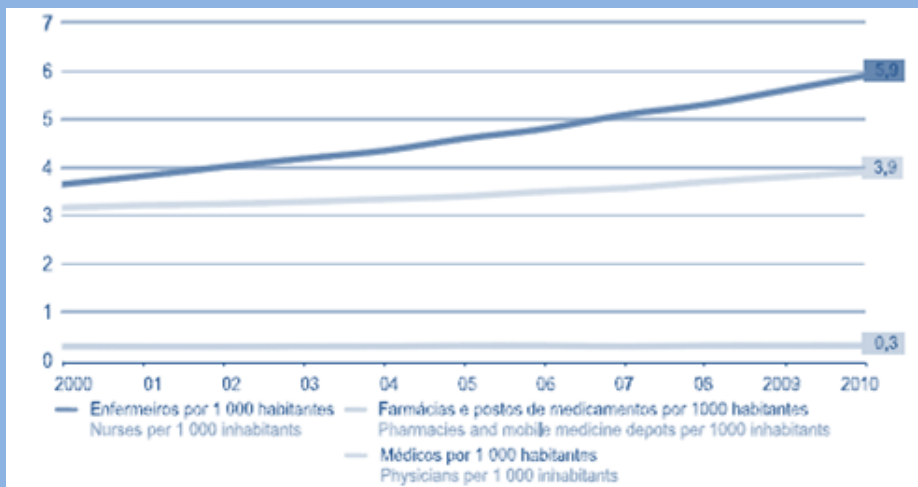
Portugal	
N.º/ No.	
41 431	Physicians
4 887	Pharmacy professionals
7 671	Laboratory pharmacists
2 879	Pharmacies
176	Mobile medicine depots

Source: NIS, Portugal em Números, 2010, page 14

Exhibit 8.1 - Health Indicators in Portugal, 2011 - Doctors per 1000 inhabitants

Legend:
[0 ; 2,2]
]2,2 ; 2,3]
]2,3 ; 2,6]
]2,6 ; 3,2]
]3,2 ; 3,6]
]3,6 ; 3,9]
]3,9 ; 5,6]
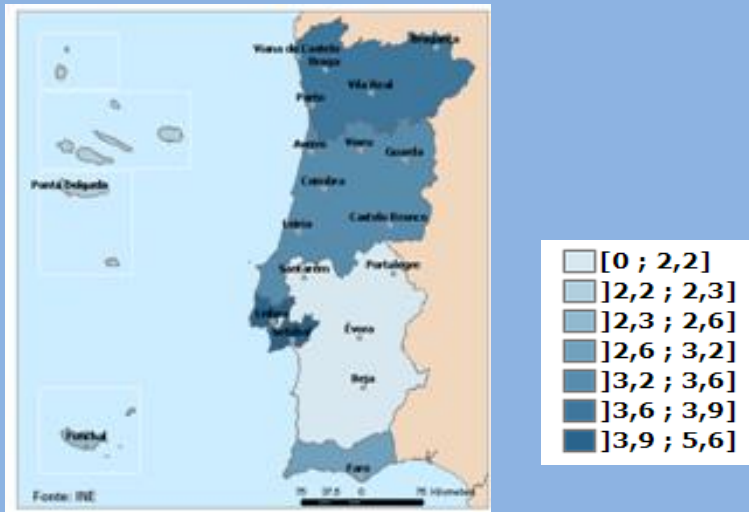
Source: NIS's website - maps.ine.pt/MapsPortal/(S(ausk5355epam5q2om2zw1m45))/default.aspx?VAR_CD=0000908&V_DIM_1=S 7A2011&NIVEL=3&LINGUA=PT

Exhibit 9 - Medical Appointments per inhabitant by region, 2009
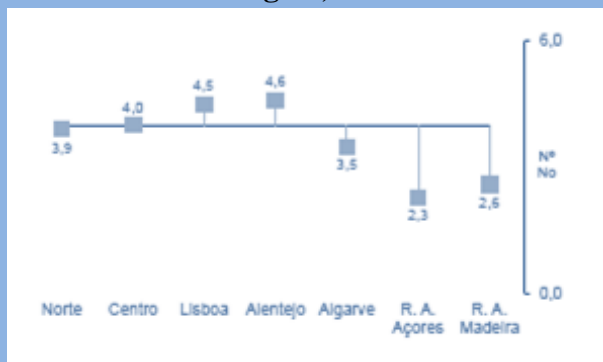
Source: NIS - As pessoas, 2010, page20

Exhibit 10- External Appointments in hospital according to the specialty, 2009
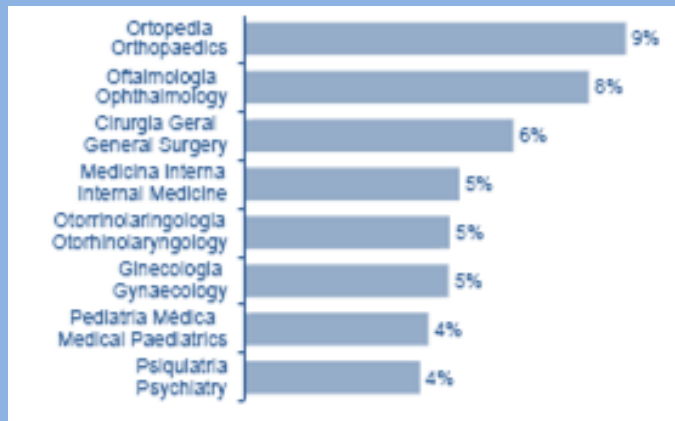
Source: NIS- As pessoas, 2010, page19 - Hospital Survey

Exhibit 11 - MQ's Prices			
Single	**Small Clinic**	**Medium Clinic**	**Large Clinic**
1 Doctor	2 to 4 Doctors	5 to 8 Doctors	9 to 12 Doctors
182,5€/year (0,50€/day)	400€/year	600€/year	800€/year
SMS and email alerts	SMS and email alerts	SMS and email alerts	SMS and email alerts
Unlimited Clinics	1 Clinical Per User (clinic with multiple locations)	1 Clinical Per User (clinic with multiple locations)	1 Clinical Per User (clinic with multiple locations)
Helpers Unlimited	Helpers and Administrators Unlimited	Helpers and Administrators Unlimited	Helpers and Administrators Unlimited
-	Page Clinic in MQ	Page Clinic in MQ	Page Clinic in MQ

Source: MQ's website: www.medqualy.com/md/plans

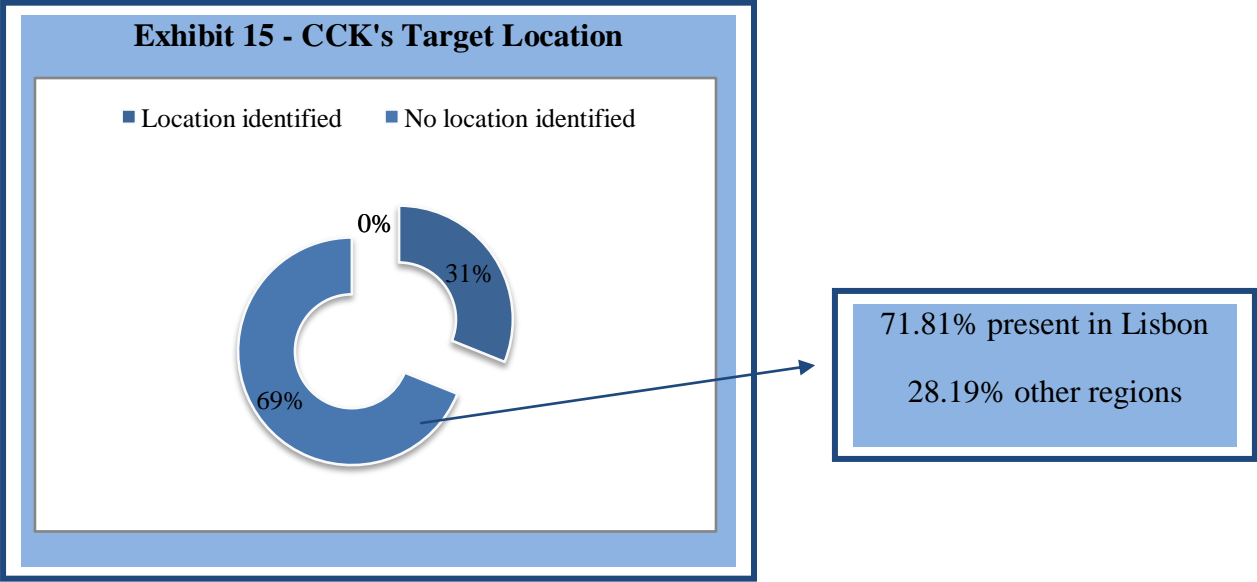| Exhibit 12 - Directory MP |
| --- |
| Diagnosis |
| Doctors and clinics |
| Medicines |
| Health establishments |
| Alternative Medicine |
| Hospital support services |
| Health and Wellness |
| Treatments and Therapies |
| Medical and Hospital Equipment |
| Financing and Health Insurance |
| Emergency Services |
| Institutions |

Source: MP's website: www.medipedia.pt/home/home.php?module=medilistaPesquisa
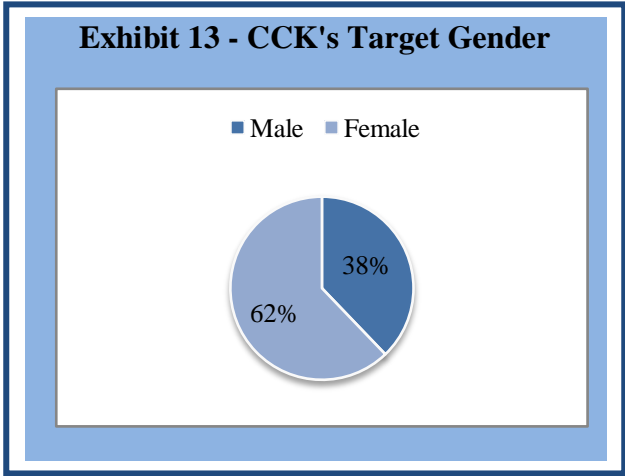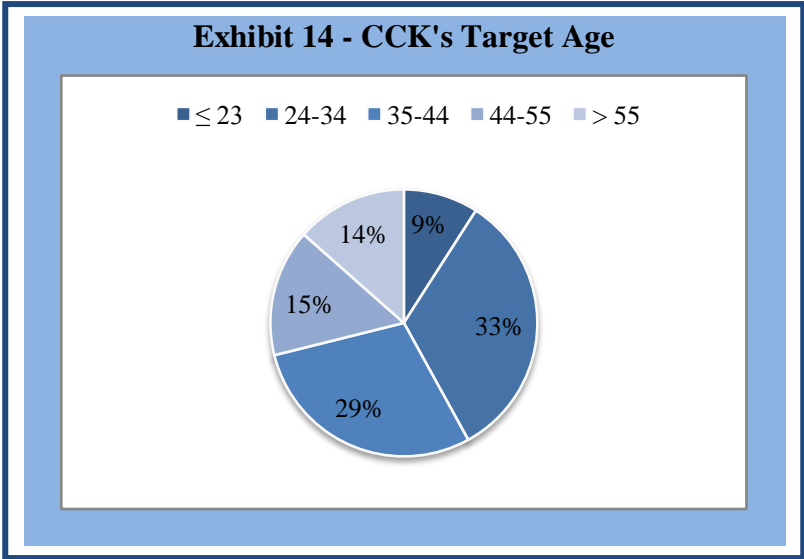
Exhibit 13 - CCK's Target Gender

Source: CCK's website:pt.consultaclick.com/VCPublicidade.aspx

Exhibit 14 - CCK's Target Age

≤ 23 | 24-34 | 35-44 | 44-55 | > 55

9%
33%
29%
15%
14%

Source: CCK's website:pt.consultaclick.com/VCPublicidade.aspx

Exhibit 15 - CCK's Target Location

Location identified | No location identified

0%
31%
69%

71.81% present in Lisbon

28.19% other regions

Source: CCK's website: pt.consultaclick.com/VCPublicidade.aspx

Exhibit 16 - CCK service advantages	
Service	**Description**
Autonomy	Agenda management through internet, any day and any time
Accompaniment	Allows an automatic reception of patient's files after the appointment booked. Doctors are able to follow their patients and check all booked/cancelled appointments
Actual	New and modern communication channel between patients and doctors
Disclosure	In doctors profile is available their curriculum, picture, professionals experiences and other information that they want to publish, further to their agendas
Attendance	Booking reception through internet 24/7 and still a *call center* available for patients
Appointments	An easy access to agendas that allows a better schedule optimization. Waiting list functionality to automatically fill unmarked appointments
Agendas optimization	When an appointment is canceled, there will be an advisement that the desired time has been made available. CCK works to fill all free places a 100%
Communication	Access to feedback, SMS automatic sent to confirm appointments and also let patients know when the doctors cancelled the appointments
Appearances	Guarantee a reduction of no-shows. Patients will be validated by the system and may cancel or change their appointments easily

Source: CCK's website: pt.consultaclick.com/VCMVantagens.aspx

Exhibit 17 - Specialties offered with online agenda		
Psychology	107	
Dental Medicine	82	
Nutrition	36	
Gynecology/obstetrics	21	
Urology	21	66.28%
General surgery	20	
Orthopedics	14	
Cardiology	13	
General Clinic	13	
Vascular surgery	13	

Source: CCK´s website: pt.consultaclick.com/VCPublicidade.aspx

Exhibit 18 - Specialties most sought		
Dental Medicine	15.72%	
Gynecology/obstetrics	15.23%	
Nutrition	12.43%	
Diagnostic Center	11.11%	
Dermatology	8.56%	
Psychology	4.53%	79.42%
Urology	3.79%	
Aesthetic and reconstructive plastic surgery	3.05%	
Gastroenterology	2.63%	
Otorhinolaringology	2.39%	

Source: CCK's website: pt.consultaclick.com/VCPublicidade.aspx

Exhibit 19 - CCK's prices		
Basic	Price for appointment 3€/appointment with insurance 6€/appointment without insurance	
Plus	Monthly 50€/5€ extra profile	Annual 365€/36€ extra profile

Source: CCK's website: pt.consultaclick.com/VCM_precos.aspx

Exhibit 19 - CCK's prices (Cont.)		
Description	Basic	Plus
Profile publication	✓	✓
Available times and accepting insurance publication	✓	✓
Email and SMS confirmation	✓	✓
Helpline to patients	✓	✓
Multiple agendas management		✓
Priority position in search results		✓
Personal area for patients management agenda		✓
Integration of patients and schedules with other clinics softwares		✓
"Online Marketing" (Google AdWords ™, etc.)		✓
Booking agenda		✓
SMS and email, free text, for all its patients		✓
Custom publishing (individual URL, disclosure of agenda and calendar application for Facebook)		✓
Profile and schedule assistant		✓

Exhibit 20 - Partnership with Blogs
A vidaazulcueca
Blog bemestar
Angel luzinha
Blog.ritabatatafrita.com
Carminho Handmade
Mãe e muitomais
Bigmae
As maravilhas da maternidade
Consultoriodepsicologia.blogs.sapo.pt/
Coisas de pais
Saúde 360
www.tiesphoto.wordpress.com
Marta-omeucanto.blogs.sapo.pt

Source: Interview with Maria Xavier

Chapter 4: Teaching Notes

4.1 Synopsis

The case study tells us a history about a Portuguese start-up company in the recent e-health sector being dedicated to the online appointment booking business. The idea came up when Duarte, the CEO, was in the hospital after a serious car accident. During that time, it was impossible for him to move from the hospital bed so he did everything through a computer: talk to friends, solve personal problems or buy things that he needed. For two months his life was around the internet, and everything was there except for the possibility to book his physiotherapy appointments. Inspired in different business models, such as flights and hotels online booking, ConsultaClick.com was founded.

In addition to CCK's origin idea, the case addresses the company´s organization structure, values, mission and vision; an environment analysis in the health sector; the business model that considers its value proposition, key processes and resource, and revenue model; and finally the company´s future plans.

Over the last few months CCK has been in the market with the main objective of facilitating Portuguese people lives. Although the number of registered users is increasing since its foundation, the company faces a long and persistent pathway to achieve its strategy objectives. Moreover, even with the economic and financial crisis, health problems are always present in a population, giving CCK a change to help tackle these needs.

Paying special attention to the company business model, the case tries to demonstrate that there is still a lot to improve in this market, since it is a very important development not only for patients and doctors, but for all society.

Finally, it is hoped that students understand CCK's innovation and effective approach and that it could bring new ideas to improve health care in the Portuguese society.

4.2 Learning Objectives and Teaching Questions

The case study could be used for strategy and entrepreneurship classes since it analyses the whole strategy of one recent company in the health sector. Additionally, it could also be helpful in the Advanced Program for Health Management as an example of an innovation company pursuing an opportunity in the e-health developments.

Considering the evolution of technologies uses in the health sector, the case's main objective is encouraging students to think about how a start-up company can be profitable in the Portuguese health sector, and simultaneously addressing social issues. It is also shown how a company can try to change social habits through technology. Finally, the case study enables students to understand the whole business model taking into account several issues.

On the order hand, CCK's initiative raises several learning opportunities, however it is proposed a close look to five interesting and important questions:

TQ1: What are the main challenges that CCK is facing?

TQ2 - State CCK's Key Success Factors. Analyze the company's position comparing it with the main competitors, specifying which is the competitive advantage of the company.

TQ3 - How can CCK increase patients' trust? Do you think that a new Marketing Strategy will be helpful for that? Justify.

TQ4 - What will be the main advantages and disadvantages of "ConsultaSolidária"? Is the company more competitive implementing it?

TQ5 - What will be your final recommendation to optimize CCK's business model?

It is recommended, for students' engagement with CCK's approach, that they imagine themselves in the position of external consultants in order to give the best possible recommendation to the company. The professor could, firstly divided the class in small groups for a brief analysis of the case and then divided the questions in individual and groups assignments. Teaching question one, two and three are encouraged to be individual

and the last two to be done by groups constitution, since these questions can be seen as more general, so it will be greater to discussion different points of view.

4.3 Discussion and Analysis

With this chapter the objective is not to give just one solution for the proposed questions, but provide a guideline for student's answers.

TQ1 - What are the main challenges that CCK is facing?

There isn't an exact explanation and discussion about CCK challenges in the case study, so it is great opportunity for students to do a general business model analysis. It will be very important for the company to know which are the main points that they have to minimize, in order to improve their activities.

Firstly, it is suggested that students start with a basic SWOT analysis in order to be possible to understand CCK's main threats, opportunities, weakness and strengths. (see annex 12). Additionally, students should also have a deeply knowledge about the company' strategy, thus it will be recommend to make a TOWS analysis to comprehend CCK's position. In this framework should consider four main factors: SO (strategies that uses strengths to maximize opportunities); ST (strategies that uses strengths to minimize threats); WO (strategies that minimize weakness by taking advantages of opportunities); and WT (strategies that minimize weakness and avoid threats).

Table 4 - CCK's TOWS Analysis

	Opportunities	Threats
Strengths	**SO** 1) In order to eliminate information gaps, CCK should keep on updating doctor's profiles, putting in the first place the ones that provide more information, so that whenever a consumer is searching within the website feels that can trust on it; 2) The top three of demanded appointments should catch CCK's attention since those should be the ones which users are going to search for; 3) CCK should use its partnerships to promote its service in order to increase user's trust.	**ST** 1) Being a high quality company, CCK should use it to increase brand awareness and create a influential reputation; 2) CCK should take advantage of its competitive advantages and key points of success to reduce (or even eliminate) consumer's ideas about online business. In other words, the company should advertise its service's advantages in order to increase conversation rates.
Weakness	**WO** 1) In order to increase patient's volume, CCK must take advantage of its high demand level; 2) In the a different view, the company should also pay attention to the number of graduated doctors and promote its service in an entrepreneurial intention; 3) CCK should take advantage of its searching capabilities to increase conversion rates.	**WT** 1) CCK should use the doctors that are already register to promote its service because user's trust is also based in referrals; 2) Considering awareness as one of the key points within the health sector, CCK should leverage this in order to reach new users.

Additionally, it is expected that students list some of the above challenges, taking into consideration the possible ways to minimize them and thinking, as well, in the best strategy to do it. Finally, the main challenges could be the ones present in the following table.

Table 5 - CCK's Challenges

The improvement of CCK's service awareness in order to increase patient's trust;
The fact that consumer's mindset towards the searching and booking process of appointments is low because consumers still trust on peer referral and are very attached to doctors that treat them before;
The low number of new registration and booked appointments must be increased in order to have a higher business volume;
The Portuguese health market may not be ready for online booking medical appointments, which can create problems for the company's business model;
The implementation of EMR as a "normal" style of keeping clinical information could became a "necessity" for consumer's habits. CCK could be market leader of this modification;
Demonstrate to doctors/clinics that CCK' service will increase their number of new patients and consequently their profit, through the results that the company already showed.

Students should analyze carefully those challenges and understand how can the company minimize them. Different perspectives and opinions can arise different solutions approaches, that should be treated in the same level, for example a Value Chain analysis could come up to a better understanding of CCK's internal procedures. Lastly, students should not forget to take into consideration the costs and the resolution time to implement the respective strategies in order to minimize the challenges.

TQ2 - State CCK's Key Success Factors. Analyze the company's position comparing it with the main competitors, specifying which is the competitive advantage of the company.

Students could answer the first part of TQ2 using the table present in annex13, where key buying and competitive factors are considered the main issues to determine the key success factors. These factors are the characteristics that make CCK successful in the e-health industry. Therefore, it is a combination of the factors that bring customers to use company's service and which levels does CCK compete with others within the industry. While reading cautiously the case study, students will be able to identify CCK's key success factors, and they should point out some among the following:

- ✓ **First Move Advantage**, since CCK was the first company with this service type in the Portuguese health market;
- ✓ The fact that the company is offering a **free service for patients**;
- ✓ Linkage between CCK and its main doctors and clinic's **partners** allows the consumers to have more mobility and power in their choice;
- ✓ Through a **user-friendly service**, consumers are able to follow in a simple and easy way the three main steps within the service: find a doctor, show the time, and book the appointment;
- ✓ Offering a differentiate service when comparing with its competitors, **CCK's positioning** though its information system and the possibility to save medical records is consider, as well as a key success factor;
- ✓ **Innovation** is considering by consumers as one of CCK's key points, since they "opened" this market bringing several opportunities to the health sector.

Regarding the second part of the question, students should taking into consideration the two big competitors of the company - MP and MQ - and they will be able to construct a competitive assessment (see annex14) and understand the key distinguish points between the three companies.

The main point of differentiation of MQ from CCK is the web content which allows patients, doctors and users to get information and understand the service advantages in a simple and direct way. From their front page patients may search for specific doctors and clinic managers while professionals have a special webpage explaining how they would profit with MQ. On the other hand, MP, which relies on a slightly different service, is positioned as a health care directory since patients may search not only for physicians/clinics but also for pharmacies, diagnosis laboratories, health clubs and more. CCK has four main points of differentiation: the complete disposable information on physician's profile, the marketing tools designed for physicians, the Software Integration as CCK possess the only system that is fully integrated with clinic software's and the price.

TQ2 could also arise some different perspectives and analysis, being the VRIO analysis one of the possibilities, as it is shown in annex 15. Since it is used to evaluate the company's

capabilities and resource in order to achieve it competitive advantage, student could link it to its internal analysis.

Company's most valuable resources are the base for its four points of differentiation, its lean culture, small team, its health connected brand and unique partnerships. However only software integration and partnerships represent true sustainable advantages since they are the only ones who fulfill the four criteria of the resource based approached. Concerning those two the fact is that CCK is the only one in this industry to have control over them, it is costly for competitors to imitate them one for technical reasons and the other for negotiation and second mover disadvantage causes. Finally both are organized since they are aligned with the remaining resources and company's capabilities in order to reinforce CCK competitive advantages.

TQ3 - How can CCK increase patients' trust? Do you think that a new Marketing Strategy will be helpful for that? Justify.

Since one of the most serious problems that CCK is facing nowadays is the low number of new registration and booked appointments, it is important to understand how the company could invert it, increasing patient's trust, in order to arise conversion rates. Students are encouraged to deeply think about it and the opportunity to discussion it will be given by the professor, since this is a group discussion question.

For the first part of the question, students should point out some of the following aspects. To **raise the awareness** of the company among consumers, trying to communicate an image of reliability and free accessibility, special among the social network community. It is essential to educate the consumer on how to use and take advantage of such a service. Additionally, **engaging doctors in the process of getting new patients** would be a precious help, so if doctors understand that they would take advantage of the online booking system, they will most certainly incentive their patients to use CCK service. Moreover, it will be also helpful if CCK **expand its partners** to a wide range of key stakeholders, such as pharmacies or diagnostic centers like radiology clinics. A possible strategy would be to create partnerships between singular doctors/clinics and these healthcare identities in order to get discounts for patients who book an appointment for

them. With this process patients would pay less while doctors, laboratories and pharmacies will get more patients. Finally, since one of the goals will be the used of EMR, the fact that the **doctors will have access to all medical information**, it could give more reliability to patients because doctors will have a higher number of exams to support their diagnostic hypotheses. This may increase consumer's confidence due to the fact that they know that the doctors have an easier way to get all the necessary information.

For the second part of the question students could start to resume which kind of marketing strategy is CCK using nowadays. This information is provided in the case study, so it will be easier to point it out. After that, students should verify if it will be important for CCK to has a different or a more completed marketing strategy and if they consider that it could help the company to increase patient's trust and **offline marketing campaigns** could one possible solution. Students should understand that, since online campaigns are not covering enough audience, an offline promotion campaign should be taken into consideration to reach a greater number of people through mass media channels in order to trigger the registration process and reinforce a reliable brand image. This campaign could be done in several ways but examples such as sensibilisation campaigns in order to "touch" the consumers to show CCK's service advantage; or a radio campaign for people start to listen about the company's name; or still some advertisement associated to other identity such as doctors/clinics already registered, should come up by the students' answers. Once there is a higher number of CCK's patients the word of mouth process could be accelerated which also would be a great contribute to raise awareness and patient's trust.

Furthermore, another possibility could be for CCK to invest in **merchandising strategies** on clinics using posters in waiting rooms and leaflets for physicians to distribute at the end of the appointment. The company should take into consideration that in this initial point clinics and physicians would not be willing to spend any money with CCK besides the subscription fee; in this case the company will have to support alone the cost of such material. To incentivize physicians to distribute leaflets CCK may create a discount system where clinics/doctors who convert more patients will get a discount fee. This system will be monitored by adding a field on the new registration form asking if the application is followed by a referral of a specific clinic/physicians and which one.

Finally, the costs for this implementation should be also taken into consideration by students due to the fact that being CCK a start-up company it budget is limited and small.

TQ4 - What will be the main advantages and disadvantages of "ConsultaSolidária"? Is the company more competitive implementing it?

In this question, students will have the opportunity to think about how CSR could help CCK to become well known in the market through the implementation of a complementary service that may change its ordinary activities.

Firstly, it is suggested that students make a brief revision of the concepts around the discussion how CSR can bring competitive advantages to companies, by reading "Porter, M.E. & Kramer, M.R. (2006) Strategy and Society: The Link Between Competitive Advantage and Corporate Social Responsibility". Additionally, it is also important that students debate the concept of "ConsultaSolidária", in order to be well prepared to understand its advantages and disadvantages. Since this it is a group discussion question several different ideas will come up, thus is propose to students to create a comprehensive list that also include if those advantages/disadvantages are in short, medium and long term.

At this point, students are able to detect "ConsultaSolidária's" advantages and disadvantages. They could identify some of the following ones:

Table 6 - Advantages and Disadvantages of "ConsultaSolidária"

Advantages	Disadvantages
✓ Doctors will have a change to do voluntary work; ✓ People that cannot afford medical appointments will have the opportunity to have it for free; ✓ CCK will have another opportunity to reinforce it brand awareness; ✓ It will be a measure to attract more doctors and could register in CCK's service ✓ "ConsultaSolidária" could be the beginning of a new source of social progress.	✓ Usual patients that afford their medical appointments could thought that in the price that they are paying could be included also the price of the appointments that doctors give for free; ✓ It may increase CCK costs - they need to have one more person to work specially in this field of the business.

After students point out the advantages and disadvantages of "ConsultaSolidária", they will have to analyze if CCK can be more competitive with its implementation. Once more, in the part of the question diverse way of thinking could arise, however the following is one of them.

The company could increase its competitive advantage due to the fact that this idea will bring more reputation, commitment and also learning in the sense of stakeholders' skills, capabilities and knowledge. Consequently, CCK's reputation may attract new doctors to its service increasing the business volume; commitment will possibly increase the company conversion rates; and learning will add more efficiency to CCK.

TQ5 - What will be your final recommendation to optimize CCK's business model?

At this point, students are able to analyze the whole business model of the company trying to resume the areas that have already been analyzed and what are the remaining ones that still need improvements.

First of all, it is recommended that students make a briefly revision on CCK's business model division, in the case study. It includes four different parts: value proposition, revenue formula, key resources and key processes.

Regarding **CCK's value proposition** students should understand that it is based upon the competencies and innovation of its service, as well as the reached targets: doctors/clinics and patients. For the first one, the company provides operational and valuable tools that could benefit not only the regular doctors, but also the entrepreneur ones, who are just entering in the market and starting their careers. They will have the opportunity to promote their CV and take the advantage of a innovative service for an accessible price. CCK should not ignore those young doctors due to the fact that in the future they will have a huge influence in the health market. For the second target the company already offers a complete service based on timing convenience, manage and choice over the decision making process with the possibility to choose an adequate doctor and schedule at no cost. Since CCK is targeting patients or potential ones, who have internet access and that need to book a medical appointment, there are no proposed changes to them.

On the other hand, students should also point out that the company might need to claim its service advantages. Taking into account that CCK has design a service directed to B2C segment that allows patients to avoid long phone calls and that provides and e-tool issues to record and manage all medical information, the company should be persistent in maintain visible and clear all the advantages that are offering to consumers. The two following solutions are some of the many that students could give:

✓ Create a link in the front page of its website stating, for example, "How can you benefit from our service". The idea would be to transmit and reinforce CCK's main advantages in order to facilitate consumers understanding how the company's characteristics. The words convenience; choice and decision making control should be highlighted in order to reinforce the perceived value.

✓ In order to caught consumer's attention, CCK might has in its website front page the option for looking for specialties or doctors in the middle of the page.

Concerning **CCK's key resources**, there is a need to assessing endorsement strategies regarding partnerships. The company has developed crucial agreements for the establishment and development of its business, being one of those with StartUpLisboa, one of the key Portuguese startup incubators. CKK can benefit from this partnership by having the incubator's offices and the influent networking around it. They has also developed partnerships with clinical software management companies creating essential distributing channel of CCK's platform. Nevertheless, the company should not forget the importance of the selling channels. In this sense, agreements with Medis[27] or Meu Sapo Saúde[28] and health blogs could be valuable for the company since it could increase the number of consumers and also contribute to CCK's total sales. Additionally, agreements with Patients Associations or private companies, like IMI[29], are also very valuable for consumers since those stakeholders are really involved with them.

Taking into consideration **CCK's key processes**, as it was mention before, CCK needs an improvement on its service awareness, which will make several modifications on its marketing strategy, for example. On the other hand, if the company will implement "ConsultaSolidária" it will also change the processes and operations activities making CCK more competitive and strong, as TQ4 already demonstrated.

Furthermore, in **CCK's revenue model** there is no change to propose since the company is already the one that practices the best price in the market. However, in this part of the question students may suggested some different ways for CCK to make more money to be possible for them to have more greater revenues to keep investing in their needs.

In conclusion, CCK already has a strong service features and resources, however differentiation strategies could be taken into account and the proposed improvements should reinforce the company's competitive advantage.

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[27] One of the most known insurance company in Portugal
[28] A personalized information system that allows to register, organize and manage all health information
[29] Imagens Médicas Integradas/ Integrated Medical Images

Chapter 5: Conclusion, Future Research and Limitations

5.1 Conclusion

The evolution of the health sector has brought several improvements for the Portuguese population. CCK, a recent online company, is one of those cases. The idea behind its foundation came from the fact that one of the company's founders couldn't book his physiotherapy appointments through the internet.

In a time where Portugal is undergoing a financial and economical crises, CCK offers a free service for patients that could facilitate their lives. Entering only in the private market, the company doesn't exclude the possibility of the NHS to integrates its service in the future. Additionally, the Literature Review makes a brief description of the Portuguese situation, as well as the market where the company is inserted. CCK knew that it would not be easy to change the consumers' habits - since normally they book an appointment through telephone or personally - and it wasn't a barrier for the company but a motivation to move forward. In this sense, the objective of this dissertation was to understand how can CCK be extremely competitive demonstrating its service advantages and key success factors.

On the other hand, with the guidelines provided in the Teaching Notes chapter, it will be helpful for professors and students (and all the ones interested in the theme) to analyze and better understand CCK's business model. Questions like trust in online business, especially in the health sector, need careful companies' approaches and CCK, since the beginning, was trying to be transparent in a way that consumers believe that its service is trustworthy; or the development of "ConsultaSolidária" in order to involve all the population and contribute for the society development.

Moreover, it is expected that the present dissertation, in a way or another, can be a contributor and an appeal of the several initiatives in the health sector in Portugal, since a better and improved health system has potential gains.

Finally, it is hoped that the readers find this study interesting and that it brings new ideas and motivation for the future.

5.2 Future Research and Limitations

The methodology used was a case study approach based only in one company, which is one of the limitations of this dissertation due to the fact that there is no space for generalizations. Additionally, the information provided by CCK was in a form of interview, and emails exchanges, and hence it was also confined to those. Nevertheless, the study can still contribute for future researchers, especially the ones that are interested in the e-health sector.

Furthermore, the presented study was also based on secondary data, which now can represent another limitation, but in the future could be a motivation to conduct some quantity research, such as focus group. Moreover, the fact that CCK is still in the beginning of its activity in the market, it also constitutes and makes this analysis more complex. Related with this, the fact that the e-health market itself isn't still sufficiently developed in Portugal was a difficulty to understand how the company can be involved on it.

Annexes

Annex 1 - Portuguese Health System
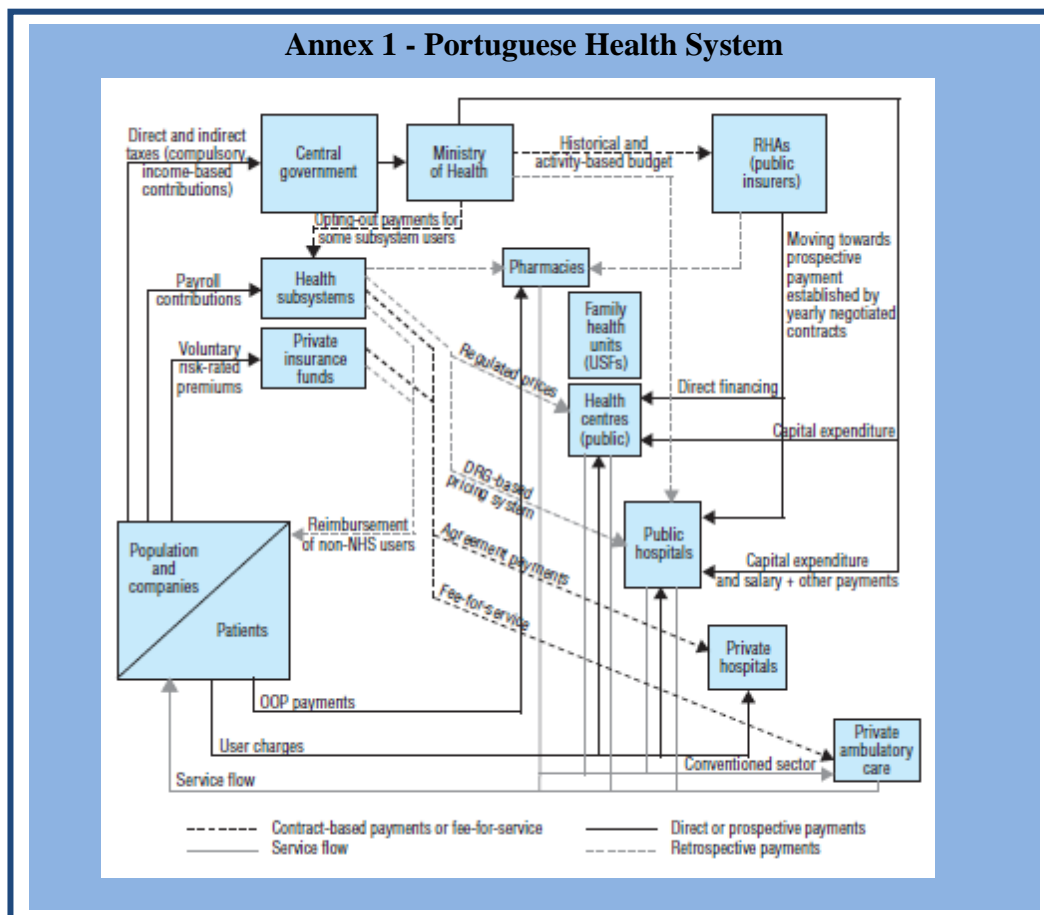
Source: Health System in Transition, Portugal health system overview; Pedro Pita Barros, Sara Ribeirinho Machado, Jorge de Almeida Simões, 2011, page 16

Annex 2 - Number of Emergencies (in thousands)			
Years	**Total**	**Hospitals**	**Health Centers**
2005	12.425	6.447	5.978
2006	12.022	6.366	5.656
2007	11.633	6.595	5.038
2008	9.766	6.409	3.357
2009	10.151	6.376	3.775
2010	8.904	6.450	2.454
2011	X	X	1.783

Source: PorData website -
*www.pordata.pt/Portugal/SNS+consultas++internamentos+e+urgencias+++Continente-159*

Annex 3 - Total health expenditure as % of GDP	
Years	Total
2005	9,8
2006	9,4
2007	9,4
2008	9,7
2009	10,2
2010	10,2
2011	9,8

Source:PorData website - www.pordata.pt/Portugal/Despesa+total+em+saude+em+percentagem+do+PIB-610

Annex 4 - Evolution of the number of insured persons
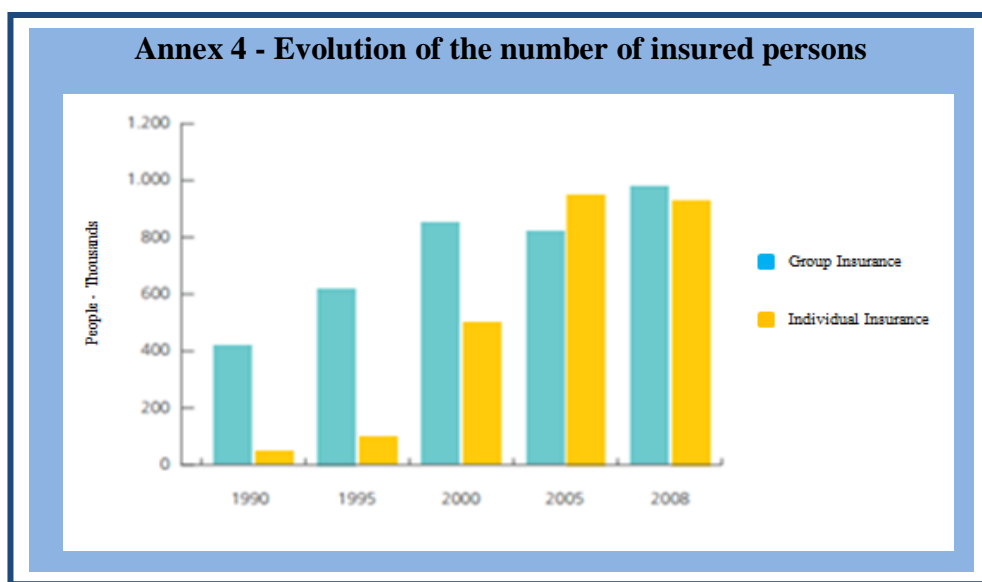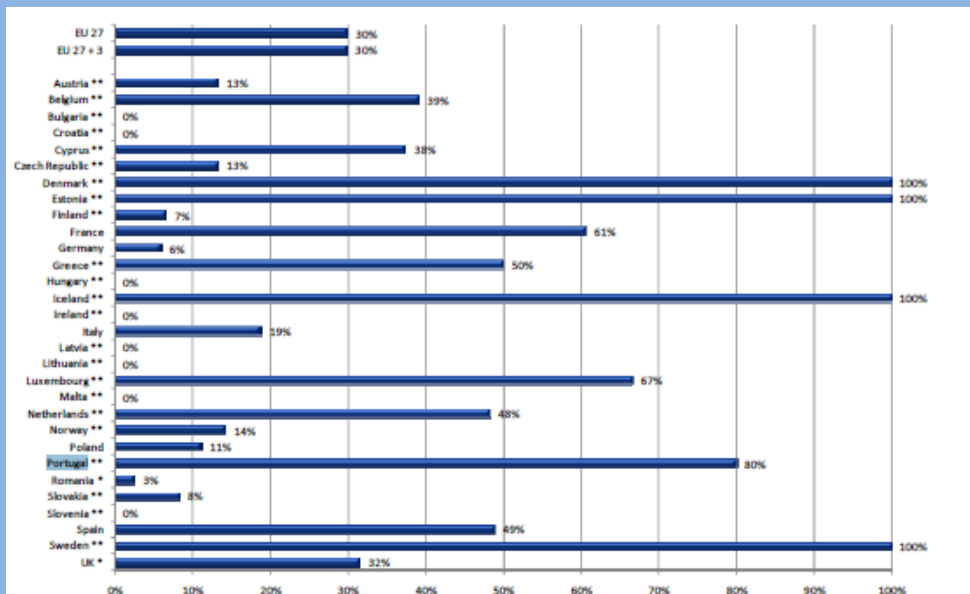

Source: Insurance Institute of Portugal

66

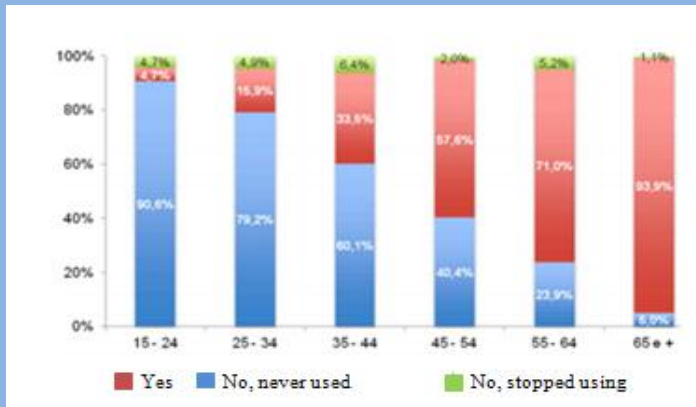## Annex 5 - Portugal's hospitals e-health profile
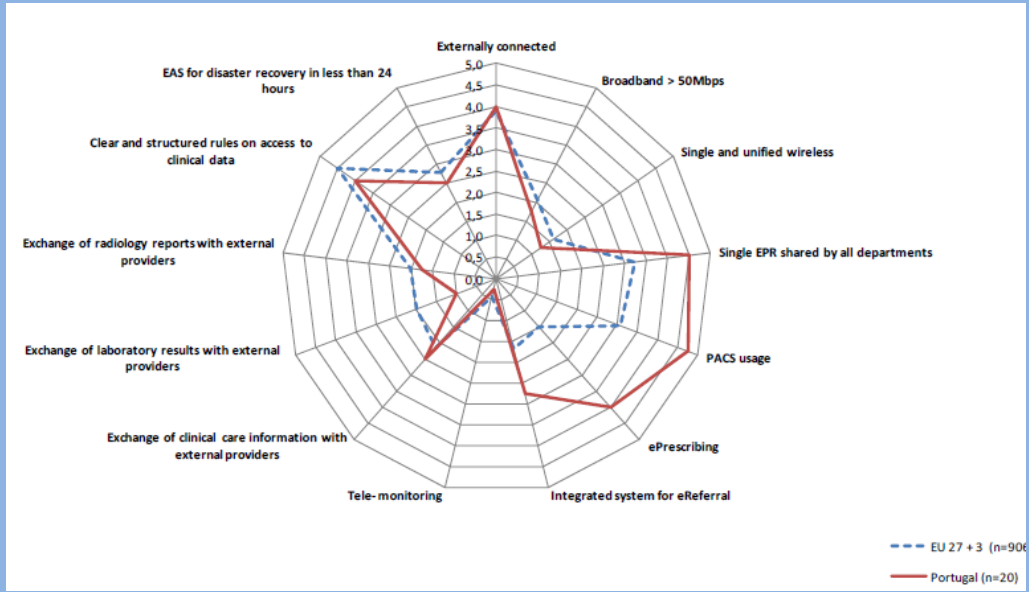
Source: European Commission, e-health Benchmarking III, 2011, page 153

Annex 6 - Availability of e-prescription by country
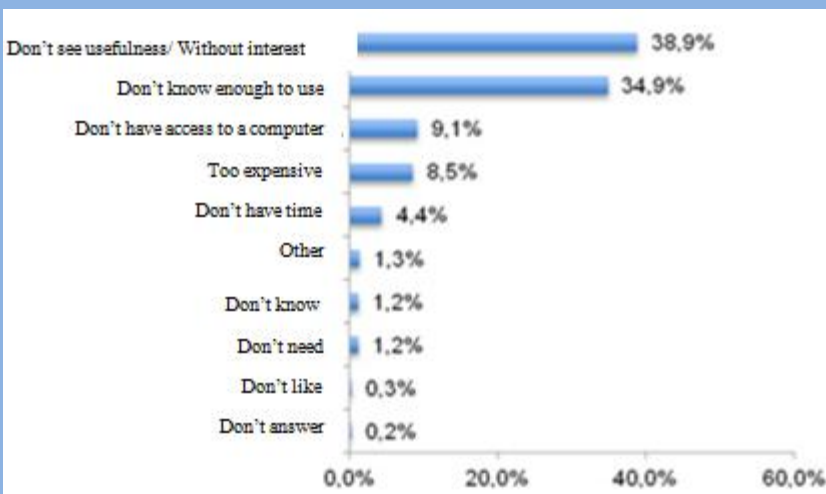

Source: European Commission, e-health Benchmarking III, 2011, page 65
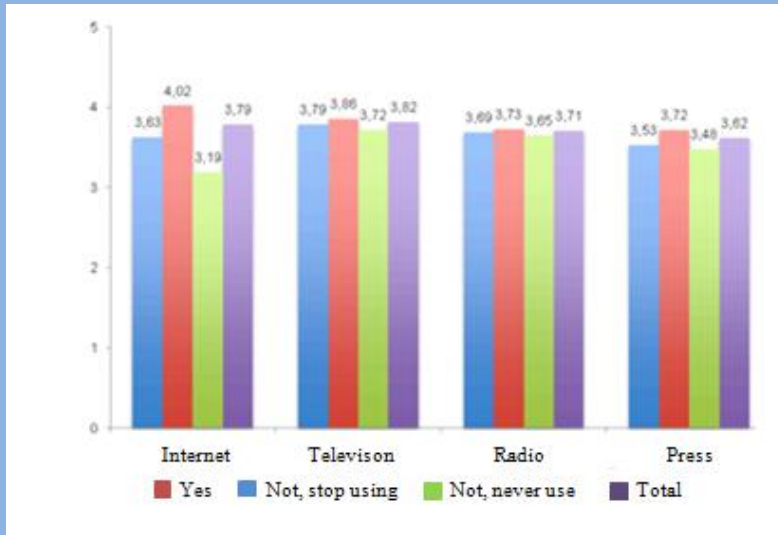
Annex 7 - Internet Users by age (%)

Source: Communication Observatory, Internet in Portugal, 2012, page 10

Annex 8 - Reasons to not use internet (%)
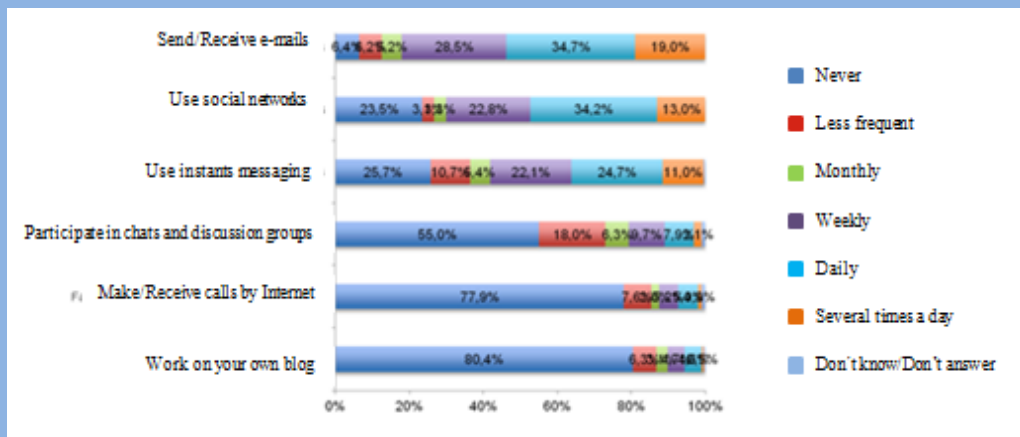

Source: Communication Observatory, Internet in Portugal, 2012, page 12

Annex 9 - Degree of confidence in available information, by internet utilization (%)
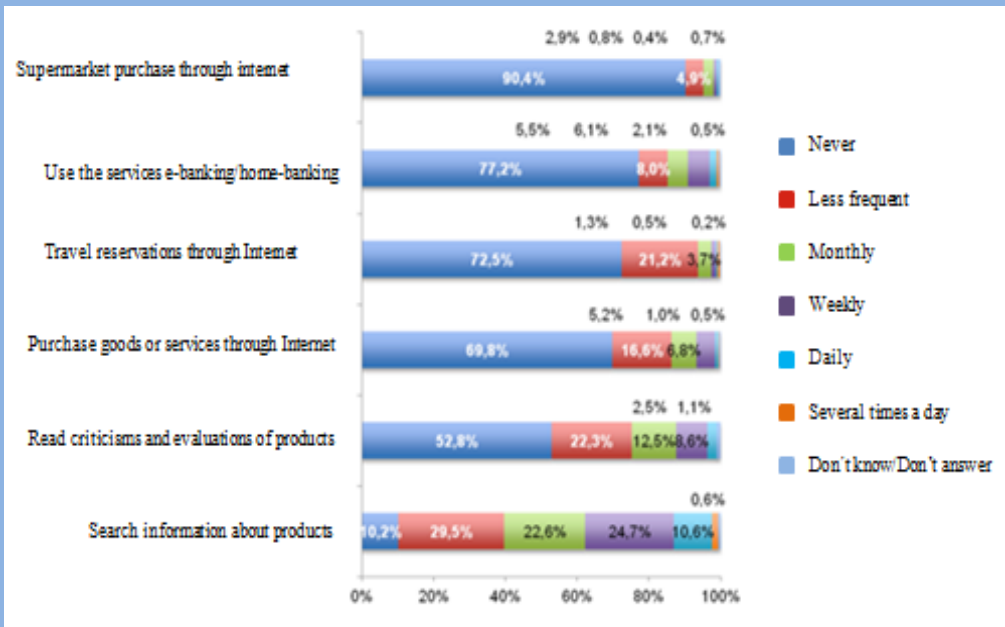
Source: Communication Observatory, Internet in Portugal, 2012, page 17

Annex 10 - Frequency of internet use for communication purpose (%)

Source: Communication Observatory, Internet in Portugal, 2012, page 19

Annex 11 - Frequency of internet use for services purpose (%)

Category	Never	Less frequent	Monthly	Weekly	Daily	Several times a day	Don't know/Don't answer
Supermarket purchase through internet	90,4%	4,9%	2,9%	0,8%	0,4%		0,7%
Use the services e-banking/home-banking	77,2%	8,0%	5,5%	6,1%	2,1%		0,5%
Travel reservations through Internet	72,5%	21,2%	3,7%	1,3%	0,5%		0,2%
Purchase goods or services through Internet	69,8%	16,6%	6,8%	5,2%	1,0%		0,5%
Read criticisms and evaluations of products	52,8%	22,3%	12,5%	8,6%	2,5%		1,1%
Search information about products	10,2%	29,5%	22,6%	24,7%	10,6%		0,6%

Source: Communication Observatory, Internet in Portugal, 2012, page 23

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Annex 12 - SWOT Analysis	
Strengths	**Weakness**
First Mover Advantage	Low awareness
User friendly service	Outsourcing of Department Technology
Fast decision-making -> small organization structure	CCK doesn't offer the same searching options comparing with its competitors
Partnerships	Low business volume
Opportunities	**Threats**
Growth in e-health and internet market	Difficulty to change social and health habits
Low competition	Consumers choice base on referrals and insurance agreement
High demand	Old people are the ones that have more diseases, but also the ones that have a lowest internet access
Take advantage from e-health strategies	Low reputation

Source: Author

Annex 13 - CCK's Key Success Factors		
Key buying Factors of CCK's consumers	**CCK's competitive engines**	**CCK's Key Success Factors**
Design	Information System	User-friendly service
Customer service	Electronic Record	Free service for patients
Efficiency	Innovation	Recent partnerships, namely with clinics and doctor
Mobility	Low number of competitors	Positioning
Easy registration process		Innovation
		First move advantage

Source: Author

Annex 14 - Competitive Assessment			
Features	**ConsultaClick**	**MedQualy**	**MediPédia**
Patients Personal Area	☑	☑	☑
# of specialties clinics and doctors	☑	☑	✅
Access to doctor's CV, agenda, clinic location and patient's feedback	✅	-	-
Front page design and level of refined search	-	✅	☑
Booking confirmation SMS an email	☑	☑	☑
Personal Advisement by promotion and CRM tools. Marketing tools: Google Adwords	✅	-	-
Real time updates and management of agendas	☑	☑	-
Software integration	✅	-	-
Clinic Integration	☑	☑	☑
Price	✅	☑	-
Total	**4**	**1**	**1**

Source: Author

Legend:

✅ Competitive Advantage

☑ Companies' features

Exhibit 15 - VRIO Analysis					
Resources	**Valuable**	**Rare**	**Costly to imitate**	**Organized**	**Implications**
Doctor's Profile	Yes	No	Yes	Yes	Temporary advantage
Marketing and CRM tools provided	Yes	Yes	No	Yes	Temporary advantage
Software and Clinic Integration	Yes	Yes	Yes	Yes	**Sustained Advantage**
Price	Yes	Yes	No	No	Temporary advantage
Team/Culture	Yes	No	Yes	Yes	Temporary advantage
Brand	Yes	No	No	No	Parity
Partnerships	Yes	Yes	Yes	Yes	**Sustained Advantage**

Source: Author

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