The importance of the Internet within pharmaceutical industry

Dissertation submitted in part fulfilment of the requirements for the degree of MBA program at Dublin Business School

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10/01/2016
STATEMENT OF DECLARATION

I, Paula Coca, declare that this research is my original work and that it has never been presented to any institution or university for the award of Degree or Diploma. In addition, I have referenced correctly all literature and sources used in this work and this work is fully compliant with the Dublin Business School’s academic honesty policy.

Signed: Paula Coca
Date: 10/1/2016
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ABSTRACT

Non Adherence to long medications is affecting the income of companies as well as patients health. The scope of this issue increases when the patients are young. The Internet is considered as an effective tool to improve communications between brands and customers. On the other hand the restrictions of pharmaceutical companies are complicated and pharmaceutical companies have to develop new strategies to engage customers. This research aims to answer the following question “How can Pharmaceutical companies use internet to encourage young patients with chronic illness to take their treatments?” Europe is the area chosen to carry out this dissertation.

To obtain primary data the researcher did three interviews to three marketing managers of the pharmaceutical industry that agreed to take part in the study. The literature review was used as secondary data.

The findings of this research showed that the companies' strategies depend of the type of drug they are selling. Both doctors and patients seem to be potential objectives of the campaigns.
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1. Introduction

In this chapter it is included a background of the research topic, the aim of the dissertation, as well as limitations, structure and conclusions.

1.1 Background of Research Topic

In the era of the Digital Technologies, the communication between humans has changed. Due to this progress, marketers have to evolve and develop new paths for Advertising. Therefore, pharmaceutical industry have started using use the internet to deliver messages and interact with audiences. It is well known that there are a high number of internet tools that currently are being used by marketers in order to achieve their objectives: Facebook, twitter, websites, online magazines, etc. Firms have to choose according to their preferences and necessities what type of tools are suitable to achieve their goals (Fill C., 2011).

This research focus in Europe where the pharmaceutical environment is more challenging than ever and companies have been forced to seek for new alternatives due to the reductions in marketing budgets and restrictions in terms of drug’s advertising (ComScore, 2014). The European law do not allow companies to advertise prescription drugs directly or indirectly to patients and general public. Direct to Customer advertising is used only with information to create awareness of the illness and with educational purposes (European Law). The table below shows the situation between different areas of the world Europe, New Zealand and America.

<table>
<thead>
<tr>
<th>Regulatory Agency</th>
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<td>DTCA prescription drugs</td>
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<td>DTCA non prescription drugs</td>
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<td>Allowed with restrictions</td>
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1.2 Background of the researcher:

The researcher has chosen this topic due to two factors:

- The possibility of interview marketing managers of the pharmaceutical industry. The researcher has contacts with this industry.
- The researcher interest for marketing trends especially in the pharmaceutical industry.

1.3 The Aim of the Research:

The aim of the research resides into exploring one of the biggest and important problems of pharmaceutical industry nowadays: The Non Adherence to long term medication. The treatments of long term sicknesses in almost all of the cases include the use of long term medication. It has been demonstrated that this pharmacotherapy is adequate and efficient to fight against diseases however the benefits of this drugs are not experienced in many cases as 50% of patients do not follow the treatments as they are prescribed by their doctors (Marie T. Brown, Jennifer K. Bussell, 2011).

The non adherence to treatments has an enormous impact in society as well as in organizations. It is estimated that just in Europe it is costing around 200,000 premature deaths (Dr Sabah Al-Lawati, 2014). The consequences of non compliance with treatments are diverse. Patients struggle with complications derived from the irregular use of their drugs or even they will not experience all the benefits from their treatment. In addition, the expenditure in drugs that palliate the effects of non adherence is costing every year millions to governments and patients.

The causes of non-adherence are divided into non-intentional and intentional. In general non intentional are easy to be resolved by methods such as calendars, alarms, remainders, etc. On the other hand intentional non compliance is hard to be addressed as it needs to educate doctors, patients and pharmaceutics (Dr Sabah Al-Lawati, 2014).

The principal reason of non-adherence is still forgetfulness. 71% of Irish patients declare that they forget to take regularly their medication (Dr Sabah Al-Lawati, 2014). The second reason is that the belief of the medication was not needed 20% of patients and finally the belief that the illness is improving and there is no need of more medication.

This study is focus in young people. Despite of what is the general idea, that old people is more likely to forget or not take their medicine, the truth is that adherence increase with the age. People that are less compliance with treatments are the young people and the elders, despite of being under the same treatment for many years, are more likely to continue with their medication. (Almudena Fernandez, 2014, Observatorio de Adherencia al Tratamiento, OAT).
Due to the complicated barriers to drugs adherence, laboratories have been using a wide range of solutions. Companies are aware of the fact that further interventions may help to improve adherence. However most of the efforts of firms in creating an effective tool have had only a modest effect. Despite of the attempts of pharmaceutical companies to develop a system that may increase adherence there has been little progress made (Jacqueline G Hugtenburg et al, 2013).

The two types of pharmaceutical marketing are marketing direct to doctors and DTCA Direct to Customers advertising. The researcher will focus in DTCA. The reason is that despite of the fact that Direct to Customers Advertising has been proved less adequate than promotion to doctors; there are still many ways to increase the effectiveness of this type of advertising. In addition, in this type of advertising there is a component that educates patients with information, showing them of the risks of not compliance and also pushing them to see their doctors more often, increasing the market (Hugh Wilson et al, 2011)

In many countries DTCA for prescription drugs is forbidden by law. Due to this marketers need to create and develop new strategies. Therefore companies need to make a biggest effort in order to stimulate the use of the drug or product. The aim must be to create messages that remain patients that the way to obtain the benefits they are seeking for, is to take the adequate medication. These messages can be deliver by many channels, including internet, tv, etc. (Hugh Wilson et al, 2011)

This research aims to find possible solutions of non adherence using internet within DTCA. As it was mentioned, in Europe this kind of advertising is forbidden. However marketers have the possibility to educate and provide general information through DTCA. In Europe, one of the practices used by firms is the use of promotion to inform about sicknesses and prevent future contagious. It is directed to the general public and it can encourage viewers to visit their doctors and to trust on the brand that is advertising. What is more, nowadays the best way to communicate any message is though internet.

Therefore, the aim of this dissertation is to draw the attention into this issue and also find out how laboratories are approaching their strategies to possible solutions that are adequate to our era.
1.4 Research methodology and Scope

This researcher will employ qualitative methods as the aim is to investigate possible solutions to the non-adherence problem in young people. Due to the characteristics of the research and the limitations, the researcher has focus in small sample of population with a no probability method. The study is based in three cases of study from 3 different companies. One marketing manager of each company has been interview by the researcher.

1.5 Research questions and Objectives

The research problem originates the research question. The importance of detail the research problem as it is drives the research process (Chisnell, 1997, Saunders et al.). This assignment aims to research the role of internet for young patients with chronic diseases. It aims to investigate possible solutions of the lack of adherence of young patients suffering from long illness. From the information gathered from literature the author raises the following research question:

- **How can Pharmaceutical companies use internet to encourage young patients with chronic illness to take their treatments?**

The main purpose of this question is to find out what kind of internet solutions the industry provides in order to increase the adherence of youth.

1.6 Research hypothesis

Hypothesis has an important role in researches as they bring “direction, detail and determinant approach to the study” (Kumar, 2005, p 73). A hypothesis provides an understanding of the variables and their effect. The hypothesis of this research is below:

- There is a correlation between the use of the internet in DTCA and the behaviour of patients with chronic diseases

1.7 Objectives

With the research question and the hypothesis the researcher seeks to clarify the objectives that are listed below:

1. To analyze the use of internet by pharmaceutical industry.
2. To assess how companies are facing the non adherence to long treatments.
3. To asses if employees consider the internet as a tool for marketing strategies.
All these objectives involve the same purpose; provide the researcher with enough information in order to answer the research questions and to develop a conclusion of how digital technology is being used in pharmaceutical companies to solve the adherence issues. The researcher has prepared an interview guide to obtain the answers of pharmaceutical employees of three different companies. The questions are the same for the all of the interviews.

1.8 Dissertation Structure

This dissertation is divided in six chapters. The reason is to ease the reading and the comprehension of the research. Below are listed a brief summary of the different chapters:

The first part is the introduction. This chapter intend to draw a clear picture of the background of the topic as well as the background of the researcher, the aim and the need for this dissertation as well as the main reasons and the research question.

The second chapter contains the literature review. In this part the author has gather articles and papers about pharmaceutical practices, non adherence, internet marketing, young people behaviour towards internet. All of this information was collected to demonstrate the need of the internet as part of non-adherence strategies in marketing.

The third chapter is the Research methodology. This part includes the research questions, the methodology, the research problem, interview preparation and ethics.

The fourth chapter is the findings. This chapter there is a summary of the answers of the interviewers. The author has assessed and compared the responses in order to answer the main research question.

The fifth chapter includes conclusions and recommendations in order to provide the readers with an overall picture of the situation and findings.

Finally the last part of the dissertation is a personal reflection on what has been learned and how has been the experience.
1.9 Limitations

The first limitation of this research was the time management. The research has been carried out during the months of November and December. There was indeed a need to combine personal time with the interviews, and, also, enough time to establish contact with the participants.

Difficulties to compare the empirical data as the participants answered with their own words and they gave their personal view in every question.

It was expected to have difficulties in the interviews as they were carried out in Spanish. All of the participants spoke just in Spanish and there have been issues in transcriptions.

There were limitations to interview managers in Spain. However they were offered with options such as Skype and one of the interviews was done in the airport.

The researcher understood that there were restrictions within companies about secret or private data and told the interviews that did not need to share internal information.

Finally, the literature found in this field was very limited. Furthermore there is a lack of European pharmaceutical papers and most of the information related to the states.

1.10 Major Contributions of the study

This research contributes to the knowledge of the role of internet in marketing strategies of pharmaceutical laboratories. The conclusions and the findings bring to the industry recommendations to establish the use of applications, webs, etc as a part of the solution of one the main issues addressed by firms. In addition, this assignment contributes to understand the relation between final customer decisions and the use of internet.

1.11 Conclusion

In this section, it has been explained the importance of the research topic. It also has been provided a view of the background the hypothesis, objectives, limitations and contributions. In summary this chapter introduce the lector the topic and a general idea of marketing in pharmaceutical laboratories. One of the most important parts of this chapter is the identification of the research question as the direction to be followed in the rest of the assignment. The following part will introduce the literature review of the topic.
2. Literature Review

2.1 Current situation of marketing in Pharmaceutical industry

Marketing is considered as one of the most controversial points for pharmaceutical firms. The industry faces a challenging scenario in the actual market. Restrictions in terms of advertising and the customer’s attitudes towards the industry are two of the main threats for marketers these days.

It is important to clarify the different strategies that have been used by pharmaceutical companies through years. Firms have been combining push and pull strategies for promotional purposes. The first relates to the “push of a product through the marketing channel” (Parker S., Pettijohn C., 2005). These kinds of strategies are mainly directed towards physicians and include promotions such as promotional products and public relations. On the other hand, “pull-strategies” pull the product through the marketing channels. These type is consider as Direct to Customers Advertising (Parker S., Pettijohn C., 2005)
2.2 Direct to Customers Advertising

The term DTC has been defined as:

"the different types of promotional efforts employed by pharmaceutical companies to provide prescription drug information to the general public through consumer-oriented media that includes the promotion of prescription drugs through not only lay media; but also via other emerging and sophisticated media such as website and social media" (Jennifer Ball, Michael Mackert, 2013).

Pharmaceutical companies have two mainly different types of drugs, the ones that could be served without prescription the self-medication or over the counter (OTC) drugs, and prescription drugs (De Mortanges and Rietbrock, 1997) (Buckley J., 2004). According to the European law advertising or promotion of prescription drugs direct to consumers is forbidden (Kavanagh C, et al., 2014), the reason is that patients do not have the necessary knowledge in choosing their own treatments. In addition, marketing practices of non prescription meds are semi-restricted, allowing just a few possibilities to be advertised directly to customers. (Kavanagh C, et al., 2014). The regulations towards DTC advertising vary across the world. Firms are not allowed to carry out Direct to Customers advertising of prescription products except in two countries: US and New Zeeland.

It has been widely demonstrated the effectiveness of DTC advertising in any type of products, however when the product is a drug any information, related to risks, side effects, provided is crucial to raise the sales. It is a fact that that during a DTCA campaign of a prescription drug for tobacco cessation, varenicline, on 2013 the number of prescriptions increased substantially (Yoonsang Kim 2015). However the risk information provided by the FDA over the next months declined dramatically the sales of this product.

Therefore, it is essential for European marketers to combine DTC advertising, that compliance with the actual laws and regulations of medication advertising, and drug related information. The main barrier of DTC arises from the inability of customers to understand technical drug information. In addition, the potential value of advertising as a tool for education is something to be taken in account by marketers (Michael Mackert and Brand Love 2011). Traditional advertising has a lack of valuable educational material and it can be asserted that traditional advertising for drugs is becoming ineffective and there is a necessity of include educational material.
2.2.1 Direct to Customers Advertising in Europe

In Europe, in concrete in countries such as Spain or UK there has been a containment of health spending that has forced the laboratories to reduce the investment in marketing and advertising, which in the last five years has decreased dramatically (Parker S., Pettijohn C., 2005). The governments are reducing the price of drugs and the pharmaceuticals obtain fewer benefits than before. The budget for the departments is lower and the companies do not hesitate to cut first from the expenditure in marketing, especially in marketing of prescription drugs. As mentioned this is the recent tendency in Europe.

To fight against the situation many laboratories has chosen to switch many of their products from prescription drugs to OTC (Over the counter drugs or non prescription drugs) with the only purpose to make them accessible to patients and to marketing. It can be consider as good tactic as the drugs will have many more opportunities to be advertised and the profitability for the companies grow (Whiteside S., 2014).

However, the question is what is happening with the prescription drugs? For these drugs companies are introducing the concept of inbound or pull marketing. As mentioned pull Marketing may be consider as DTC type of marketing and means the methodology that groups a series of practices and techniques that allow obtaining four main effects:

- Attract internet users to the websites of the companies: this is obtain incrementing the organic traffic (the traffic that has the origin in Google or Bing or Yahoo or Duck Duck Go) and also the social traffic (that comes from Social Media such as Facebook, Twitter o Google+).
- “Automation of Marketing”, it is based on the sending of contents and personal communication of users, depending on the interactions that take place on the website of the firm (Lea Prevel Katsanis, 2015)
- Inform and educate the users about the benefits of the brand. Despite of that the first visits to the web sites do not correspond to the interest of users for the products of the company, but the interest in the contents published, the pull marketing strategies deployed strategies to publicize the advantages of the drugs among its potential audience, with the objective of obtaining more customers.
- Loyalty. It is enough to get a customer to make a purchase during an specific time. Therefore, the pull marketing displays actions made to achieve that the user continue to feel comfortable and identified with the brand, and that in the future continue to rely on the brand and recommending their products in social networks (Lea Prevel Katsanis, 2015)
Despite of its short life, the pull marketing has experienced a remarkable growth. Emerged in 2006, its use began to spread in the following year, closely linked to a more familiar concept: the content marketing or content marketing, since it is a less expensive more accessible field from the economic point of view and more intuitive. In addition these pull marketing uses as main tool internet and allow firms to promote prescription drugs without breaking the law.

2.2.2 Customer behavior towards DTC

After researching in different data bases it has been founded considerable number of papers that intend to assess consumer behaviour towards DTC. One of the main topics is how can be examined the impact of direct-to-consumer advertising on consumers’ decision-making (CDM) Abdel-Aziz et al. in 2013, after doing a survey through questionnaires to 484 consumers, show a positive powerful relationship between DTC advertising and CDM. It can be highlight that including reliable health literacy is an advantage, as it aware the patient with health risk and side effects information, and it has an important impact on outcome. However, final decisions might vary depending on factors such as information quality, adequacy, validity, reliability, clarity and product price. Exposure to drug advertising is one of the most significant predictors of attitudinal and behavioural outcomes (Mina Lee, 2015).

DTC influence in patients is related to factors such as the income or culture. Additionally, we can mention that health status, involvement with drugs, health consciousness and drug use are also associated to Customer behaviour (Mina Lee, 2015). What is more comparing the behaviour of customers with low income and patients with high income it can be observed that low income patients change their behaviour more easily when they exposed to DTC than patients with high income (Mathew Joseph Deborah F. Spake Zachary Finney, 2008). Furthermore, the effect of DTC advertising on patients that have been raised under different cultures is may be different as well. Customer’s attitudes triggered by DTC in patients may vary depending on the exposure of the customers to the different channels (Jisu Huh et al., 2014). As a good example it can be mentioned the case of Korean-Americans living in America. This segment of the population is more exposed to advertising through TV than they are to the media. The result is that their decisions when purchasing drugs are different than the decisions Hispanic White Americans who are more influenced by media (Jisu Huh et al., 2014). In fact Kotler (2012) pointed the importance of dividing the population in segments in order to focus in a concrete target market and established a successful strategy.

Consumers, who are positive about DTC are more tent to talk to their doctors than patients who are more sceptical. However, consumers even the ones with negative attitudes towards DTC prefer to obtain information in order to minimise sickness and control the adverse effects. We can assert that Direct to customers marketing encourage patients to talk with their physicians. Moreover DTC increase the likelihood of searching for supplementary information. On the other hand the final decision between different drug brands is something that patients, in general, tend to discussed with
their doctors. Finally is important to highlight the importance of the content of the message, patients prefer prevent information than advertising (Nithima Sumpradit et al. 2015).

2.3 Long term illness, adherence to medications

For many years the treatment of chronic illness have represent one of the main challenges for the pharmaceutical industry. By definition a chronic illness is a disease that has one or more of the following characteristics: it can be caused by non reversible pathological alteration, it is usually long term or permanent, required long period of supervision and observation of care (World health organization 2003). Patients that suffer from long term diseases might require continue and specific medication during the rest of their lives. The threat for pharmaceutical companies relies in ensuring patients persistence with treatments.

The term adherence has been described by Matt Lamkin et al. (2014) as the action of following continually the “treatment instructions over the correct period of time”, no matter how long is this period. The poor adherence to treatments prescribed by doctors has consequences in pharmaceutical industry as well as for health care costs and the most important for the patient.

Companies have brought their efforts to increase the adherence to medication as the lack of compliance results in a drag of profits, making up a substantial loss for companies estimated in 564 dollars in revenue (Thomas Forissier et al, 2012).

What is more, many companies have carried out studies to assess the level of adherence of the patients. Pfizer, the pharmaceutical laboratory, has published a recent study revealing that while 82% of the patients have adherence to their medications, the other 18% of the patients do not stick to their medication. The non adherence is related to the gender and the age. Furthermore men are less likely to be compliance to medication than woman. Finally, young patients under 35 have the less ratio of compliance with 35% of non adherence (Dr Sabah Al-Lawati, 2014).

The main factors of non adherence can be divided into groups with different characteristics. For example, factors related to disease include the type of illness as the main important issue. The healthcare system is another important factor, with important characteristics to look at such as doctor-patient communication, the lack of understanding of patient needs or the duration of the appointments. In terms of patient’s attitudes, what influences the non adherence is the low understanding of the illness or the lack of involvement. Complexity of the treatments, long duration, health risks associated and poor drug information are the main factors related to treatment. Finally the cost is also a factor to bear in mind (Dr Sabah Al-Lawati, 2014).

To solve this problem not few companies have created special marketing teams focus in aware patients of the importance of continuity in long term treatments. These strategies must be created to
asses and study the main factors that can influence patient’s behaviour. The key point relies in the understanding of what makes a patient decide whether or not to take medication.

Firstly, there has always been an atmosphere of distrust due to the bad reputation of the Pharmaceutical industry. There are many experts that the industry, especially in US, asserting that the system is corrupted, pointing the politics to turn a blind eye, and in occasions to obtain personal benefit from the launch of new drugs that has no proven effect on patients (Donald W. Light et al, 2013). Obviously, this affects the opinion of patients all over the world and consequently their final decisions.

Secondly, it is important to bear in mind that patients are willing to see prompt results when taking medication. In many occasions the results of these drugs are invisible in a short term (Matt Lamkin et al. 2014). This is the case of interferon in patients with Chronic Hepatitis B Virus Infection. Shi-Ming Lin et al. (2003) asserted that patients treated with interferon have invisible short term effects, but long-term beneficial effects and they prolonged survival more than patients without it.

Finally the unpleasant side effects could be considered as the most important reason of non-adherence. The lack of continuity in some treatments is related to the tendency of leaving unpleasant tasks for the next day (Crawford Hollingworth, 2015). Side effects of drugs might affect plans and routine. It is called by behavioural economists as “inconsistency and discounting the future”. On the other hand, we can take in account the case of patients that have to take antipsychotics for schizophrenia. I has been proved that this drug improve the symptoms of the illness, reducing hallucinations, delusions, and disordered thinking. However they cause long term side effects such as muscle dystonia, akathisia, and tardive dyskinesia that remain permanent in some cases. Many patients decide to stop using this type of medication when the side effects exceed the benefits (Matt Lamkin, 2015).

Finally, the most simple but still one of the main causes of non adherence is forgetfully: People suffering from a long term illness in many cases forget to take their medications.

2.3.1 Fighting Non adherence

Firstly it is important to be mentioned that, while 76% of the patients do not use any tool to record the treatments, 24% use one method such as pillowboxes to remember (Dr Sabah Al-Lawati, 2014). Due to this fact laboratories work hard to create tools that may help avoiding the non adherence. After researching in the literature it has been founded a few articles that refer to possible solutions to non adherence.

As an example, it can be mentioned the use of reminder charts in order to increase compliance. The Institute of Medicine (IOM) US, aware of the risk of not taking medication, has created a tool named
Universal Medication Schedule (UMS) that describes how to take daily pill-form medications. In summary, the tools that are more popular include improving patient education through digital channels, the use of reminders, or simplifying medication regimen among others.

Cassandra Kenning et al. (2015) have carry out a research with the aim of prove the necessity of the ‘Universal Medication Schedule’ (UMS) and how pharmacists and Doctors could use the UMS in chronicle illness treatments. The researchers performed interviews with 10 General Practitioners, 10 community pharmacists and 15 patients of 65 years old with multiple long-term conditions that had been prescribed with five medications or more. The results showed that attitudes towards the UMS were different depending of the person however the grid helped with the understanding of the message and it enhanced patients’ experience. Despite of this it is easy to be introduced within services the main finding of the research highlight that it is not proven its effectiveness increasing the adherence.

On the other hand adherence requires interpersonal interaction with patients (Matt Lamkin et al. 2014). Taking in account that human relationships have currently changed due the interruption of new technologies we can consider Smartphone, laptops, etc a way to communicate nowadays. One of the most recent examples of the use of technology to increase adherence is the use of SMS. This has been used to increase medication adherence to HIV medications, polio vaccination and maternal and child care populations in first world populations (Matt Lamkin et al. 2014). In order to prove the effectiveness of SMS, this technique has been used in treatments for high blood pressure. Patients feel comfortable with SMS and the support that a message offers is considered as “acceptable, relevant and helpful”. It is interesting to bear in mind a hypothesis: phone SMS-text messaging may raise the adherence to treatment (Natalie Leon et al, 2015).

Finally, DTC Advertising may play a significant role in adherence of long treatments. Nilesh S Bhutada et al (2015) published a research that intended to assess the relation between DTC Advertising and consumers self reported medication taking behaviour. Patients were exposed to DTC online campaign for depression and the findings showed that DTC can help patients with adherence and lead to a “more positive medication taking behaviour”.

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1.4 Online Marketing

The breakthrough of technologies in the actual landscape has changed completely the traditional marketing frame. Furthermore, it is essential for any company the communication with customers through the technology and the use of internet. E-marketing is currently an essential tool in marketing strategies.

E-marketing relates to the utilization of information and communication through technology (Kotler P., et al, 2012, p118). Parkin defined it as:

“the overall set of activities, processes, and attitudes that a business applied to understanding the needs of its online consumers and developing, supplying and communicating products or services that addressed those needs” (2009, p.10).

An online consumer is not necessary an online customer, it refers to the users that are influenced by digital communication. In addition, online marketing or e-marketing involves getting closer to customers, understanding them and maintaining a dialogue, adding extra value to products. (Chaffey D, et al, 2012, p.15). It is a way to place the customers as the centre of the process and produce a constant stream of information between users and firms. Finally it can be mentioned that digital marketing uses technologies such as applications, websites or social networking.

The question that relates here is why firms must go online and use online strategies. According to Chaffey et al. there are five objectives behind the use of e-marketing by an organization: Growth sales, get closer to customers, save cost, extend the brand online and the most important add value (2012, p.22)

2.4.1 Value added

Nowadays customers have the power to choose between the uncountable number of brands, and offers. Customer’s role has change in the last few years and currently customers have the rights to request more for their money. In consequence, marketers are forced to focus in add value to products to enhance buyers to decide for their brands.

The value proposition relates to the group of benefits that an organization is planning to deliver in order to engage users (Kotler P., 2012, p.869). The main difference with the online value proposition resides in the use of online contents, services, platforms, software... (Parkin G., 2009). The spread of the internet in 2016 is estimated in almost half of the population of the world. This is interpreted by Emmanuel Huet et al (2013) as a proof that the internet provides users with value. The internet allows the users to obtain information immediately anywhere and what is more important exchange any this information for a very low cost.
According to this, the business success is associated with the idea of deliver high quality online value propositions that can create customer satisfaction. Customer satisfaction is a term that measures the performance of an organization in meeting customer expectations. Schiffman L. et al defined it as the positive perception of the performance of product in relation to their expectations (2010, p29). In addition, Gounaris el al. states that there is a relationship between customer value, satisfaction and purchase intentions, asserting that superior customer value allow an organization to "achieve favorable behavioral intentions" and might deliver final purchases (Kotler P. et al. 2012, p422).

2.4.2 Online Marketing in Pharmaceutical companies

Pharmaceutical industry appears as one of the most traditional business. There are many experts that agree that these enterprises have been reticent to incorporate DTC online strategies. Whiteside reflected in a paper the opinions of marketers’ specialized in pharmaceutical industry and in summary, it is agreed that the main challenge for the industry is to incorporate a multichannel marketing and online marketing. Therefore the discussion relates to the “need for digitally-driven change within the pharmaceutical sector” (2014,a)

There are few powerful reasons that support the incorporation of online marketing in pharmaceutical strategies. Deliver value to buyers might be helpful in differentiating organizations form competitors as well as to increase the communication with patients (Whiteside S., 2014,b). In addition Pharmaceutical companies need to be differentiated more than anyone as the product is similar and even the same as the competitors'.

Secondly, marketers will have the chance to establish a previous communication. The aim is to engage patients in a digital environment. Whiteside states that “Helping individuals to improve their health literacy while they are fit and well… is a useful example of the ways in which pharmaceutical companies can expand their range of activity in a more service-orientated direction” (Whiteside S., 2014).

Finally, the last reason is the importance of placing the patient as the target market, and provide them with online services that meet their expectations as customers (Whiteside S., 2014,b). After reviewing literature, many cases have been found where pharmaceutical companies have used internet as a tool to advertise their products in Europe. However and despite of the strict legislation that affects pharmaceutical advertising to customers, there are still many possibilities of using e-marketing to promote brands and medications. Furthermore, online marketing has a positive impact on adherence. Brand sites appear as the easiest way to create awareness in the users. The existence of education materials in the web can build favourable communication user/brand. Patients, who have visited brands online, have developed high adherence to treatments. These results emphasize the importance of patient brand relationship especially for those who suffer from long term illness and need continuous medication (comScore 2014).
2.4.3 Online marketing in Europe

Europe compared with other regions is delayed in terms of introducing internet to their strategies. However this evidence contrast with the fact that 96% of the doctors that can prescribe a drug use internet as a regular basis and 86% believes that internet is essential. Current circumstances speak for themselves: most physicians manage and consult blogs and enter websites on medicine. At the same time that they use medical apps, specialized portals, instant messaging services and social networks (Mnanhattan research, 2014). Indeed, this is an area where doctors are and want to be, but the steep into the digital world is hard for laboratories.

It is also important to take in account the view of the marketers. One third of revenues of marketing health agencies come from digital channels and it is truly possible that over the next two years we will able to see a substantial change with regard to work with digital tools. What is more, 63% of advertising agencies specializing in health believes that online communication will be strengthened despite of the regulatory restrictions that can be an impediment on social media strategies (AEAPS, 2013).

In summary, the objective is to enhance the online communication. This is something that agencies may and must contribute by helping managers to see that these forms of working with products are more efficient and profitable, and that will definitely help to achieve the objectives and optimize the advertising investment.

3.4.4 DTC online

As it has been mentioned before, in Europe there is an online marketing revolution due to the pull marketing. This type of marketing may have benefits that are valuable for companies. One of them is that after a few months, the company may have achieved a high volume of traffic of users who have found their website, and where they will find information that answers their needs. Therefore, this content is always showed by the brand that has created it and this contributes at the same time to spread the name of the brand (branding).

However, this is not all: this strategy helps Internet users to become familiar with the products of the company. In addition it contributes to consult published articles; it is likely that users will take advantage of his visit, and they will browse other sections of the website, including the catalog of products and services.

However, visitors who get these sites not only have as origin organic traffic, but also social networks, which creates something called social traffic (Balekari Umamahesh et al. 2015) In fact, communities formed by patients share content of interest, providing the company with online relevance, which encourages many users to become followers of health content channels.
1.5 Young people and the use of the internet

Nowadays young people are growing in a different world due the new technologies. Digital media, Smartphone, internet are used every day to communicate. What is more, it is a way to obtain information. Internet is part of their environment since they are born, consequently they are totally adapted to it and it is integrated in their lives since an early stage.

Thirty percent of the world’s youth population from 15 to 24 years old have used internet on the last 5 years. The percentages vary according to the country. The highest rate is registered in South Korea, Japan and several European countries such as Finland, Denmark and the Netherlands where almost a ninety percent of youth uses internet on a daily bases (Michael Best, 2013).

Eurostat has published a research on 2012 assessing the use of internet in Europe. The report reveals that the percentage of population from 16 to 24 years old that have never used internet is extremely low, just 4.5 percent. This means that almost all of the young generation consider internet as a “daily tool for studies, work, leisure or social relations” (Eurostat, 2012)

(Eurostat, 2012)
Finally the statistics of the participation in social networks show that almost 90% of youth is highly active in Social media while 35 years old people use less social networks.

The internet, as a source of information related to health has experienced a boost due to its growth over the last years. It is a confidential way to obtain information about different health matters such as lifestyles, patients support or drugs prescriptions. The number of young people with chronic illness is actually very high. According to Eurostat statistics the most common long term illness among kids are asthma, allergic disease and eczema (2000). However illness such as mental diseases or diabetes rises from childhood to adolescence. In Europe from 15% to 20% of young people from 15 to 24 years old suffer from mental disorders. What is more, according to Rethink Mental Illness (mental health charity in England) one in ten young people have a mental health diagnosis. However the number increases when we talk about Ireland where a research published by RCSI (Royal College of Surgeons in Ireland) asserts that one in five young Irish adults aged 19-24 and one in 6 young people aged 11-13 were experiencing mental disorder (ARY CANNON et al. 2013). It has been found
extended literature that explores the attitudes of youth towards health and medication information on the internet.

For the pharmaceutical industry the understanding of what young people expect from health related content on the Web is essential to develop relevant content. However is important to bear in mind that almost all the health information available at the internet related to health and drugs is generated by the users. Young people seem to be concerned about the reliability of official and user generated content. However and even if it is not a reliable source of information, user-generated content is appreciated by young people “as a useful source of accounts of other people's experiences” (Gillian Fergie et al., 2012). This is something that marketers of the laboratories must remember as if the information that they will provide is reliable young people may find it even more useful.

There has been an increase in the use of internet due to the searches for support in mental illness. There are many difficulties that young people face when they talk about their mental issues as it is not easy for them. It is also hard to obtain the appropriate doctor treatment. Websites are a plausible solution taking in account the 72% of young people access internet more than one time every day and 30% have looked for mental health information online. From these people almost 70% will use the web for support in mental disease (A. Horhan et al., 2009). The conclusion is that internet is a powerful tool to offer information and support.

In addition, there is a big effort of young people to find alternatives to the lack of support offer for health authorities in mental sicknesses. L. Kris Gowen (2013) carried out a study that seeks to obtain information about three main issues: Topics searched motivations for going online to search for information, and barriers to successful searching. The findings show that the users look for information about their medications and diagnoses and apply the information to their own cases. On the other hand they feel overwhelmed by the amount of information.

In summary, the main problem addressed in many of these research papers is the lack of reliable information available in the web.

2.6 Best Case of Study

Warc.com is an online database that collects the best practices in terms of advertising in the world. Warc has different competitions aiming to gather the best practices in the world. The Warc’s five annual Prizes showcase choose the best cases in marketing communications. In 2014 the Warc Prize for Asian Strategy was “Crestor: The Vein Guy”. It is an example of how AstraZeneca used digital technology to improve the adherence to medication of patients with high cholesterol. The main goal of this section is to present a case that provides an example of how companies are facing the adherence to treatments.
2.6.1 Campaign details

The brand that launched this strategy was AstraZeneca and the product was called Crestor. The application was launched in Japan and it could be consider as DTC advertising for prescription drugs. The channels where users could use this product were mainly mobiles and tablets. The budget that the brand had to create this app was 500K.

The objective was to create a digital tool that could increase the adherence and encourage people to continue with cholesterol-lowering drug on an ongoing basis.

In terms of Target Market the tool was created for patients with Smartphone. Compared to the rest of the developed countries, Japanese population spend more time on smart phones. The long distances and the use of public transport seem to be the main reason behind the popularity of the Smartphone. The users of Smartphone in Japan are mainly young people.

According to case of study, adherence “is a long-term behaviour that requires a little reminder or motivation every day”. The idea was to create a tool that could engage the audience at the same time that could create compliance to a drug or medication. A tool that performance, both, engagement and adherence was the solution of AstraZeneca. It was created for patients with Smartphone’s.

The Japan Legislation does not allow Direct to Customers Advertising. Companies have to focus in other techniques to launch DTC advertising.

The vein Guy

‘The Vein Guy’ was a Smartphone application developed and created in Japan. The application had as main characteristics an avatar, an alarm, calendar,..

The idea of the avatar was create something similar to the patient. The user could choose between different options for the face, hair, eyes, nose, mouth, hairstyle, etc. This avatar was named the Vein Guy.

The main aim of the Vein Guy was to remain users to take the medication. The user could choose the best hour and also program the alarm according to their personal schedule. In this way the Vein Guy was totally customizable and programmable by the user. This avatar was able to ask if the user has already taken the medicine at the hours scheduled. If the patient said yes, he/she got a stamp on the calendar and a health tip. On the other hand if the user said no the Vein Guy gave an adherence tip. All these messages were susceptible to be rated by pressing the button “like” or “wherever “. 
The Vein Guy also remained the user to go to the clinic and to buy new drugs before he/she runs out with the help of a calendar. There was an option where the user could also monitor the drug taking history.

Results
The only way to measure effectiveness of Vein Guy is though the usage and interaction. Quote: “to measure adherence we need to measure engagement”. The results of the Vein Guy had very promising rates:

- The Target was to engage 75% of users with the app at least two or more times and the result was that 97.9% of users engaged with the app twice or more.
- The second target was that 25% of users engage with the app more than 10 times and the final outcome showed that more than 44% of users engaged with the app 10 times or more.
- Finally the last target was that 26% of users rate two or more messages that appear in the app and the result showed that 91.7% of users rated two or more messages.

There are important quotes extracted from the case of study that are important for readers:
- “Positive feedback is a much stronger motivator for adherence than negative reinforcement”.
- “With The Vein Guy, we had a clear example that customisation, convenience and positivity supported by smart design will help patients not only feel better about their situation, but also make the patient feel good about adherence, rather than guilty about not following their doctor's orders”
- “Not everyone cares about taking their pills properly, but everyone likes a little fun and a helpful tip or two. This is the key to stickiness and, in this case, the key to improving adherence through The Vein Guy”.
3. Methodology

In this chapter it will be revised the methodology apply in order to carry out the research. It will be used “the onion” to write and structured the decisions of the researcher (Saunders, et al., 2007). The different research layers helped to structure and examine all the parts to complete successfully the research. The main aim of this research is to find the importance of using the internet to increase the adherence to medications.

In the first part I will record the research philosophy that I will adopt to perform the research. The second and third part will be the discussion of research approaches and strategies. On the fourth part it will be presented the mono-method used. The fifth part there will be a discussion of time horizon. Finally a quantitative approach will be explained in the sixth point.

To conclude the research data collection and interview methodology, limitations of the research and ethics will be argued.

3.1 Research Questions

The proposed questions are:

1. How can pharmaceutical industry use internet to encourage young patients with chronic illness to take their treatments?

The aim is to identify if DTCA is effective in Europe and what are the key points for marketers to bear in mind before creating any strategy.

2. Is the use of internet by companies a step forward or backward?

With this question the researcher is seeking to assess how the use of internet is being seen inside the laboratories. As pharmaceutical industry is a traditional business, reticent in many cases to use internet the aim is to determine whether or not the internet is a valuable tool.

3. How Companies are facing patients no adherence to treatments?

The aim is to understand the current strategies that are used and also assess the effectiveness of them within patients.

The objectives of this assignment are listed below:

- To analyze the use of online marketing by pharmaceutical industry.
- To assess how companies are facing the adherence to treatments.
- To asses if employees understand online marketing as a tool for marketing strategies.
All these objectives involve the same purpose; provide the researcher with enough information in order to answer the research questions and to develop a conclusion of how the internet is being used in pharmaceutical companies.

The researcher has prepared an interview guide to obtain the answers of pharmaceutical employees of three companies. The questions are the same for the all of the interviews.

### 3.2 Proposed Methodology

The goal of this research is to gather information about the situation of online marketing within a pharmaceutical context. In this research it will be used an Interpretivism philosophy along with an inductive approach. The data used will be qualitative and it will be gathering through interviews. The reasons of this choice will be explain below.

Figure 1: The research ‘onion’

Source: Saunders, Lewis and Thornhill (2009, p.108)
3.2.1. Research philosophy

According to this model, every layer is vital for the research. The first layer relates to the research philosophy that according to Saunders, Lewis and Thornhill is important as “it contains assumptions about the way that you view the world” (2009, p. 107).

The research philosophy adopted in this research is the interpretivism philosophy. The aim of this approach is to combine the implicit information in the message, behaviors and the specific circumstances with the message. The philosophy comprehends the behavior of people rather than explain it (Saunders, Lewis and Thornhill, 2009).

“it is the role of the interpretivism to seek to understand the subjective reality of those that they study in order to make sense of and understand their motives, actions, intentions in a way that is meaningful to the research participant” (Saunders, Lewis, Thorhill, 2003)

The research focus is the knowledge and the understanding how online marketing is used by pharmaceutical organizations and whether it makes any difference when it is used in non-adherence campaigns. Consequently, the study have a strong social component as it takes in account the opinions and own experiences of the interviewers. Therefore, there is also an idea of realism pointed in the research.

3.2.2. Research approach

The next layer relates to the research approach. Saunders et al. purposes two types of research: inductive and deductive. Between the two main approaches, it will be used the inductive approach. The objective is that the researcher will gather information from a small group of pharmaceutical managers aiming to understand the reasons why firms are using or not Internet. Saunders, Lewis and Thornhill (2009) highlight that:

“Research using induction is likely to be particularly concerned with the context in which such events were taking place. Therefore, the study of a small sample of subjects might be more appropriate than a large number as with the deductive approach” (Saunders, Lewis and Thornhill, 2009, p. 126).

Therefore, the inductive method is more flexible and suits the research objective better than the deductive method. Another important reason is that the researcher’s knowledge is reduced due to different reasons and it is unachievable formulating a hypothesis. The objective of this approach is to end the research tailoring a theory based analyzing the data gathered.
3.2.3. Research strategy

The third layer of the onion refers to the research strategy. In conducting this research the Case of Study will be used. According to Baxter et al (2008):

“The qualitative case study is an approach to research that facilitates exploration of a phenomenon within its context using a variety of data sources. This ensures that the issue is not explored through one lens, but rather a variety of lenses which allows for multiple facets of the phenomenon to be revealed and understood.”

To approach this case of study there were chosen three pharmaceutical companies for the interviews. The strategies of the companies are useful to obtain data of how firms face the lack of adherence.

3.2.4. Research Choice

The Mono-method is chosen to carry out the research. In-depth Interviews to Pharmaceutical Managers will be done in order to answer the research questions and gather qualitative data. Boyce and Neale pointed out that “In depth interviews is a qualitative research technique that implicates individual interviews with a small number of respondents to explore their perspectives on a particular idea, program, or situation (2006)”.

With these interviews, the researcher will collect more detailed data than in surveys. Boyce and Neale asserted, also, that the creation of relax environment will help interviewers to feel more comfortable (2006).

The interview format will be guided and semi-structured. There will be an interview guide ready with predetermine questions. However, there will be additional questions depending on the answers. In-depth guided interviews intended to combine structure with flexibility.

According to Bowen (2005):

“The use of the interview guide indicated that there was some structure to the interviews, even though they were treated as conversations during which the interviewer drew out detailed information and comments from the respondents”

The researcher will record the interview in order to analyze carefully the answers and for the final transcriptions. Interviews are the appropriate way to understand deeply the current use of the internet in marketing, and what are the advantages that it can bring to the non adherence campaigns directed to youth.
3.2.5. Time Horizon

Saunders et al. states that: “A Cross-sectional study is of a particular phenomenon at a particular time. It recognized that most research projects undertaken for academic purposes are necessarily time restrained” (2003, p.148).

Cross sectional will be the time horizon used in this research as it has a limit time to be finished. It represents a just “a snapshot of one point in time” (Cooper et al, 2001, p.144). The study will be carried over a short period of time and finished by January; therefore it will be nonsense using a longitudinal approach.

3.2.6. Qualitative vs Quantitative

The data analysis method choice is qualitative research. Ponterotto (2005) stated: “qualitative refers to a class of empirical procedures designed to describe and interpret the experiences of research participants in a context-specific setting” (Denzin & Lincoln, 2000) (Ponterotto, 2005 p. 128).

This method will enable to investigate through managers experiences that work for Pharmaceutical companies and it will supply the researcher with qualitative data from the core of the organization. Bryman and Bell (2011, p.386) declared that “the stress is on the understanding of the social world through an examination of the interpretation of that world by its participants” The people who were interviewed in this research are managers that work or have recently worked close to marketing departments and known the field. In addition “quantitative research tend to be concerned about words rather than numbers” (Bryman et al, 2011, p386)

3.3. Data Collection Methods

In order to answer the research question the researcher will gather primary and secondary data.

3.3.1. Primary Data Collection

Primary data was collected through in depth interviews with pharmaceutical managers. The aim is to understand the use of online marketing by pharmaceutical organizations and what is its influence. This implicated the study of the reactions, face and hand signs of the interviewers. Saunders et al. stated that “The use of interviews can help you to gather valid and reliable data that are relevant to your research question(s) and objective” (Saunders et al., 2009, p.318). For data analysis the results will be collected and divided into categories according to the questions formulated.
3.3.2. Secondary Data Collection

According to Saunders et al. “secondary data can provide a useful source from which to answer, or partially to answer, your research question(s). Secondary data include raw data and published summaries” (2009, p.256).

The secondary data in this research is composed by books, newspapers, magazines, journal articles, webs and Government regulations. Journals will contribute to have updated information of the research topic. The journal articles and books will be searched in DBS library website, databases and google academic. The information of the companies will be gathered from the organization’s website. Finally government regulations will be collected from official websites.

3.4. Interview Preparation

As it was mentioned before the primary data will be gathered by in depth interviews with pharmaceutical business managers. The researcher will prepare in advance a guide in order to follow a structure during the interview. Guided and semi-structured interviews allow studying the “what” and the “how” (Eriksson et al.,2008, p.82) It will be prepared an outlined of topics and issues with a guide of questions, however the researcher have flexibility to vary the order and also to add or change words in the questions. It will provide a structure maintaining adaptability to the questions at the same time.

3.4.1 Non – probability sample

The techniques can be divided in two, probability and non-probability sampling. Saunders et al. stated that “for all research questions where it would be impracticable for researchers to collect data from the entire population, you need to select a sample” (Saunders, Lewis and Thornhill, 2009, p.212).

Probability samples refer to the identification of a concrete sample of population based in your objectives. On the other hand, the use of Non-probability allows the researcher to choose a sample randomly (Saunders, Lewis and Thornhill, 2009, p.214-233). According to this, Non-probability sample will be chosen for this research.

Therefore there is a need to define the research sample. Three Managers, one of them is a Marketing manager, one is operation marketing manager and the last one is assistant marketing manager will be interviewed to find out the role of online marketing in pharmaceutical companies. The people have been chosen because of the current experience or past experience in marketing operations.

Moreover the research time is limited and sampling helps in saving time. Saunders et al. states that “Sampling also saves time, an important consideration when you have tight deadlines” (Saunders, Lewis and Thornhill, 2009, p. 212).
3.4.2 Convenience Sampling

“Convenience sampling (or haphazard sampling) involves selecting haphazardly those cases that are easiest to obtain for your sample” (Saunders, Lewis and Thornhill, 2009, p. 241). This method will be used in this research in order to understand the benefits of using the internet in campaigns directed towards patients.

3.5 Ethics

According to Saunders et al. “ethics refers to the appropriateness of your behaviour in relation to the rights of those who become the subject of your work, or are affected by it. Cooper and Schindler (2008) define ethics as the 'norms or standards of behaviour that guide moral choices about our behaviour and our relationships with others’” (Saunders, Lewis and Thornhill, 2009, p. 183-184)

The interviews are voluntary. The data gather in the interviews is used for academic purposes and that it might be published by DBS and academic websites. Participants are informed about the use of the data, the purpose of the research and the voluntary character of it.

The identity of the interviewers is totally confidential unless they specify the opposite. However the interview is recorded for transcription purposes. Interviewers are notifying of this issue in order to give them the right to refuse the interview.

Participants also have the right of reject any question as well as review the answers before the final submission of the dissertation. Bryman and Bell declared that “The right to privacy is a tenet that many of us hold dear, and transgressions of that right in the name of research are not regarded as acceptable”( 2011, p. 136). The researcher also mind to not reveal private data of the companies or organizations.

The researcher explained the purpose of the interview as well as the benefits and the risks. Bryman and Bell asserted that anyone that participate in researches should be provided with the consequent information in order to choose whether or not they wish to participate in the research (2011, p.128). Therefore confidentially agreement forms have been handled to all of them with the aim of record the ethics of the study.
4. Findings

The author has studied the effect of the use of the internet in pharmaceutical marketing campaigns towards young patients in three different companies. Company A and B are two of the largest multinational pharmaceutical companies. Company C is smaller than A and B and it is considered a biopharmaceutical company focusing on behavioural health, gastrointestinal conditions, rare diseases, and regenerative medicine.

The main aim of this part is to summarize the answers of the four interviews, compare and assess the findings in order to find the coincidences and differences between the three companies. The objective is to find out if pharmaceutical companies are implementing internet in their strategies.

This chapter is divided into two sections listed below. By analyzing the findings the researcher seeks to increase the information of how companies are using new technologies and also provide an understanding of how to face non-adherence issues. There are some references used in this part of the dissertation however most of the test is based on the performed interviews.

4.1 The respondents

Three managers of the pharmaceutical industry have answered the questions. Two interviews have been carried out on Skype and one in person, in the airport. Below, there is a description of the enterprises they work in.

4.1.1 Company A: Novartis

Novartis is a multinational pharmaceutical company based in Switzerland. Novartis has three operating divisions: Pharmaceuticals, Alcon (eye care) and Sandoz (generics). Their main aim is to "discover, develop and successfully market innovative products to prevent and cure diseases, to ease suffering and to enhance the quality of life".

During 2014 and 2015, Novartis has been recognized as one of the world’s most innovative companies. As part of this innovation Novartis has been one of the first companies to introduce internet in the marketing strategies. In addition Novartis has received several awards such as Advertising Awards Aspid Health and Pharmacy for the launching of an internal App part of the campaign “JPC, a visionary experience”, that shows the product catalogue of the company to facilitate sales representative’s work.

Profile of the Interview subject
The person has joined the company in 2006. The person has worked in the sales department for four years. After an internal promotion the person joined the marketing department. Nowadays the person...
is responsible for the department in one most important cites in Spain. The person duties are develop marketing strategies, coordinate marketing campaigns, sales, budgets,

Reasons why the researcher choose company A is the use of internet, and the innovative component. In addition it has presence in Europe as one of the most important drug suppliers. It has wide range of prescription drugs and many departments that care of the marketing processes.

4.1.2 Company B: Pfizer

Company B is an American multinational pharmaceutical corporation with headquarters in New York City. It is one of the world's largest pharmaceutical companies. The business is divided in nine main areas Primary Care, Specialty Care, Oncology, Emerging Markets, Established Products, Consumer Healthcare, Nutrition, Animal Health, and Capsugel. Company B produces pharmaceutical drugs for many type of illness including immunology, oncology, vaccination, cardiology, rare diseases, and neurology.

Company B has many parts and it is made up by acquisitions such as Warner–Lambert or Pharmacia or Wyeth. Company B is active on many social networking platforms. Company B mainly post information about news, or announcements, or illness information.

Profile of the Interview subject
The person has joined the company in 2013. The person has entered in the marketing department as an assistant manager. The person holds a MBA and a course in pharmaceutical marketing. The subject duties are coordinate the team, develop success marketing campaigns, sales.

Company C has been chosen for being one of the pioneers in using Social Media in countries such as US or Spain. It is one of the largest laboratories in Europe.

4.1.3 Company C: Shire Pcl.

Company C is a biopharmaceutical company based in Jersey with headquarters in Ireland. Company C mainly works in the areas of behavioural health, gastrointestinal conditions, rare diseases, and regenerative medicine.

Shire has also many acquisitions however the number of drugs that that company manufactures is not big. Their strategy is based in growth, drugs innovation, efficiency, and people.

Profile of the Interview subject
The interviewee has joined the company in 2010 as an assistant manager for the production chain department. The person has moved recently to the sales department due to his/her interest in
marketing. The person holds a Bachelors’ degree in pharmacy and curse in pharmaceutical production. The interviewee’s responsibilities are manage a wide range of marketing projects, manage day-to-day client relationships, arrange conferences and meetings as well as trainings for doctors.

This company has been chosen due to the small drug offer. The researcher seeks to compare the two other companies with a firm that is just focus on specific conditions and that has a limited pharmacology. In addition Company C has not much expenditure in marketing towards patients as they focus their efforts in doctors.

4.2 Findings

The findings are showed from the information gathered through qualitative interviews. The questions asked are divided in topics. Below there is a brief introduction of the topic before the questions

4.2.1 Target Market of Marketing Campaigns

The segmentation is understand as the division of the market according to their demographic, psychological or behavioural factors, is one of the more important key aspects of the present marketing. The target Market is defined “target market as a well-defined set of customers whose needs the organization plans to satisfy” (Kotler 2014). It must be the total focus of the company in order to develop success marketing campaigns.

The questions put to interviewees are listed below:

1. Do you think that your Company (A, B, C) need to focus their campaigns towards patients instead of Doctors?
2. In your opinion, what are the weakness and strengths of the marketing strategies towards patients?

Traditionally the target market of pharmaceutical campaigns has been doctors. Firms make all the economical efforts into educate doctors as they are the only authorised people that can prescript medications, especially for long term sicknesses. However, over the last years there has been a technological revolution. Patients have access to internet and so to unlimited information. People are more educated that ever. Pharmaceutical firms have noticed this and they have begun a change, they are placing the patients as the new target market of their campaigns. In the past the patients were only the centre of campaigns when the products were non prescription drugs, such as aspirins or paracetamol. Now, companies go beyond and they are launching education and illness awareness campaigns towards patients. Is it a waste of time? The author sought to find out what are the opinions of the three interviewees within this matter. What is best pull or push strategies? The question “do you think that your Company (A, B, C) need to focus their campaigns towards patients instead of Doctors?” was asked to the three subjects.
One of the respondents, respondent A answered that the main target now should be patients asserting that “Nowadays, Novartis have many campaigns towards patients”, while the other two respondents stated that the main target for companies are still being doctors.

The interview subject for Company B answered “no”. The subject believes that the best way to promote the drugs is doctors. However it was pointed out that companies need to create specific departments in order to develop marketing strategies where the main target is the patient “we understand that the needs of every segment of population are different and we already have different areas in the company dedicated to this matter”. The subject also highlights that what really matters are patients.

Finally the interview subject for Company C states that the focus needs to be in doctors as they are the only people who can advice patients about Company products. The subject also states that “Our strategies nowadays are based on inform and train doctors in order to increase their knowledge about the illness and the possible effect of our drugs”. Company C has a wide team of sales representatives with the mission of visit and educate doctors.

**Summary**
While one of them believes that it is essential to be focus in patients, the other two stated that the priority target market is still doctors. The type of drugs and the country seem to be the main reasons for this conclusion.

**Question 2**
For the next question the author intention is to find out what are the key points that make a campaign towards patients be a success and what are the factors that companies must improve. The aim is to identify what are the key and the improvement points of the campaigns towards patients. The question “In your opinion, what are the weakness and strengths of the marketing strategies towards patients?” was put to the subjects:

The interview subject for Company A asserted that “The main strength is the fact that we have been working with patients for many years, therefore we understand their necessities”. According to the subject the company understands the evolution of the sickness and can help patients better than anyone “we know the past the present and the future of the sickness”. It is also highlight as strength the use of the economic resources of the company to improve the treatments.

Subject for Company B affirm that “any campaign towards patients will definitely create awareness of the drug, and patients will ask for them at the pharmacy and at their appointments with doctors”.


The Subject for Company C argued that “these strategies can help us to inform the patient about their own illness. Patients can understand better their own sickness therefore they could follow doctor instructions.”

On the other hand the Subject for Company A stressed as a weakness that the company “have not been very innovative”. The subject blames European and national regulations as well as company compliance department and points out that the strong regulations has forced the company “to be extremely restrictive with the communication with patients and with the way we work with them”. The subject considers that this is a barrier for innovation.

According to subject for Company B the exposure of the company to the patients can create negative comments. The subject believes that “any type of negative comments can have a negative influence on thoughts and the consequent attitudes of patients”.

Finally Subject for the Company C declared that despite of the recent creation of new departments that are focus on patients, doctors are the only ones authorised to prescript drugs. Therefore the efforts must be focus on them.

**Summary**

The three of them find important strengths in strategies towards patients. However their reasons are different. Subject for Company A believes that the knowledge of the company is the main strength and it can be used in DTCA. The other two subjects believe that DTC marketing can educate and aware patients.

In terms of weaknesses the points highlighted were the strong regulations that affect the marketing of pharmaceuticals, the negative comments that may appear, and finally the fact that only doctors can prescribe drugs for patients.

It is also mentioned that the best option to promote a drug is the word of mouth.

**4.2.2 Importance of Internet**

The internet has transformed traditional marketing. It is a fact that nowadays the internet is likely the core of any marketing campaign. Many industries and business are using the internet to promote their products via websites, blogs, email, social media such as Twitter, Facebook, Blogs, Instagram, LinkedIn, etc. In addition the Internet facilitates activities that improve the conversation and the relationship with users as well as the market research by the company (Kotler, 2012).

Internet has become a powerful tool of communication, promotion and commercialization for any type of products, including pharmaceutical products. This means that there has been a series of changes in traditional focus of the pharmaceutical market.
The questions put to candidates:

3. In a 1 to 10 scale valorise the use of internet by your company in campaigns towards patients
4. In your opinion the use of internet by your Company is a good decision? Is it a step forward or backward?
5. From the following list, do you know what tools have been used by Company A, B, C in marketing?
6. What is the approach of the company about the use of internet in DTCA?
7. Have you ever use internet in any of your marketing campaigns?

The question valorise from 1 to 10 scales the use of internet by the company in campaigns towards patients was put to subjects.

Subject for Company A asserted that the value is really low. “The use of internet is very low, and it is also strictly regulated and this complicates the use of internet”. The subject highlighted that company A has been launching campaigns “via patients associations, nurses or doctors” and it has been just over the last few years when “there has been a change within the use of internet in the company strategies”

Subject for Company B score it with a 7. The subject highlighted that “despite of the strong regulations, Company B has always tried to have a good relationship with patients”. The subject points out internet as the best way to communicate.

Subject for Company C scored it with a 3. In general, Company C has not developed big campaigns towards patients. The subject also mentioned that the firm has collaborated with different associations of patient’s advocacy. “In doing so, we ensure that patients needs are meet and that we provide the education necessary to understand their own sicknesses. However, during these collaborations, the use of internet is limited.”

Summary
Just one of the interviewee asserted that the internet is actively used by the company in campaigns towards patients. The other two believe that the use of this tool is poor and that their efforts have been in train and educate patients through patients associations, doctors and nurses.
In addition it has been asserted that the situation is changing and nowadays companies are providing new ways to improve the activity on the internet, apps and media.

Question 4
The question “the use of internet by the Company is a good decision? Is it a step forward or backward?” was asked to the interviewees. What the researcher know from a previous research is
that Company A and Company B are more active on internet than company C. The aim of this question is to understand why one company is more active than others.

Subject for Company A answered that it is a step forward. It is also highlighted that the use of internet is “why the company is aiming to have the best internal regulation and the best improvements in this area”. The Subject discussed the idea of the internet as the future of campaigns. “Before patients didn’t have access to information and also there was no way to understand their illness, as they have now”.

According to Subject for Company B the use of internet is a step forward. The subject also asserted that there is a need of internal change in pharmaceutical organizations to realize that there is a real need of marketers to use internet. “The real challenge now here relies in changing the philosophy of the company. We cannot do what we were doing 10 or even 5 years ago”. However the interviewee stated that Company B has already changed. On the other hand the respondent alluded to the fact that medical visitors can educate doctors in order to transmit this knowledge to patients and improve relationships.

Subject for Company C affirmed that the use of internet is a step forward. However Company C uses internet in a different way. “Basically our strength is the training of medical visitors as they play a fundamental role. These visitors aware doctors about the use of internet and how this tool can help them to establish a better communication with patients, as well as enforce their relationship with patients. The main aim is to eliminate the fears and the doubts of doctors about the use of internet. This is the strategy that the company is following in terms of internet approach. Finally within relation of DTC the subject is unable to give an answer.

Summary
From the scheme generated from the discussion: internet is a step forward, the respondents consider that the use of internet in marketing is looking to the future. It is highlighted the idea of the internal change, companies must be prepared internally to face these changes. In addition, it is an excellent way to communicate with young people. On the other hand, there is another different approach: Internet used to improve doctors relationship with patients. Medical visitors represent a way to introduce the internet to doctors. Visitors can help doctors to understand how internet can improve their relationship with patients.

Question 6
A list of Social media and online tools was given to the respondents. From the list they had to choose which ones were used by their companies. The main objective resides in find out what are the most popular channels used by a company to communicate with patients.

Website:
Respondents from companies A, B and C answered “yes”. Company A also has an internal website and the subject for Company B mentioned the use of the website to launch a campaign to explain how users can benefit from the use of internet.

**Facebook:**
Two interviewees answered no. The reason is that the information in Facebook cannot be controlled and due to the strong regulations terms of medication and side effects, to have a facebook page is a risk. The subject for company B declared that the company have a facebook page and it is used to published general content.

**Twitter:**
One of the interviewees responded no, interviewee for Company C was unsure and subject for company B answered yes. Company A has an internal twitter used to communicate company events and news; however it is not used to communicate with patients.

**Instagram:**
None of the Companies have Instagram. However, Subject for Company A stated “it could be an improvement for pathologies such as dermatology or radiology as the need images”

**Blog:**
None of the companies have blogs

**LinkedIn:**
Companies A, B and C have LinkedIn. All of them use it for general information about the status of the company.

**YouTube:**
The person interview for Company B asserted that they have a channel in YouTube for countries such as Spain, US, etc. The other two subjects responded “no” their companies do not have YouTube channels.

**Apps:**
The three respondents answered “yes”. Company A have many apps at the moment and they are designing for, either, doctors and patients. Company B has apps. Most of them just can be downloaded in US due to the strong legislation in Europe. Company C has one app that is used in US for trials.

**Summary**
None of the companies use internet as a regular basis to communicate with patients. However it has been founded that Company A and Company B are making efforts to participate in social media as
well as to develop apps in order to communicate with patients. Company C seems to be far from use internet to establish a relationship with patients.
At the beginning of the interview Respondent C mentioned that Company C manufacture drugs for rare diseases and chronic conditions and due to this fact their marketing strategies are focus towards doctors. Their drugs are sold to hospitals and through doctors. This may be the reason why company C is not using actively internet.

**Question 7**
The question “What is the approach of the company about the use of internet in DTCA?” the respondents answered:

Company A is pushing the use of internet, according to the subject A. The firm is currently hiring staff to be incorporated in departments that focus in marketing for patients. In addition the person stated “We have recently created an international department to control and regulate apps towards patients and doctors, and this is because there is high development in this area.

Respondent for Company B argued the fact that Company B “is pioneer in the use of internet in DTCA advertising either in Europe and USA”. The subject affirmed that “the future is in digital communication with patients”.

Respondent for company C argue that “Company C do not use internet in DTCA as we don’t have drugs that can be sell without prescription”. However it is also asserted that there are general information in the website about drugs and sicknesses. This information is provided by the company for patients. Subject also mentioned that the strategies are mainly B2B.

**Summary**
The use of internet is essential for Company A and B when it comes to DTCA. On the other hand the strategy of Company C is totally different as they focus in educate doctors as the main source of information for patients.

**Question 7**
To the question “Have you ever use internet in any of your marketing campaigns?” the respondents answered:

Respondent A answered “yes”

Respondent for company B answered “Yes”. The interviewee also gave an example of campaign where he had participated: “can you feel my pain”. The aim of the campaign was to share patient’s experiences through different social media channels.
Respondent C refused to provide any private information of the company. However, the subject asserted that has used Social Media and messages with doctors.

Summary
The interviewees affirmed that they have used Social Media and Internet for their campaigns, however not all of them used for DTC campaigns. Respondent for company C asserted that the work done with internet has been focus in doctors.

4.2.3 Non-adherence

As it has been mentioned before the non-adherence is one of the major problems of the pharmaceutical industry. The aim of this section is to find out what are current solutions of the industry and how the issue is being seen by the different companies.

The questions put to interviews were

8. Do you believe that the non-adherence to long treatment illness represents an issue for companies?
9. How the company is facing patients no adherence to treatments?
10. In your opinion the company should use Internet to increase the adherence?
11. How can the company use internet to encourage young patients with chronic illness to take their treatments?
12. Do you believe that the use internet to engage young patients is positive or negative?

It was asked to respondents if they believe that the non-adherence to long treatment illness represents an issue for companies? The answers are listed below:

Respondent for Company A pointed out the non-adherence as one of the biggest problems within the industry. The subject highlighted the importance of long treatments, especially in treatments for transplants. In addition, the interviewee quoted “it is believed that 30% of the patients do not take appropriately the treatment”. What is more, the non adherence increases other sicknesses to 40% or 50% more. It was also mentioned that the non adherence has consequences in the patient and in the effectiveness of the medication “we cannot assure the effectiveness of the treatment if the medication is not taken”.

Respondent for company B alleged that it is a “complex problem” and “it represents a substantial loss in income for Company B”. According to the interviewee the company has made efforts to reduce the
non compliance although the results are still poor. It is also highlighted the impact in patients “it increases the rates of uncured patients and also mortality”.

Respondent for company C consider the non-adherence as the “main problem” for the company. Company C manufacture medications designed for chronicle illness. The subject also argued that “Non compliance is reporting every year substantial lose to our company”. According to what has been asserted patients spend years before they experienced the positive effects of the drugs and this is one of the main reasons of non compliance. In addition Company C focuses in “educating doctors so they can educate patients”.

Summary
According to these responses, it can be asserted without doubts that non adherence is one of the main problems that pharmaceutical industry faces at the moment. Companies have been spending money and efforts in this issue without achieving good results. The marketing strategies of each firm change depend on the type of drugs they manufacture and also on the type of patients.

Question 9
It has been asked to the respondents “How the company is facing patients the no adherence to treatments?”

Respondent for company A confirmed and asserted that “adherence has a direct relation with the knowledge of the sickness and with the control of the illness”. The interviewee believed that the adherence improves when patients “understand their sickness and treatment”. In addition, the use of a journal or any other tool that may remain patients to take their medication will help. The person quoted “it has been proved that the patients with knowledge of the illness and reduce their non-adherence to a 5%”. The company currently is working with both parts, doctors and patients to increase the education. Finally, it is important to highlight that the respondent has mentioned apps as a great way to improve the adherence.

Company B has created and developed internal reports in order to aware employees about the importance of adherence. The respondent believes that the first step to change patient’s behaviour is first changing the behaviour of the organization. Besides company C organized events to aware doctors about the importance of compliance and to provide them with products to help in passing the information to patients. Respondent for company C also mentioned the use of apps, tabletboxes or web information.

Interviewee for Company C stressed the use of “products” such as a device called “communicating pillbox” that warns patients through voice messages to take the medication at the right time. Also the use of calendars, alarms, etc. However the subject mentioned that the best way to improve the
compliance is train medical services to follow up on their patient’s treatments, if it is possible with calls or longer appointments.

There is a wide range of products that we are working in to increase the compliance. Actually there is a device called “communicating pillbox” that warns patients though voice messages to take the medication at the right time. We also have calendars, alarms, etc.

Subject for company C also talked about value add “we can offer a value add to doctors and patients through internet”. If the extra value offer is good it will mean that patients will likely prefer the laboratory drugs.” The role of the company is providing doctors the opportunity to improve the relationship with patients through internet”. Medical visitors may show doctors that the use of internet is not a threat and that the use of it may add extra value to the product. “Any value added to our products will help patients in taking the final decisions”

Summary

All three interview subjects suggested that the use of products such as apps, calendars, alarms, tablet boxes help patients to follow the treatments. On the other hand, according to all of them the key point is the knowledge of the illness. However, the approach of each company is different. Company A is educating both parts wile company B is focusing the efforts mainly in training doctors. Finally subject for company C highlight the idea of add extra value to the drugs using internet to establish a relationship with patients. The idea of internet as an is again present in the questions.

Question 10

To the question “in your opinion the company should use Internet to increase the adherence? The respondents answered:

Subject for Company A said “yes”. The interviewee focused the attention to apps and suggests that “apps help to increase the adherence”, as well as “help to control the illness”. According to the conversation with this person the success using of Social Media, such as blogs or Facebook, depends on the control on the users’ comments. The reason lies on the fact that patients that are non compliant with their treatments and this push other patients to leave the treatments.

Also, subject for company B answer yes. The reasons of the affirmative answer are different from Subject for company A. The non adherence is a risk for both company and patients and the company b accept any strategies that help avoiding this issue. According to the interviewee, Company B is quite active online. It is essential for business nowadays the use of internet. Also it is mentioned that that the pharmaceutical industry is the last in joining the trend.

On the other hand subject for Company C disagree with them. The subject was concerned about the positive impact of doctors opinions in patients “the best way to approach patients is through their own physicians”. Internet can be used to educate doctors.
**Summary**

Nowadays Internet is a powerful tool. Two of the interviewees believe that internet is a solution for non-adherence. However the use of social media needs to be controlled due to the effects of negative comments in other patients. The last subject believes that the use of internet in strategies with patients is not as efficient as the strategies towards doctors.

**Question 11**

The question “How can the company use internet to encourage young patients with chronic illness to take their treatments?” was put to the interviewees.

Subject for company A was unsure about the best way to encourage young patients to continue with their treatments. However this person asserts that the young people is using more and more new technologies such as Smartphone’s, tablets, etc. and the person believes that “any e-tool that helps to remain them to take their medication will improve the adherence of the patient”. The interviewee asserts that apps are a great tool to increase it. It was also mentioned that any tool that uses internet may increase the adherence.

The subject for company B quoted “Young patients have the highest rates in non-adherence”. Social factors are what influence them the most. The subject affirmed that have a normal social life, friends, etc is essential for the new generations. “In many cases long treatments and his possible side effects impedes young people from drinking alcohol, going out or even doing regular activities such as going to school or just having a coffee”. According to the subject, Internet is a way to establish a communication with them. Company B educates patients and users through internet providing them with information about “their illness and the consequences of not taking the right medication”. The subject believes that the company should work on websites and social media to improve the education and the adherence. Finally, the quality of the information that is provided online must be excellent. “We have to be sure that with the online information and with any type of service offer to patients we add value to our products”

Subject for Company C argued that the best way to encourage young patients to continue with treatments is “offer them good quality information and services that can support patients and doctors”. There is a wide amount of information on the internet nowadays and it is hard to select the best quality information. This is something that the company needs to do, ensure that their online information as well as their services has a great quality.

**Summary**

To encourage young patients to take their treatments through internet there are three important points that can be summarized in this part: The use of appropriate tools (apps, websites,...) the concept of extra value (the value that the internet add to the products in terms of information and education) and the need of information and services with high quality. These are the main aspects
that the interviewers consider in order to connect with young people and decrease the non adherence.

**Question 12**
The question “Do you believe that the use internet to engage young patients is positive or negative?” was asked to the participants.

Respondent for company A answered that “It is positive”. In addition the subject asserted that “any tool that increases the adherence or helps the patient is always positive”

Respondent for company B agreed that “it is absolutely positive”. The reason lies in the fact that the internet offers a wide range of opportunities to establish communication with young people. The person also stated that internet “used in a good way can improve the compliance of the young people”

Respondent for Company C just answered that it is positive.

**Summary**
The idea of high quality information is also present in these answers. The three of them agree and rate the use of internet for non adherence purposes as positive.
5. Conclusions, Recommendations

5.1 Target Market

While primary data highlight the importance of a change of the target market in marketing strategies, the opinion of one of the interviews suggested that traditional approaches such as “educate doctors” will remain essential for success. The factors that influence this opinion may be the type of product of the company as it is more specific for chronic diseases and it can just be prescript by doctors. The rest of the companies believed that patients are the priority.

The type of marketing used by companies depends on the size of the company, the resources, the type of drugs and the sicknesses that the company covers. The marketing strategies used by a big firm are not the same as the tactics used by companies that have a limited pharmacology portfolio.

5.2 Use of internet

After many attempts to include internet in marketing strategies of pharmaceutical industry, the findings reveal that finally the laboratories are starting to consider the internet effective. The irruption of the internet in the pharmaceutical marketing industry represents a big challenge to the industry and for the people in charge of the main areas of commercialization of laboratories.

As part of the challenge the pharmaceutical industry must defined clearly the role of the internet in the market. Both kinds of data, primary and secondary that have been gathered during the course of this dissertation have showed the crescent demand for internet in new marketing campaigns towards patients as well as doctors. Nowadays the companies show more interest in incorporating additional and educational information in their websites.

Structure the websites and the web tools to achieve a balance is suggested as adequate. Establish a balance between the site, the commercial and medical content, the reliability of the information and ethical and legal aspects that are implied is implicit an suggested over the interview. In order to achieve this, it is necessary to involve adequate experts into the traditional marketing departments. This will be an advantage as they will grant the balance mentioned before.

Given the great proliferation of the websites the engagement of users will depend not only of the quality of the information but of the value added that is offer by laboratories to the patients through the website. What is more, the fact that internet can improve the customer service with patients will be a significant influence for doctors. Companies must make an important creativity effort and implement innovative solutions that can differentiate the company from others.
5.2 Non adherence

Because of the fast increase of mobile technologies, there are many companies that include innovative apps to increase the adherence to treatments. This means that online marketing will definitely have to be a key point of marketing strategies in pharmaceutical companies. While one company has not yet adapt to this trend, the other two companies that have been interviewed in this dissertation seemed to have already include the internet as a regular practice in their campaigns. Due to the increase in demand of internet by young generations it may be a good solution for companies in order to avoid the lack of adherence.

The use of apps is the new trend of the industry. Many companies seem to be using them for different purposes. The secondary and primary data reveal that apps may represent the future of the marketing techniques. There are other ways to communicate through internet however these channels are considered as high risk as they cannot be controlled by the laboratory.

5.3 Recommendations

According to the data found and the information from the interviews the author has listed some recommendations for companies related to the use of internet. They can be summarizing in this points:

- Companies must create information that allows the user identify what is high quality and what generates a value.
- The e-marketing will be unable to substitute the traditional medical promotion. The industry must structure the promotion of their products in a way that it is strategic and tactically coherent with the use of online channel for the promotion of the drugs, taking into account that the patient has a different role. The use of internet will probably improve the retention of patients.
- The implementation of online marketing required a new management inside the company. The management team must be a broad support for the rest of the divisions and especially with medical visitors because they perform a fundamental role in the awareness of doctors in this new ways to approach marketing. An open and clear communication with the sales forces will allow any doubts or fears with the use of this channel and will aware them that the internet represents an additional and powerful tool to enforce the relationship with patients
- Pharmaceutical industry can offer an extra value with drugs through internet. Doctors can improve their relationships with patients. Doctors must not see the internet as threat, it must be seeing as a way to improve and enforce their relationships with patients.
- Due to the large amount of information of drugs and laboratories present in the Web, pharmaceutical companies will be successful in their online strategies when they offer both information of great quality and a wide range of services that offer support to the business as
well as doctors. This can be a challenge for laboratories as they need to transform this websites into a competitive advantage

- The use of apps could help in increasing the adherence as they can include tools such as calendars, alarms or simply information about the sicknesses or the drug.
6. Reflection on learning

The information written in this section is an impression of the learning through the MBA in the Dublin Business School. This part is an opportunity to show the skills achieved in over the curse.

6.1 Introduction

With the completion of this dissertation, my main objective is close this stage of my life and finish what I have started with illusion. However this research project has become a thug task due to my tight schedule and my language limitations. On the other hand it is great learning experience that will prove my knowledge in this field.

I am Spanish professional that have been living in Dublin for last 2 years. I am 32 years old and I work for PayPal. I study a bachelor's degree in science in the University of Salamanca. My passion for business has ended with my decision to apply for the MBA. This commenced when I first travel to Dublin and I had the opportunity of study and learn English.

This MBA required self control and full time dedication. I have benefited from skills achieved on previous years working as retail manager. In addition it helped me to develop my communication and organization skills. I focused the MBA in learning about pharmaceutical industry. The assignments developed over the curse as well as my dissertation were focus to achieve a better understanding of this industry.

In summary the MBA has improve my knowledge in business as well as my previous ability to manage teams. I am ready for new challenges in my career.

6.2 Self reflection on learning

Research has been defined by Saunders et al (2007) as “as something that people undertake in order to find out things in a systematic way, thereby increasing their knowledge”. This research started on December 2014. I have been gathering information over the months. Once the information was found I started writing the dissertation. As a result I have a complete scheme of the topic and enough knowledge to write and complete the dissertation. The most challenging part was to choose an appropriate topic that could do both, develop my knowledge in marketing and focus in the pharmaceutical industry. The circle of Kolb "Kolb Learning Cycle" has been used to write this assignment.
6.3 Concrete experience

Before starting my master I was unsure about what will be the topic of my final dissertation. When I started I choose the pharmaceutical industry due to the high volume of companies established in Ireland. When I first started gathering the information I soon started to be passionate about marketing and indeed the possibilities of pharmaceutical firms in this field. However at this stage I did not have cleared the final objectives as well as the main aim of my research and also the way to achieve them. Therefore, my main objective has been modifying along the different months. It has been a challenge to find appropriate literature that will adjust to my topic as the papers and journals of pharmaceutical marketing are limited, and the ones founded were not able to answer my research question. The Marketing in Pharmaceutical industry is a restricted area that just a few people understand and known as it is subject to the regulations of the countries. It can be mentioned, as well, that this dissertation has brought me other challenges such as the language barrier. I had never written any assignment in English before my MBA Proficiency English exam, and what is more, all the English that learned I did from people speaking. The hardest part has been writing all my ideas and also the translations of interviews in English. I have certainly improved my language skills thanks to this dissertation. Finally I would like to mention that this dissertation is just part of my MBA, during my Master I achieved a wide knowledge of marketing improving also my knowledge in business and other disciplines.

6.4 Reflective observation

Over my course I had the chance to find out about many marketing theories. However I just choose not to use some of them in my dissertation as they may not apply properly to my objective and future dissertation.
Although the topic and the dissertation I risk and I choose a topic that was not common in my Business School. There have been not many references to the pharmaceutical industry during my curse. However, I did a wide literature review to obtain a better understanding of the topic. Thanks to this research I took important decisions such as the research about a topic that was not in my modules.

An extensive review of the found literature was carried out. The time spent in this part was enough to achieve a good understanding of the situation. Thanks to the literature review found I could focus my dissertation in a current issue that affects the pharmaceutical industry and also take decisions that will lead my assignment in the best direction.

On the other hand I believe I could have been more critical with some papers found and write a better literature review. Anyway, I will be learning more critical skills during my career and I am confident that thanks to the skills that I acquired I will be a better professional in the future. I will focus in learn more over the next few projects.

The methodology was indeed another tough part of my assignment. Choose a good methodology took me a few weeks as I needed to be sure that every choice matched with the aim of the dissertation.

Data analysis was the smoothest part of the dissertation. Connect all the interviews were indeed the most enjoyable part. Over this process I was able to match some ideas I read before with the answers of the different experts.

Finally the conclusions come from the previous research plus the answers of the interviews. I can assert that some of my ideas were reinforced and on the other hand other believes were wrong.

6.5 Abstract Conceptualisation

From my own point of view, as a professional I will be able to incorporate the knowledge achieved through this master when I will have the opportunity to create my own projects. I believe I can become a complete professional at this point.

My personal experience working within a multicultural environment has improved my skills as well as my language abilities. The feedbacks obtained from the groups work have given me other perspective of myself, and helped me to understand better my weaknesses and also my strengths. One of my weaknesses, my written English, has become better over the last year, however is still poor and I need to work on this harder. The dissertation was the hardest assignment I had to face during my course. I can mention that I had two challenges: time management and language barrier. Time was absolutely a problem. My office is in Dundalk and I had to travel every day a few hours to get there.
Due to this fact I did not have as much time as I needed to work on my dissertation. Manage my time was a difficult task. I created a calendar with a schedule to ensure that my work will be done on time. However it was impossible to follow my plan due to personal problems.

My other challenge was the language as I am no totally fluent in written English. I took me a lot of time to translate the interviews into English. Now that I finish my dissertation I could finally focus in my professional career.

6.6 Active Experimentation

There have been some personal issues that have been a real challenge for me. I had to work hard and be very insistent to carry out the interviews. The interviews could have been more in deep, but due to the limitation time I could not travel to Spain. It was impossible. According to the definition of research off Saunders et al. the research should increase my learning in this matter, that I think this aim as been achieved. Finally I can assert that I have an extensive knowledge of the marketing in pharmaceutical industry as well as a better understanding of my skills.

6.7 Conclusion

During my MBA curse I obtain more insightful knowledge in marketing and in business administration. The best lesson learned in this course is that you always need to push yourself and continue improving. When I first started the curse the main goal was to achieve new abilities and improve my skills in order to gain competitive advantage in my future career. I have always wanted to study an MBA curse. The reasons were my crescent interest for business and also for marketing. I consider myself as a very creative person and marketing will allow me to show this creativity to everyone as well as do something that I really like. I will search for jobs where I can put in practice what I have learnt in this master. Finally I can assert that I am more prepared to face new challenges in my future job.
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Appendix 1: Cover letter for interviews

I am Paula Coca, Masters Student in Dublin Business School (Dublin, Ireland). I am conducting a research in the use of internet by pharmaceutical companies. My research involves face to face interviews and I would be very grateful if you would participate in this research. This interview is voluntary. The data gather in this interview will be used for academic purposes. Your identity will be totally confidential unless you specify the opposite.

The interview will be recorded. Before the interview I will explain the purpose of this interview as well as the benefits and the risks.

You have the right of reject any question as well as review the answers before the final submission of the dissertation.

Please do not hesitate to contact me if you need further information.

Kind Regards

Paula Coca

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Appendix 2: Questionnaire

1. Do you think that your company need to focus their campaigns towards patients instead of Doctors?
2. In your opinion what are the weakness and strengths of the marketing strategies towards patients?
3. In a 1 to 10 scale valorise the use of internet in campaigns towards patients.
4. In your opinion the use of internet is a good decision? Is it a step forward or backward?
5. From the following list, do you know what tools have been used in marketing strategies?
6. What is the approach of Novartis about the use of internet in DTCA?
7. Have you ever use internet in any of marketing campaigns?
8. Do you believe that the non-adherence to long treatment illness represents an issue for companies?
9. How companies are facing patients no adherence to treatments?
10. Do you think your company should use Internet to increase the adherence?
11. How your company use internet to encourage young patients with chronic illness to take their treatments?
12. Do you believe that the use internet to engage young patients is positive or negative?
Appendix 3: Transcriptions

Novartis – Transcribed Interview – Respondent Number 1

**Interviewer:** Do you think that Novartis need to focus their campaigns towards patients instead of Doctors?

**Respondent:** Novartis focus mainly in patients. Nowadays, we have many campaigns towards patients. We have specific departments in the company created to be focus just on patients’ needs and they are completely separated from the departments that are doing marketing to doctors. My company is oriented to patients’ needs and I personally believe that this is important.

**Interviewer:** In your opinion what are the weakness and strengths of the marketing strategies towards patients?

**Respondent:** The main strength is the fact that we have been working with patients for many years therefore we understand their necessities. Because we know how is the evolution of the sickness we can help them, we know the past the present and the future of the sickness. As well, we have economic resources and we use them to improve the treatments. The weaknesses are that we have not been very innovative. European and national regulations as well as company compliance department force us to be extremely restrictive with the communication with patients and with the way we work with them. All of these are a barrier for innovation.

**Interviewer:** In a 1 to 10 scale valorise the use of internet by Novartis in campaigns towards patients.

**Respondent:** The value is really low. Until now all the campaigns towards patients have been via patients associations, nurses or doctors. The use of internet is very low, and it is also regulated strictly and this complicates the use of internet by companies. What is true is that the last few years there has been a change within the company, and it focuses more in this way of communicating. The situation is changing and nowadays they are providing new ways to improve the activity on the internet, apps and media.

**Interviewer:** In your opinion the use of internet by Novartis is a good decision? Is it a step forward or backward?

**Respondent:** In my opinion it is a step forward. That’s why the company is aiming to have the best internal regulation and the best improvements in this area. What is true is that before patients didn’t have access to information and also there was no way to understand their illness, as they have now. The youth look for information on the internet and they have everything connected to internet so it is necessary to approach them the same way they approach the rest of the world, using media. And it is the future of campaigns with patients.
Interviewer: From the following list, do you know what tools have been used by Novartis in marketing?

Respondent:

Website: Yes we have internal and external website

Facebook: No, but we will have. Until now it has been one of the not used tools because of the regulation in terms of medication and side effects. We couldn’t control the information on Facebook so we couldn’t use it. Now we are currently working on it.

Twitter: No. We have internal twitter that we use when we have events, but we cannot use it to write comments to patients, it is just for the company

Instagram: No. At the moment we don’t have any Instagram. However it could be an improvement for pathologies such as dermatology or radiology as the need images

Blog: No. We have just company blogs

LinkedIn: Yes, we have. We can use LinkedIn

YouTube: No. We don’t have videos on YouTube.

Apps: yes we have many applications. This is the tool that we use the more. We have apps focus to patients doctors and internal.

Interviewer: Are these apps made for patients

Respondent: Yes, we have developed apps that help doctors and patients to control their illness

Interviewer: What is the approach of Novartis about the use of internet in DTCA?

Respondent: We are trying to push the use of internet. This is the part of the company that is hiring more staff within previous years in order to create more departments specialize in this area. We have recently created an international department to control regulation in apps towards patients and doctors, and this is because there is high development in this area.

Interviewer: Have you ever use internet in any of marketing campaigns?

Respondent: Yes, I used a few times.

Interviewer: Do you believe that the non-adherence to long treatment illness represents an issue for companies?

Respondent: It is one of our biggest problems especially in terms of chronicle illness such as transplants. The non adherence to treatments may end with the loss of the organ and the re-transplant. It is believed that 30% of the patients don’t take appropriately the treatment. In other kind of illness the non-adherence increases to 40 or 50%. For Novartis this is an issue as we cannot assure the effectiveness of the treatment if the medication is not taken. Also It affects negatively the patient.

Interviewer: How Novartis is facing patients no adherence to treatments?

Respondent: It is one of the hardest problems to deal with. It has been demonstrated that adherence has a direct relation with the knowledge of the sickness and with the control of the illness.
mean, patients improve their adherence when they understand their sickness and treatment and also when they use a journal, electronic journal or any tool that remain them to take their medication. As mentioned, it has been proved that the patients with knowledge of the illness and journals reduce their non-adherence to a 5%. Novartis works together with patients and doctor’s organizations to improve the knowledge of the illness. Recently, it has been noticed that apps improve the adherence

**Interviewer:** Do you think that Novartis should use Internet to increase the adherence?

**Respondent:** Yes. It is a good question because we know that apps help to increase the adherence, and these apps help to control the illness. On the other hand, when we talk about Blogs and Facebook the effectiveness depends on the control that company have on the comments. We are seeing that patients that don’t follow their treatments push other patients to leave their medication also.

**Interviewer:** How can Novartis use internet to encourage young patients with chronic illness to take their treatments?

**Respondent:** I cannot say what is the best choice to encourage these patients to take their medications. Nowadays we are seeing that patients are using their moviles, tablets, etc, so we believe that any e-tool that helps to remain them to take their medication will improve the adherence of the patient. We can assert that apps meet this goal.

**Interviewer:** Do you believe that the use internet to engage young patients is positive or negative?

**Respondent:** It is positive. Any tool that increase the adherence or helps the patient is always positive.
Pfizer – Transcribed Interview – Respondent Number 2

**Interviewer:** Do you think that Pfizer need to focus their campaigns towards patients instead of Doctors?

**Respondent:** No. I definitely believe that doctors are one of the best ways to aware patients of our products, at least in Spain. However, I think that times are changing, there should be departments dedicated to the different segments target markets, doctors, patients and pharmaceutics. At Pfizer we understand that the needs of every segment of population are different and we already have different areas in the company dedicated to this matter. We cannot forget that in what really matters are patients.

**Interviewer:** In your opinion what are the weakness and strengths of the marketing strategies towards patients?

**Respondent:** Any campaign towards patients will definitely create awareness of the drug, and patients will ask for them in the pharmacy and in their appointments with doctors. However, we have to be careful because any type of negative comments can have a negative influence on thoughts and the consequent attitudes of patients. Therefore, I consider that, expose the brand to negative comments is a weakness. The best would be to create drugs that could be promoted by Word of mouth, as patients trust other patients. The mission of our laboratories is creating the best drugs of the industry.

**Interviewer:** In a 1 to 10 scale valorise the use of internet by Pfizer in campaigns towards patients

**Respondent:** I will score it as a 7.

**Interviewer:** Why?

**Respondent:** Despite of the strong regulations, Pfizer has always tried to have a good relationship with patients. It is undeniable that nowadays the best way to communicate is via internet. In Pfizer we have group of professionals working to improve our dialogue with patients.

**Interviewer:** In your opinion the use of internet by Pfizer is a good decision? Is it a step forward or backward?

**Respondent:** It is a step forward. From my point of view the digital transformation started from the highest positions in the company, and then it spread to the rest of the company. The real challenge now here relies in changing the philosophy of the company. We cannot do what we were doing 10 or even 5 years ago. We shouldn’t change just the way that we communicate with patients, the real challenge is internal. This also implies the fact that medical visitors must improve their knowledge of these strategies and must be able to show it to doctors. Doctors in many ways are the best channel to inform the patients.
**Interviewer:** From the following list, do you know what tools have been used by Pfizer?

**Respondent:**

**Website:** yes we have. Everyone can visit it. As an example, one of our last campaigns is focus on train patients in the use of internet. It is call patients 2.0

**Facebook:** Yes we have. We use it as tool to inform about general matters. Comments are not allowed.

**Twitter:** Yes. As well we use it to inform users

**Instagram:** No.

**Blog:** No.

**LinkedIn:** Yes, we have. As a company we use LinkedIn to hire new people.

**YouTube:** Yes, we have official channels for countries such as Spain, US, etc.

**Apps:** Yes, we have many apps at the moment. However there are many of them that can be only used in USA due to the regulation in Europe.

**Interviewer:** Are these apps made for patients

**Respondent:** most of them, yes. We have calendars, drugs information, coaching, etc..

**Interviewer:** What is the approach of Pfizer about the use of internet in DTCA?

**Respondent:** Pfizer is pioneer in the use of internet in DTCA advertising either in Europe and USA. We believe that the future is in digital communication with patients

**Interviewer:** Have you ever use internet in any of marketing campaigns?

**Respondent:** Yes I did. I participate in “can you feel my pain”. It was a campaign that allowed patients to share their sicknesses and pain in the social media. It was a success in US.

**Interviewer:** Do you believe that the non-adherence to long treatment illness represents an issue for companies?

**Respondent:** Non adherence is a complex problem. I believe it is a big for all pharmaceutical company. The non adherence represents a substantial loss in income for Pfizer. But it also has an impact in patients as it increases the rates of uncured patients and also mortality. Despite of the efforts of the company to reduce the percentage of no compliance, the results show very poor improvement.

**Interviewer:** How Pfizer is facing patients no adherence to treatments?

**Respondent:** Firstly, we have internal reports created to aware the staff about the importance of adherence. If we need to change patients behaviour is important to start first from the core of the organization. In addition, we organize conventions to aware doctors about the importance of the adherence to treatments and we provide them with the necessary tools and products to transmit this knowledge to patients. Also we have materials such as apps, tabletboxes, web information, etc.
Interviewer: Do you think Pfizer should use internet to increase the adherence?

Respondent: Definitely. Nowadays the use of internet is fundamental. Every business no matter what are the products should use internet as it is the most efficient tool to communicate with customers. The pharmaceutical industry seems to be last industry to join this trend. However Pfizer can be consider as one of the most active companies in terms of online activity. In my own opinion, the non compliance issue must be considering as complex and high risk as it affects patient’s health. All the strategies that we can use to avoid this issue are welcome.

Interviewer: How can Pfizer use internet to encourage young patients with chronic illness to take their treatments?

Respondent: Young patients have the highest rates in non-adherence. I think that the factors that influence them are mainly social. The style of life when you are young is really important. Have a normal social life, friends, etc is essential for the new generations. In many cases long treatments and his possible side effects impede young people from drinking alcohol, going out or even doing regular activities such as going to school or just having a coffee. I agree that one way to reduce the non adherence may be communicating with them through internet. Pfizer use the internet to provide people with enough information about their illness and the consequences of no taking the right medication. I think Pfizer has to keep working in the same lines as previous years and develop websites, apps, etc that aware the youth to take their medication. In addition it is important to mention that the quality of the information that we offer online must be excellent. We have to be sure that with the online information and with any type of service offer to patients we add value to our products.

Interviewer: Do you believe that the use internet to engage young patients is positive or negative?

Respondent: It is absolutely positive, as I mentioned before internet offers a wide range of channels that used in a good way can improve the compliance of the young people.
Shire – Transcribed Interview – Respondent Number 3

**Interviewer:** Do you think that Shire pharmaceuticals need to focus their campaigns towards patients instead of Doctors?

**Respondent:** No, in my opinion no. The reason behind relates to the product. Shire Pharmaceuticals sells specific drugs for rare diseases and chronic conditions. The only people who can advice and prescribe patients' drugs are the doctors. Our strategies nowadays are based on inform and train doctors in order to increase their knowledge about the illness and the possible effect of our drugs. We have teams of sales representatives that meet regularly with doctors, with the only purpose of educate them.

**Interviewer:** In your opinion what are the weakness and strengths of the marketing strategies directed to patients?

**Respondent:** This is a tough question. We are not specialist in this type of marketing here in Europe, despite of the fact that it has been recently created new divisions that are more focus in patients. In US is more common to have Direct To Customer Advertising. From my own point of view I believe that these strategies can help us to inform the patient about their own illness. Patients can understand better their own sickness therefore they could follow doctor instructions. The weakness is that doctors are the only people authorised to prescribe our treatments.

**Interviewer:** In a 1 to 10 scale valorise the use of internet by Shire in campaigns towards patients

**Respondent:** I will score it as a 2

**Interviewer:** Why?

**Respondent:** As I said we have no big campaigns towards patients, however we collaborate with different associations of patient's advocacy. In doing so, we ensure that patients needs are meet and that we provide the education necessary to understand their own sicknesses. However during these collaborations the use of internet is limited.

**Interviewer:** In your opinion the use of internet by Shire is a good decision? Is it a step forward or backward?

**Respondent:** I see. Definitely the use of internet is a step forward. We use it in our marketing strategies towards doctors. It is a very useful tool. Basically our strength is the training of medical visitors as they play a fundamental role. They aware doctors about the use of internet, and how this tool can help them to establish better communication with patients, as well as enforce their relationship with patients. The main aim is to eliminate the fears and the doubts of doctors about the use of internet. This is the strategy that we follow in terms of internet approach. Unfortunately I cannot say about the use of internet in campaigns directed to patients as in Shire we focus our efforts, as I said in our medical visitors.
**Interviewer:** From the following list, do you know what tools have been used by Shire?

**Respondent:**

**Website:** We have official websites where we inform about our company and the products that we sell.

**Facebook:** No.

**Twitter:** No... But I can be wrong

**Instagram:** no

**Blog:** no.

**LinkedIn:** We can to use LinkedIn

**YouTube:** No.

**Apps:** We have one famous app in US. It is called shire Cares. It has been created to help patients that cannot afford their treatments.

**Interviewer:** What is the approach of Shire about the use of internet in DTCA?

**Respondent:** Shire do not use internet in DTCA as we don’t have drugs that can be sell without prescription. We have general information in our website about drugs and sicknesses clear enough that patients can read. However our strategies are B2B.

**Interviewer:** Have you ever use internet in any of marketing campaigns?

**Respondent:** I cannot reveal any private information of the company strategy but yes I did. We used Social Media and messages with doctors.

**Interviewer:** Could you give us an example.

**Respondent:** Well, I cannot as it is private information, but I can assert that our teams are working to implement solutions towards doctors through Internet.

**Interviewer:** Do you believe that the non-adherence to long treatment illness represents an issue for companies?

**Respondent:** I would say that non-adherence is our main problem (laughs). Most of our products are designed for long term treatments. Non compliance is reporting every year substantial lose to our company. It is hard for patients to be in long treatments, especially when the positive effects of the drugs are showing after years. It is why we dedicate so much time in educating doctors so they can educate patients.

**Interviewer:** How Shire is facing patients no adherence to treatments?

**Respondent:** There is a wide range of products that we are working in to increase the compliance. Actually there is a device called “communicating pillbox” that warns patients though voice messages to take the medication at the right time. We also have calendars, alarms, etc. However the best way to improve the compliance is train medical services to follow up on their patient’s treatments if it is possible with calls or longer appointments.
On the other side we can offer a value add to doctors and patients through internet. If the extra value offer is good it will mean that patients will likely prefer our products. The role of the company is providing doctors the opportunity to improve the relationship with patients through internet. I mean our visitors need to show doctors that the use of internet is not a threat and can add extra value. Any value added to our products will help patients in taking the final decisions.

**Interviewer:** Do you think that Shire should use Internet to increase the adherence?

**Respondent:** well, it is hard to say. I think that the best way to approach patients is through their own physicians. If you mean that we should use internet to educate doctors I agree, but I am not sure how internet help patients can.

**Interviewer:** Well, the use apps as calendars or even provide information about sicknesses through the website is a way to use internet.

**Respondent:** Yes, definitely. Any kind of tool will help. However I still think that in our case the way to avoid non compliance is through a good communication with your doctor.

**Interviewer:** How can Shire use internet to encourage young patients with chronic illness to take their treatments?

**Respondent:** I believe the best way to encourage young patients to continue with treatments is offer them good quality information and services that can offer support to patients and doctors. There is a wide amount of information on the internet nowadays and it is hard to select the best quality information. This is something that the company needs to do, ensure that their online information as well as their services have a great quality.

**Interviewer:** Do you believe that the use internet to engage young patients is positive or negative?

**Respondent:** It is positive.