ICT in online and offline retailing

AUTOR: Marta Catalá Bonet
TUTOR: Teresa María Vallet Bellmunt

AE1049- TRABAJO FINAL DE GRADO
CURSO 2015 - 2016
INDEX

A. INDEX OF GRAPH ........................................................................................................... 3
B. INDEX OF TABLE .......................................................................................................... 4
C. INDEX OF FIGURE ...................................................................................................... 4

0. INTRODUCTION ........................................................................................................... 5

PART I: ............................................................................................................................... 7

1. DEFINITION OF ONLINE AND OFFLINE COMMERCE ........................................... 7

2. IMPORTANCE OF RETAILING IN THE SPANISH ECONOMY ................................. 10
   2.1 Spanish online retailing .......................................................................................... 10
      2.1.2 Mobile platforms ............................................................................................ 12
      2.1.3 Advantages and disadvantages of Spanish online retail ............................... 15
   2.2 Spanish offline retailing .......................................................................................... 20
      2.2.1 Advantages and disadvantages of Spanish offline retail ............................... 22

3. BUYING PROCESS FINAL CONSUMER IN A RETAIL STORE ............................... 23
   3.1 Sales Funnel offline and online ............................................................................. 23
   3.2 Type of customers for each type retail trade in Spain. ......................................... 26
   3.3 Payment methods ................................................................................................ 29
      3.3.1 Online payment method .............................................................................. 29

PART II: ................................................................................................................................ 34

4. USE OF NEW TECHNOLOGIES BY THE RETAILERS ................................................ 34
   4.1 ICT online ............................................................................................................. 34
      4.1.1 Control tools people online .......................................................................... 34
      4.1.2 Big Data .......................................................................................................... 39
   4.2 ICT offline ............................................................................................................ 45
      4.2.1 Newsletter, location marketing ...................................................................... 45
      4.2.2 Street control .................................................................................................. 47
      4.2.3 Beacon technology ....................................................................................... 51
   4.3 Customer loyalty in retail store offline .................................................................. 53
PART III ............................................................................................................................. 55
5. OMNI-CHANNEL .............................................................................................................. 55
6. CONCLUSION .................................................................................................................. 63
7. BIBLIOGRAPHY ............................................................................................................. 65
A. INDEX OF GRAPH

Graph 1: Evolution of Internet use in Spain between the years 2011 and 2015........10
Graph 2: Sales evolution in millions of euros in Spain........................................11
Graph 3: Devices from which purchases are made online.....................................13
Graph 4: Analysis of online shopping.................................................................14
Graph 5: Factors contributing more confidence to buyers online..........................17
Graph 6: Evolution of retail sales offline in Spain................................................21
Graph 7: Payment most used online payment.......................................................30
Graph 8: Preferred paying method for smartphone and tablets in Spain...............31
Graph 9: Offline payment methods in Spain.........................................................33
Graph 10: Rating determinants for purchases in Spain..........................................38
Graph 11: Percentage of Retailer investment in the newsletter..............................46
Graph 12: Comparison daily pedestrian traffic, between “Calle Alcalá” and “Calle León XIII”...............................................................48
Graph 13: Monthly comparative...........................................................................48
Graph 14: Comparison of daily evolution..............................................................49
Graph 15: Combination of search and buy products from online and offline methods..56
Graph 16: Omni-channel services offered by retailers..........................................59
B. INDEX OF TABLE

Table 1: E-commerce in Spain in 2014 .................................................................12
Table 2: Socio-demographic profile of online shopper........................................27
Table 3: Socio-demographic profile of non-online shoppers..................................28
Table 4: Definitions of Big Data........................................................................40
Table 5: Services offered by different retailers......................................................60

C. INDEX OF FIGURE

Figure 1: Online sales funnel ..............................................................................23
Figure 2: Offline sales funnel ............................................................................25
Figure 3: Timeline of Recent Technology Developments.................................41
Figure 4: Type sensors .....................................................................................50
Figure 5: Proximity marketing .........................................................................51
Figure 6: Within range of the Beacon technology.............................................52
Figure 7: Omni-channel ...................................................................................57
0. INTRODUCTION

The final grade work I have done is investigation. It is focuses on the use of ICT (information and communications technology) by retailers, it should be noted that the subject to which I refer is novel and is poorly treated in Spain. As for the methodology that I used is of two types: first are the academic and nonacademic sources in second place.

Within the academic sources I used are newspaper articles, reports of companies dedicated to monitoring the developments in this field, either economically or infrastructure, reports from government institutions (to access certain legislative aspects), draft final master, end of career and college notes and dictionaries.

Regarding the information obtained from nonacademic sources I must emphasize, blogs, web pages, non-specialized and non-specialized reports.

The main objectives to be achieved with this project are to know the difference between the offline retail and online retail, as well as their evolution in terms of sales volumes and a technological level. Differentiate the types of buyers and buying process carried out depending on whether this is done in the online retail or in offline retail.

Another key objective is to know in depth the ICT (Information and communication technologies), their characteristics, functions and applications by retailers. Knowing how these retailers have adapted to these new technologies and how it has affected the demand from consumers, both online retailing as in the offline retail trade especially through the implementation of "Omni-Channel".

This research focused on economic development, trade and the introduction of new technologies as key tools in the market.

As noted Angelo (2003, p.2):

*In 1995 the countries of the G7 / G8 created the "A Global Market for SMEs" initiative, in order to accelerate the use of electronic commerce among businesses around the world. During this G8 initiative the Spanish information portal and virtual library in Spanish on electronic commerce, called Global Electronic Commerce developed.*

The thrust of Internet push in 90s caused the emergence of e-commerce, which offered the opportunity to purchase a new method for customers and at same time, a new way of business for retailers.
This project is divided into three parts and seeks to differentiate the two great forms of retail that exist, on the one hand a retail “online” and on the other a retail “offline”, focuses on using technology by both and evolution.

The first of these parts is intended to present an explanation of the various basic concepts that will be developed throughout this project, such as retail online, offline retail marketing channel, among others. The evolution of the two types of markets both economically, as those elements that improve online and offline retail and structure will also be posted. Finally, in this first part they will also be displayed both positive aspects that improve each of the types of retail market and negative aspects perceived by consumers.

A study on the different characteristics of online shopper’s retailers and offline retail shoppers takes place. How retailers perform rose through the sales funnel process of attracting, interest, maintain and build customer loyalty.

In the second part, the different ways that have online and offline retailers to keep track of customers or potential customers, needs and preferences of these, as well as the collection and management of information ranging getting exposed and all the above named through the use of different technologies. In the case of the collection and management of information I focused on Big Data, in its components, functions, positives and negatives, but there are other tools that can be used for this purpose.

Finally, the third part focuses on the evolution of the different channels that have been using the retailers to reach more effectively and efficiently to their current or potential customers, through the "multi-channel", the "cross-channel" and finally being used today, that is, the "Omni Channel". The latter aims cohesion between physical and digital channels, which can both support each other and thus facilitate purchases to customers.

Having described the various parts that comprise the project, it should be noted that in some paragraphs and in order that there is clarity, have been introduced examples of using the tools indicated in section by different companies.
PART I

1. DEFINITION OF ONLINE AND OFFLINE COMMERCE

According to the definition of Stern and I. El-Ansary (1991) marketing channel is a type of marketing that provide higher levels of service outputs reduce consumers search, waiting time, storage, and other costs by lessening their involvement with the accomplishment of these necessary activities. Other things equal (especially price), end users will prefer to deal with a marketing channel that provides a higher level of service outputs. Perhaps most important of this type of marketing is an understanding that channels consist of interdependent institutions and agencies, in other words, that their members are interdependent relative to task performance.

After explaining the marketing channel retailing we should focus on is the "ultimate goal of marketing Channel" and what will develop throughout the project.

Retail is when the buyer is a final consumer, instead of a company or institutional buyer. In contrast, with purchases for resale or for business, industrial, or institutional use, the buying motive for a retail sale is always personal or family satisfaction stemming from the final consumption of the item being purchased. The importance of retailing is measured in terms of its contribution to gross national product (W. Stern ad I. El-Ansary, 1991). For this reason, it is important to know how it has affects the evolution of retailing to the economy and know how it affects the retail distribution and the relationship between suppliers and distributors.

- The impact of retailing on the economy: Retailing is a major part of world commerce. Retail sales and employment are vital economic contributors, and retail trends often mirror trends in a nation’s overall economy (Berman and Evans, 2013, p.4). In Spain, retail represents 5.5% of total GDP of the country and also represents 10.8% of employment (Ministry of Economy and Competitiveness, 2015). The revival of retail trade also represents an improvement in expectations of Spanish households and the return of confidence, fueled by improving economic recovery, rising disposable incomes, the revival of the labor market, the reopening of credit and the lower prices.

- Retail functions in distribution: retailing is the last stage in the channel of distribution. All of the businesses and people involved in the physical movement and transfer of ownership of good and services from producer to consumer.
Evans, 2013,p.6). In the distribution of the channels are important intermediaries (Stern and El-Ansary, 1991) their importance can be explained in four steps: 1) Intermediaries arise in the process of exchange because they can improve the efficiency of the process. 2) Intermediaries also arise from channel to adjust assortments discrepancy through sorting processes they perform. 3) Marketing agencies along with the available channels are used to facilitate reuse of transactions. 4) The channels facilitate the search process.

- The relationship among retailers and their suppliers can be complex. For example, retailers want to buy wherever it suits them and then and suppliers want loyal retailers (Berman and Evans, 2013,p.6), but also increased the efficiency of transactions, and the intermediaries smooth the flow of goods and services by creating possessions, place, and time utilities. These utilities enhance the potency of the customer’s assortment. One aspect of this smoothing process requires that intermediaries engage in the performance of a sorting function. This procedure is necessary in order to bridge the discrepancy between the assortment of goods and services generated by the producer and the assortment demanded by the consumer (Stern and El-Ansary, 1992).

Currently there are two types of retail that will develop below.

The first is the retail online or e-commerce. The definition of e-commerce or retail online offered by the EU concrete it is as one based on electronic data processing, comprising various activities, including retailing in goods and services, distribution of online digital content, electronic fund transfers, public procurement online... etc., with the particularity that the sale purchase order must be made by electronic way. The steady increase in turnover through this channel has led to develop the legal framework governing e-commerce, in relation to intercompany traffic (BICE, 2010).

The rules of online retail standouts are as follows:


- Law 56/2007 of 28 December on measures to boost the Information Society and Royal Decree 1496/2003 of 28 November by the regulations laying down regulating billing obligations is approved (BICE, 2010).

- Royal Decree 1163/2005, of September 30, by which the public label of trust is governed by the services of the information society and electronic commerce (BICE, 2010).


Largely thanks to these regulations and many others has ensured that consumers have greater confidence in electronic commerce and as a consequence, this has increased its turnover significantly in recent years. The following section will deepen this evolution.

The second is the retail offline. It is defined as the business professionally developed with the intention of offering consistent profit in the sale of any kind of goods to final recipients thereof, consumers using an establishment. With this type of closer trade deal with the customer is achieved, retail specializes in a particular sector, allowing greater professional advice. Gains obtained in the price difference between the purchased wholesale and establishing in the store to be sold to the consumer (Definición.de, 2016).
2. IMPORTANCE OF RETAILING IN THE SPANISH ECONOMY

The of retail trade have a very significant influence on the Spanish economy, in fact it is the main driver of this. Therefore, this section is intended to expose data and its evolution over the years, both the online and the offline retail.

2.1 Spanish online retailing

In the recent years, the new information and communications technology (ICT) play an essential role in today's society and everyday life. We can observe the progressive increase in the use of internet in the period of 2011 – 2015 in Spain.

Graph 1: Evolution of Internet use in Spain between the years 2011 and 2015

![Graph 1: Evolution of Internet use in Spain between the years 2011 and 2015](image)

*Source: INE (2016a)*

We can see that this increase has been remarkable. It has increased from 68% of the population in 2011 to almost 74% in 2015.

This increase changed the way people communicate, but also how to do business. Because the increase use of Internet has also made companies to be released more easily and made online commerce more popular.

Visibility and internet facilities provided, has become very important for companies to be in the e-commerce.

Another important reason for companies to have a presence on the Internet is the increasing of online purchases in the last years. In the next graph we can see the rise of online shopping in million euros from 2011-2015.
The evolution of online sales has been progressively rising from 9.349 million euros to 12.897 million euro in four years. It is also true that the percentage increase from one year to another has been declining.

Although the growth rate is declining, sales continue to rise, but at a place slower. If we add increased sales to this, increased presence of potential consumers in Internet, low cost, high visibility, ease of access to geographically remote territories, among others. We can see the great importance of having an online business.

It is important to note that in recent years the trend of buying through internet has increased, although figures in million euros of sales do not grow so significantly. Of the nearly 76% of the population is connected to Internet, 62% make purchases by that means. Looking at these data it can be understood that the slowdown in growth seen in the volume of B2C e-commerce in 2014, which is explained more by the smaller increase of Internet buyers than by Internet users in general. The decline in the average consumer spending has also had its influence on the decline in growth. In 2014 the relationship between Internet users, shoppers through retail stores through internet and average spending per buyer is as follows.
Table 1: E-commerce in Spain in 2014

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>% Internet user</td>
<td>76,1%</td>
<td>29,9 MM people</td>
</tr>
<tr>
<td>% Internet buyers</td>
<td>62%</td>
<td>18,6 MM people</td>
</tr>
<tr>
<td>Average spending per buyer</td>
<td>876 €</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>16,259 MM€</td>
<td></td>
</tr>
</tbody>
</table>

Source: Panel Hogares, ONTSI (2015a)

We must note that the data in the table set forth above differ somewhat from the graph because the information was taken from two different sources.

2.1.2 Mobile platforms

As I said earlier internet access via computer has increased in recent years, but in this section the increase of Internet access through mobile devices is highlighted as is the Smartphone or Tablet among others. In 2015 the number of people who have a mobile was 16.2 million, and within those, 95% this is 5.4 million people owned a Smartphone (IBAN, 2015). 7 out of 10 Spaniards have a mobile and 90% of those with Smartphone’s are connected every day (Distendria, 2015). As for tablets, in 2014 Internet access via this platform increased by 14% (Distendria, 2015). Though the tablet and not just reading mail or surfing the Internet, but there has been a growth in people who watch TV programs through this medium.

Noting the increase in the use of mobile platforms, it stands to reason that purchases and payments through these devices have also taken power.

In recent years there has been a large increase in the use of mobile platforms both to surf the Internet to make purchases. Every year, the “Cetelem Observatory” publishes relevant studies on trends and buying behavior of electronic commerce in Spain.

At present, it has increased the number of devices through which the purchases are made online, such as: the computer, the smartphone, tablet or TV with internet access. Also you have to consider other devices are not reflected in the study, because for
the moment, its relevance is minimal. These devices could be smart watches and console.

**Graph 3: Devices from which purchases are made online**

Source: *El Observatorio Cetelem e-commerce (2014/2015)*

We can see in the graph above that the computer remains the main device used by the respondents to make your purchase online with 97%. Follower by the Smartphone with 27%, that is, 27% of respondents have made purchases through this device. And for both the computer and smartphone are people who use tablets to make purchases online, with 13% and only 1% of respondents use the internet TV.

Although the trend of use has not changed, we can see how the purchase by Smartphone has increased in the last year by 8 points, 3 points tablet and TV with internet access has remained constant. The only device that fallen has been a computer by 1 point. So it is not very remarkable.

The following graph identifies which products were purchased (Although in the study that I have had many more based products purchased online, I chose these because I have seemed the most representative).
It can be seen clearly that travel are the most commonly purchased products online, 63%, 6 points above that 2014. Second is the electronics with 54%. In the last year it has increased by 11 points. And third are the elements of sports with 48%, in the last year there has been a decline in purchases of this product by 2%

On the contrary, bicycles and accessories are the least percentage of sales have, although sales of both have increased in the last year by 2% and 4% respectively.

With the data presented above, we can conclude that online shopping take more strength, and that different mobile devices to computer are gaining in importance. So it is important that business adapt their websites to those devices.

If the web pages are called “Responsive Design (RWD)”, users can better see the contents of the page web and through their phones. This will make website has a better positioning and search engines like Google.

Another reason to adapt the web page, is because the Google search engine gives priority to pages that meet the requirement of “Mobile-Friendly”, this means that the website provides access from mobile phones/tablets.

An example of an online store that has adapted to the growing importance of the use of smartphones has been “Zalando”. 
Zalando was founded in Germany in 2008 by David Schneider and Robert Gentz. He currently works with over 1,500 brands in addition to its own brands which were introduced in 2013 (Manual ecommerce, 2016).

Smartphones have marked both philosophy and the investment made by the company. Because of the great importance of the same, the company has created the "Zalon" application in this application has been introduced from recommendations to full depending on the user looks. This application being designed exclusively for mobile operation is much more effective and works are designed to give users a much more intuitive. Another element introduced in implementation have been the videos, since it has been observed that is what most Smartphone users consume (Manual ecommerce, 2016).

Another innovation that has included the company has been basing its strategy on three elements: easy, fun and fast (manual ecommerce, 2016).

- In terms of ease it makes consumers have direct dealings with fashion experts to be advised.
- They have chosen to make the consumer experience is fun through videos, pictures, stories and more.
- Finally, in terms of speed, “Zalando” is working on improving this point, betting one-click\(^1\). It also includes the option "Visual Search", which is an integrated search engine counseling and similar garments and shoes are thinking for searchers introduce future voice. In the future, they expect to be able to deliver the package where and when the customer wants.

2.1.3 Advantages and disadvantages of Spanish online retail

Despite the great development that has occurred in the online retail, and high economic volumes handled, there are still some aspects of this type of retailing that are perceived by consumers as a risk, something which negatively affects the retail business online.

\(^1\) Make the purchase with a single click, because the company has data customers who have previously purchased, generating that satisfying user experience from start to finish (Manual ecommerce, 2016).
The negative aspects that refer customers are: The late delivery of the product purchased, almost 3.7% of respondents. The product or service has been delivered with a defect or not is the product or service requested, 3.1% of respondents (Cetelem, 2015)

According to the survey on equipment and use of information and communication technologies in households (INE, 2015), negative aspects related to distrust the reception and return of products of services, accounts for 35% y and 4% of respondents respectively. 44.8% of respondents do not shop online because of the distrust of the privacy or security in payment. There are 33.2% of respondents who do not use online purchase due to lack of skills or knowledge. Finally, 22% of respondents in the Cetelm 2015 report on retail e-commerce, says it sees as negative the delivery of products because, as I said in this paragraph, there may be mistakes in it, but also it is the fact that the customer has to wait some days for the product.

To try to reduce the negative aspects and distrust of Internet users, and that they will decide to buy through online retailers, carried out a series of activities that seek to gain the trust of users of the network. The so-called “Seals of trust” are one of the main tools to achieve that trust.

The main important hallmark in Spain is the “Online Trust”, is an association has been created in 2003 by “Self” and “Adigital”, in order to mobilize national trust of customers when they are buying online, but also when you´re browsing different online pages.

Despite attempts are being made to give greater confidence to Internet users, today has not yet been able to reach all people know and come to these trust seals to solve the problems they have been able present when they have made an online purchase. According to the first study Online Trust & Showroomprive on the confidence of the Spanish in the Online Shopping (Confianza Online, 2015) provides the following information. 65% of internet users are aware of the "Trustmark" but only 50% are aware they can pursue such "Trustmark" to act as intermediates between the user and the company in case that the customer wants to carry out any type of claim and of that 50%, only 12% of consumers used the services of these "Trustmark" in the last year.

In many cases part of ignorance that there are such "seals" is that 45.9% of online shoppers are unaware of European regulation on rights for online shoppers. 50.7% have heard of it but do not know what are the rights of online shoppers and only 3.8% indicates that knows and can mention up to 3 rights. These data are very enlightening
and perhaps is the reason why consumers give much importance that online retailers have with official stamps showing they are buying in a secure and trusted retailing.

According to the Confianza Online (2015), aspects that provide greater confidence to customers and gradually get these go relying more on buying by retail stores are expressed in the following table:

**Graph 5: Factors contributing more confidence to buyers online**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality labels and web confidence</td>
<td>37.40%</td>
</tr>
<tr>
<td>Ease of contact the retail store</td>
<td>22.80%</td>
</tr>
<tr>
<td>The store brand</td>
<td>17.70%</td>
</tr>
<tr>
<td>Clear identification of the provider</td>
<td>16.40%</td>
</tr>
<tr>
<td>Website design</td>
<td>5.50%</td>
</tr>
</tbody>
</table>

*Source: Confianza Online (2015)*

The "Quality labels and web confidence" refers to the quality seals that have explained previously and although most do not know all the benefits available, 37.4% of users state that such seals are what it gives them more confidence when making an online purchase. Second with a percentage of 22.8%, users indicate that the possibility of contacting retail is very important when they are deciding to make the purchase online element. The brand of the retailer and the clear identification of the supplier, that is, that the brand is recognized and has a certain prestige and the fact that the provider has some experience in the sector is very important for 17.7% and 16.40% of people respectively. Finally, the element that least affects to give greater confidence to customers or potential customers is the design of the website where you made your purchase, it is only important for 5.5% of respondents (Confianza Online, 2015).

Within that 22.8% of users that gives them a lot of confidence to maintain contact with the retailer, the methods provide more confidence to consumers are the following: 51% of consumers prefer their complaints or suggestions through a phone call, e-mail 29%
and 14% by chat with online retail store. Other methods, such as video chat with the retailer, customer service via social networks or applications by WhatsApp are insignificant (Confianza Online, 2015).

As for the different platforms that users have to make their complaints, 12.25% do so through trust seals such as “Online Trust”, “eValor”, “Trusted shops guarantee” among others. 32.2% of consumers prefer to contact the Office of Consumer and finally, 11% contact consumer associations (Trustmark, 2015).

Another way to get the trust of customers is through online communities. According to Gallego (2012), defines community as “a group of people who voluntarily associate with a common purpose”. Achieving this purpose involves a degree of commitment by each of its members, thus establishing a special relationship between them and a hierarchy specific to that community.

Virtual communities have different advantages to build customer loyalty. Through virtual business communities its members are able to be more visible to his followers as experts in the field that dominate leveraging the credibility and good name of the community (Diamond Academy, 2014). Note that there are different types of online communities that retailers can use to improve customer loyalty. Among the most commonly used there are “Social Networks”, “Forums discursions” among others.

Thanks to these communities, retailers can to increase the number of people accessing their web page, because the users will recommend the site web to their friends and so on. There is also the fact that longer retain users in the virtual space of retailers and make users return more frequently. It increases the knowledge that customers or potential customers with products and services that offer retailers and facilitates feedback between both parties. Significantly, it is a strong source of information very beneficial for retailers. So that they can better understand your customers. According to a study of “Forrester (2015)”, users of virtual communities buy 36% more. Also reduces costs, because users generate content and help each including improving the opinion they have on the retailers.

An example of the great influence that can have online communities is what happened when the mark "Gap" wanted to change its logo. In October 2010 the company announced through his account "Facebook" change logo in just a few hours more than 1,000 negative comments were generated, the campaign was extended to Twitter with the same result (Graffica, 2010). They were created
"memes", videos mocking the new logo and a deep rejection by users. A few days later the company decided not to change the logo and maintain that they had so far.

In this example we have been able to clearly see how the pressure internet user made the logo of the company not changed, this shows the great power that online communities.

We have been talking about the negatives that have the online retail, the mistrust of customers or potential customers and aspects that would enhance confidence increase. Here they are to expose the positive aspects of this type available e-commerce. And thanks to these and according to a study by the INE (2015), 48% of the population referenced had made a purchase through e-commerce sometimes in their life. 32,1% in recent months, that is, one in three people aged between 16 and 74 years old, bought on the Internet in recent months. According to the report of electronic commerce in Spain: tends and buying behaviors (Cetelem 2015). Three most positive aspects of e-commerce are as follows: 19% of respondents indicate that power shop from home, 13% refers to the purchase at any time of day, and 10% of respondents referred to the speed and simplicity of the process. These are not the only positive aspects of e-commerce. There are many others, such as discounts offered by online shopping, ability to import products, exclusive offers, delivery, availability and others.

In the next section will carry out an exhibition of economic development of retail, but in this case the offline retail.

An example of a company that combating fraud effectively in the transactions made on its website is the company “Atrápalo”.

This company was founded in 2000, in the early years where the size of it was not very big no frauds in purchases were recorded. However, in the 2008 and 2009 period the first crisis came about. Although at first were unable to cope with the situation, they finally decided to create a system "Anti own fraud", which analyzes the operations and reviews orders for added security. The "fraud screening" using take into account users (either by IP, by user ID, email or address) exceeding a reasonable number of transactions with different card numbers over a period of time. Geolocation of the card with the user IP address or country of registration (Manual ecommerce, 2016), thus can create a pattern of use of the card and detect if their use is being suspect is also compared.
The company also takes into account a number of aspects to detect suspicious orders. Some of these aspects include the following (Manual ecommerce, 2016):

- Order products high amount.
- Product orders shipped to unusual countries.
- Order products with a high number of the same product.
- Orders with "urgent" request.

Another technique used tool to prevent fraud is the implementation of 3D Secure\(^2\) depending on whether the customer is usual or not.

### 2.2 Spanish offline retailing

In the case of offline sales, figures in million euros it has had serious fluctuations since the crisis that occurred in 2007. There has been a steady decline and outstanding (except for the slight increase that occurred in 2010). The biggest decline in sales figures occurred between 2008 and 2009, with a drop of around 21,000 million euros in turnover retailers. And another highlight though much less occurred between 2011 and 2012 with a decline of around 6,800 million euros. Last year, that is, between 2013 and 2014, the decline in offline retail sales has been reduced up to 672,000 million euros. (INE, 2008, 2009, 2010, 2011, 2012, 2013, 2014).

\(^2\) It is a technique that has been implemented in recent years to improve user protection when you shop online. After paying by credit card is redirected to the page of your bank and asked a question, or ask certain information that the user must provide in order to verify your identity. (Kioskea, 2014).
Graph 6: Evolution of retail sales offline in Spain

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>240.651</td>
<td>219.519</td>
<td>221.382</td>
<td>217.287</td>
<td>210.487</td>
<td>204.932</td>
<td>204.260</td>
</tr>
</tbody>
</table>

In millions of euros


The data presented in the above graph include data pertaining to the CNAE\(^3\)-2009, section G. Within this section you can find different appliances for various activities related to trade.

- Paragraph 45: Wholesale and retail trade and repair of motor vehicles and motorcycles.


But the section that interests us in this project, and from which we followed to extract the data from the previous graph, is a paragraph 47: Retail trade, except of motor vehicles and motorcycles. Within this branch the following sections are included:

- Subsection 471: Retail sale in non-specialised stores

- Subsection 472: Retail sale of food, beverages and tobacco in-specialised stores.

- Subsection 473: Retail sale of automotive fuel in specialized stores.

- Subsection 474: Retail sale of information and communication equipment in specialized stores.

\(^3\) The CNAE is the National Classification of Economic Activities and assigns a code to each economic activity that can be performed (CNAE, 2009).
- Subsection 475: Retail sale of other household equipment in specialised stores.

- Subsection 476: Retail sale of cultural and recreation goods in specialised stores

- Subsection 477: Retail sale of other goods in specialised stores

- Subsection 478: Retail sale via stalls and markets.

2.2.1 Advantages and disadvantages of Spanish offline retail

As in the retail purchase online, offline retail purchase has positive aspects that encourage this type of retail and negative aspects, restraining purchases.

In Spain the character of people makes that a personal contact with the seller is very relevant, when customers decide whether to opt for making your purchase online or offline in store item. In this case, the personnel deal is a positive element in the offline stores, as it is the only one that offers a personalized customer care and dealing with another person. The fact that when the customer goes to the store can be at the same time the product to your home and use is also essential for customers who prefer this type of purchase method. Another very important factor, is the fact that the customers can see and touch the product, they can try it, and on certain purchases is essential for the consumer. Many people rely more in offline stores than online stores. Because in offline stores they can go if they have any problem with the product or service that they have purchased (Experian, 2013).

On the contrary, it also has diverse disadvantages. These disadvantages that I considered more important are as follows: Prices cheaper offline store, the prices offered for the same product cheaper online store is still far from being. The fact that customers sometimes lose a lot of time in the queue waiting to pay, especially in times when sales are higher, for example, in sales, at Christmas among others. The fact that in many retail stores are not all products that the Brand offers is also a very negative element. Since the consumer can go with the idea of buying a certain product and the store does not it in stock at that time.
3. BUYING PROCESS FINAL CONSUMER IN A RETAIL STORE

3.1 Sales Funnel offline and online

The sales funnel is the basis on which you will build your entire marketing strategy and sales (Diaz, 2013). It is the graphical way a business can plan to capture a customer. The funnel explains the process by which potential sales leads are qualified and selected to become opportunities ending in actual transactions (Grou, 2015), shows business opportunities in every step of the sales process of your company. Said sales funnel is used in recruitment processes for digital marketing, but can also be used by the force of offline retail sales. (Grou, 2015). During each phase of the sales funnel, the number of people interested decreases, but also increases the level of interest of those who do are (Hair, 2015).

Both in the case of the sales funnel online retail and offline are divided into five sections and both have the same goal which is to attract customers and gain their loyalty, the difference is the process carried out for get this purpose.

Then we will see the sales funnel designed to gain customers for online retail store.

Figure 1: Online sales funnel

Source: De haro (2012a)

The first step is finding potential customers in the target market in which the retailer achieves the revenue target through marketing (Grou, 2015). This finding leads can be performed using different tools, some of the possible tools would be the publications post on blogs, sending e-mail through the interaction by the retailer online social
networking company, SEO⁴ (Search Engine Optimization), ads by CPM⁵ (cost per thousand). With all this trying to retailers it is to get the greatest possible impact among the target audience, in order to attract the attention of customers and increase the likelihood of getting a sale and subsequent loyalty.

After calling the attention of potential customers, they pass traffic⁶ to the web, the retailer uses the CPC (cost per click), this is, for every click a user makes an announcement this retailer pays an amount previously agreed with the agent company (AdSense, 2016). The more web traffic for the company more likely they are to get sales.

Of all traffic on the website, you get leaders. It can be understood by a potential customer leader showing interest in a service or product offered by the retailer (Alonso, 2015). This collection of leaders has a cost to the retailer, called CPL (Cost per Leader), this cost involves the payment by the online retailer a fee previously established the company that is releasing their advertising, for each customer you register on the website, fill out a form etc ... the leaders can be classified by marketing (MQL) and sales (SQL).

First, the MQL are customers who have expressed interest in products or services of the retailer through its actions, such as downloading form, watch videos, interact with the page ... That is, the customer has expressed interest, but it is not known if they are determined to buy the product or service offered (Grou, 2015).

The sale is the penultimate point of the online sales funnel. This includes the SQL leaders. These types of leaders have expressed their interest through shares and the company thinks they are determined to buy the product or service offered (Grou, 2015). The sale also has a cost to the retailer, these costs are called CPA (cost per acquisition), but is paid for each share converted into user that already considers customer (Antevenio, 2015).

The last section refers to customer loyalty, that is, get a continued customer relationship with the company (Wikipedia, 2016). Thus it is avoided that the customer goes to the competition to purchase the product or service. A loyal customer is the

---

⁴ SEO: The set of actions that help us to improve the visibility of a website in search results from different search engines (Isocial, 2016).
⁵ CPM: Cost per mile. Advertisers running CPM ads set the price they want for each thousand ads served, select the specific ad placements where you want your ads and pay each time their ad appears (AdSense, 2016).
⁶ Pass traffic: The measurement of the amount of users that visit a Web site (Webopedia, 2016)
ultimate goal of the sales funnel, because confidence is achieved with the customer and is more likely to make more purchases in the future.

After explaining the different sections of online sales funnel, it will expose the sales funnel for offline retail businesses.

![Offline sales funnel]

The first block refers to the importance of branding. This term refers to the set of activities grouped in the same direction get help build brands and properly manages them (Diaz, 2015). It is the basis for building a coherent, consistent and constant brand at all points of contact (Gomez-Roman, 2015). We must not forget that the brand is not only a graphic expression, with the logo. But it is also associated with more intangible aspects such as values, image, perception or reputation (AEBRAND, 2015). All these elements are essential to attract a greater number of potential customers who enter the funnel.

When we know that customers are attracted to the company, this launches the techniques of the second block of the sales funnel. Retail companies use technology to account for and control the potential customers that pass in front of the premises or the surrounding area. The information obtained is essential to improve its position in the market, one of the technologies used is the T-street, and this concept will be developed later in the work.
When people enter the premises, these have become potential customers, as it has gotten to observe the product or are interested directly by the service offered. At this time the sales funnel the company also uses technology to better understand customer behavior within the establishment, and to improve customer satisfaction in the future.

The penultimate point is those customers who buy the product or service offered by the retail trade. And the last is, after purchase by the customer is already getting your loyalty.

To conclude this section applies during the development of this work are to go by exposing different methods used by retailers both online and offline to get different points of retail funnel discussed above.

### 3.2 Type of customers for each type retail trade in Spain.

Once known the funnel shopping, retailers must know the characteristics of customers buying both online and offline retail stores, to adapt to the needs of them.

According to the study on Electronic Commerce B2c (Ontsi, 2015), the socio-demographic profile of buyer of products or services online it is a male between 24 and 49 years old. With averages high school and college and high social class and upper middle. With an active employment status and living in capitals and cities with more than 100,000 resident.
Table 2: Socio-demographic profile of online shopper

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th></th>
<th>2013</th>
<th></th>
<th>2014</th>
<th></th>
<th>Variation 2013-2014 (p.p)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Buyer</td>
<td>Total</td>
<td>Buyer</td>
<td>Total</td>
<td>Buyer</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>51,2</td>
<td>51,6</td>
<td>51,3</td>
<td>55,3</td>
<td>50,7</td>
<td>53,9</td>
<td>-1,4</td>
</tr>
<tr>
<td>Women</td>
<td>48,8</td>
<td>47,4</td>
<td>48,7</td>
<td>44,7</td>
<td>49,3</td>
<td>46,1</td>
<td>1,4</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>De 15 a 24</td>
<td>15,9</td>
<td>13,5</td>
<td>15,5</td>
<td>15,2</td>
<td>14,5</td>
<td>13,3</td>
<td>-1,9</td>
</tr>
<tr>
<td>De 25 a 34</td>
<td>23,8</td>
<td>29,9</td>
<td>22</td>
<td>26,8</td>
<td>19,9</td>
<td>24,8</td>
<td>-2</td>
</tr>
<tr>
<td>De 35 a 49</td>
<td>35,7</td>
<td>36,5</td>
<td>35,5</td>
<td>36,4</td>
<td>35,6</td>
<td>38,7</td>
<td>2,3</td>
</tr>
<tr>
<td>De 50 a 64</td>
<td>17,8</td>
<td>16,5</td>
<td>19,2</td>
<td>16,6</td>
<td>20,5</td>
<td>17</td>
<td>0,4</td>
</tr>
<tr>
<td>65 y más</td>
<td>6,8</td>
<td>3,8</td>
<td>7,7</td>
<td>5,1</td>
<td>9,5</td>
<td>6,1</td>
<td>1</td>
</tr>
<tr>
<td>Study</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary studies</td>
<td>4,7</td>
<td>2,7</td>
<td>3,5</td>
<td>2</td>
<td>5,8</td>
<td>3,2</td>
<td>1,2</td>
</tr>
<tr>
<td>Secondary school</td>
<td>64,5</td>
<td>56,7</td>
<td>58,3</td>
<td>51,1</td>
<td>62,9</td>
<td>55,9</td>
<td>4,8</td>
</tr>
<tr>
<td>Higher education</td>
<td>28,6</td>
<td>39,9</td>
<td>38,3</td>
<td>46,9</td>
<td>31,4</td>
<td>40,9</td>
<td>-6</td>
</tr>
<tr>
<td>Social class</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High + medium-high</td>
<td>30,8</td>
<td>40,2</td>
<td>33,5</td>
<td>42</td>
<td>30,6</td>
<td>36,8</td>
<td>-5,2</td>
</tr>
<tr>
<td>Medium</td>
<td>40,1</td>
<td>37,5</td>
<td>45,2</td>
<td>43,2</td>
<td>40,7</td>
<td>39,7</td>
<td>-3,5</td>
</tr>
<tr>
<td>Medium- low + low</td>
<td>29,2</td>
<td>22,3</td>
<td>21,2</td>
<td>14,8</td>
<td>28,7</td>
<td>23,7</td>
<td>8,9</td>
</tr>
<tr>
<td>Resident</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less of 10 mil</td>
<td>21,4</td>
<td>18,9</td>
<td>19,8</td>
<td>18,9</td>
<td>23,9</td>
<td>21</td>
<td>2,1</td>
</tr>
<tr>
<td>10-20 mil</td>
<td>13,6</td>
<td>11,8</td>
<td>11,9</td>
<td>12</td>
<td>12,3</td>
<td>11,7</td>
<td>-0,3</td>
</tr>
<tr>
<td>20-50 mil</td>
<td>15,3</td>
<td>14,6</td>
<td>16,2</td>
<td>15,6</td>
<td>15,7</td>
<td>15,8</td>
<td>0,2</td>
</tr>
<tr>
<td>50-100 mil</td>
<td>10,5</td>
<td>12,2</td>
<td>10,7</td>
<td>11,4</td>
<td>10</td>
<td>10,5</td>
<td>-0,9</td>
</tr>
<tr>
<td>More of 100.000</td>
<td>39,3</td>
<td>42,5</td>
<td>41,4</td>
<td>42,1</td>
<td>38,1</td>
<td>41,1</td>
<td>-1</td>
</tr>
</tbody>
</table>

Source: ONTSI (2015b)

In recent years there have been balanced of online shoppers and has been an aging buyers due to the reduction of young population. Another interesting fact is that they have increased purchases by individuals with secondary education, and decreased those with university studies. There has also been an increase in the lower middle class and low and declining purchase by the upper classes and upper middle. All these changes mean greater diversification of the buyer profile.

By contrast, the profile of those who do not buy online, and prefer to offline store to buy, is very different. I will consider only those which do have at their disposal
electronic devices to carry out the purchases over the internet, but prefer not to do so for different reasons, and I will not consider those who do not have access internet or devices.

The profile of non-online shoppers, that is, those who prefer to go to offline store to shop, usually are women in the age ranges between 15 and 24 years and in the age of more than 65 years. Residents in towns with fewer than 10,000 inhabitants and an average or low income (ONTSI,2015).

Table 3: Socio-demographic profile of non-online shoppers

<table>
<thead>
<tr>
<th>Total</th>
<th>Sex</th>
<th>Age</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Man</td>
<td>Woman</td>
<td>15/24 years</td>
<td>25/24 years</td>
<td>34/49 years</td>
<td>50/64 years</td>
</tr>
<tr>
<td>No buyer online in 2014</td>
<td>38%</td>
<td>34%</td>
<td>42,1%</td>
<td>42,9%</td>
<td>22,6%</td>
<td>32,5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total</th>
<th>Resident</th>
<th>Social class</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt; 10 mil</td>
<td>10/20 mil</td>
</tr>
<tr>
<td>NO buyer online in 2014</td>
<td>38%</td>
<td>45,6%</td>
</tr>
</tbody>
</table>

Source: Total Internet users, ONTSI Household Panel (2015c)

Some of the reasons that may explain this great distinction between sexes in terms of buying over internet or offline store, largely the products they buy each are due. Women usually buy products related to decoration, luggage, cosmetics, leather, accessories or clothes, so buying these products online are difficult, because you cannot touch and observe physically. By contrast, men tend buy more technology products, which are not required previously tested or touch them to know they are.

Another element important that makes the difference between buying online and offline occurs, it is the fact that women buy more products considering the aesthetic of the product and sensory elements, so it is very important touch and feel it, hey give great importance to the security of the data and the funny that they have when they go to store to buy. By contrast, man pay more attention to rational criteria, that is, they pay
more attention to the value, at low prices, the brand and the ease of maintenance of the product purchased.

### 3.3 Payment methods

Once customers have decided to buy the product, either online retail store or retail store offline, happen to have the desire for the product or service action. To carry out the payment of the product or service there are a variety of methods that will outline below, separating them according to whether the purchase is made online or offline so.

#### 3.3.1 Online payment method

According to the report e-commerce 2015 (Cetelem 2015), are 7 online payment methods most used by buyers. Before showing the data I will explain briefly what each one of them:

- **Paypal**: is an electronic commerce (e-commerce) company that facilitates payments between parties through online funds transfers. PayPal allows customers to establish an account on its website, which is connected to a user’s credit card or checking account. PayPal attempts to make online purchases safer by providing a form of payment that does not require the pay or payee to disclose credit card or bank account numbers. (Investopedia, 2014)

- **Debit card**: A payment card that deducts money directly from a consumer’s checking account to pay for a purchase. Debit cards usually have daily purchase limits, meaning it may not be possible to make an especially large purchase with a debit card. (Investopedia, 2014)

- **Cash on delivery**: is a type of transaction in which the recipient makes payment for a good at the time of delivery. The customer can make payment by cash, certified check or money order, depending on what is the shipping contract stipulates. (Investopedia, 2014)

- **Credit card**: A credit card is a card issued by a financial company giving the holder an option to borrow funds, usually at point of sale. Credit cards charge interest and are primarily used for short-term financing. (Investopedia, 2014)

- **Revolving credit card**: A revolving credit is a line of credit where the customer pays a commitment fee and is then allowed to use the funds when they
are needed. It is usually used for operating purposes, fluctuating each month depending on the customer's current cash flow needs. (Investopedia, 2014)

- **Financing provided on the web:** When the seller facilitates the payment of the product or service through quotas, for a time and a certain amount. (Investopedia, 2014)

Once explained the terms, we will observe the following information, which explain the percentage of people who prefer each type of payment and the evolution that has occurred in each of them between 2014 and 2015.

**Graph 7: Payment most used online payment**

![Graph showing payment methods](image)

*Source: El Observatorio cetelem e-commerce (2015)*

In regard to payment methods, PayPal remains the most widely used method, with 72% of consumers who have paid this way. One point more than in 2014. The second place is the debit card with 50%. One point more than the previous year. Third is payment cash or cash on delivery or away from PayPal and debit card, with 16%. This way of payment has lost 8 points compared to 2014. Fourth, it is the credit card. With 20% of respondents have used this way of payment, one point less than previous year.

The others ways of payment, have little relevance on percentage level.

We have to keep in mind that the customer’s ages is relevant in the payment way used. Customers aged between 25 and 34 used more PayPal, with 77.6%, 5 points
above the average. The largest consumers are the 45 most used mode of credit card ends meet, and least likely to use the debit card.

Once known the general data, are to expose the data of the payment methods but this time held on mobile devices, since, as has been noted in the previous section, both the use of Smartphone and tablets has increased considerably in recent years.

**Graph 8: Preferred paying method for smartphone and tablets in Spain**

As we can see, the preferred method of payment remains the PayPal with 69%. The second preferred method of payment is a debit card with 40% and third preferred method of payment is to cash on delivery. An observation to note is that compared to 2014 all payment methods have fallen.

Considering only the year 2015, we can see that the payment by "paypal, “credit card revolving” and “Financing website” are very similar in the purchase made through mobile devices such as computers. The difference between them is between one and three points.

By contrast, in the case of “debit card”, “cash delivery” and “credit card end of the month”, the difference between the payment through mobile devices and computers is significant. It is twelve points, six points and seven points respectively.

This difference may be due in most cases to the fear of users in entering bank details through a mobile device that in their opinion may present greater difficulties in connecting to the Internet or the computers.
As for the little known and little used, such as "Sofort", "Bitcoin", "Trustly" among others "other payment methods," referring to some relatively.

The Bitcoin\(^7\) is a currency used to purchase products and services, however, it is an electronic currency. One of its main features is that it is decentralized, that is, has no central issuer, it is produced by people through software called “Bitcoin miner”. Through this software anyone makes a series of jobs and the client is rewarded with “Bitcoins” a scheduled unlimited ratio. These Bitcoins are stored in digital wallet and the customer can use in certain online stores. This money is sent over Internet, once the user has done it so there are no middlemen or rely on banks or securities of any entity.

Transactions in Europe have increased from 2014 to 2015 by 30.000 transactions, from 70.000 to 100.000 in just one year.

However in Spain is neither among top 20 countries worldwide in the use of this currency, or among the top 10 countries in Europe, where other are countries like Germany, the United Kingdom or Holland.

As for the Sofort\(^8\) is present in Spain since 2011. Sofort is a method of online payment systems belonging to direct online bank transfer whose operation is based on the proven online banking procedure. Its main advantage is that the user does not have to register or create a virtual account, an electronic wallet, since it is an online bank transfer, that is, a direct transfer.

By implementing a form, the order data is automatically filled with the approval of the transfer by the usual confirmation system. The data are remitted to the online bank account of user encrypted form. The commerce receives a real-time confirmation of the transaction and it will process the order immediately (Sofort, 2015).

In Spain it is compatible with 49 banks to charger more than 98% of online banking users. Sofort is a leader in payment by direct bank transfer online in Germany and Austria, and this dates continues to grow. In the first quarter of 2015 the company recorded a growth of 40% over the same period of 2014.

Spain, Belgium, Italy and Poland are the target markets for this payment method. Sofort is integrated in more than 30.000 stores in 13 countries in Europa. The objective of the company in the medium term is to be present in the main European

\(^7\) https://www.youtube.com/watch?v=rpvBYASCiQA

\(^8\) https://www.youtube.com/watch?v=Hu20XXFAHd0
markets. Some companies already accept payment by this method, these companies are: eDreams, IKEA, Nestlé, Instituto Cervantes, among others. (Sofort, 2015)

According to the survey conducted by PwC and IE Business School (2015) on means of payment, 100% of Spanish assiduously used the cash to carry their purchases in offline retail stores, 90.8% of respondents say they use debit cards to make purchases, it must indicate that payment method has fallen by 17% from 2000 to 2014 (Sector financiero de PWC, IE Business School, 2015). The transfer payment is used by 85.8% of the population and finally, credit cards are used by 76.6% of Spaniards. Although today credit cards are less used to debit cards, the first are more successful, since from 2000 to 2014 there has been an increase in use by 169%. Then these data are represented by a graph for easy viewing.

Graph 9: Offline payment methods in Spain

<table>
<thead>
<tr>
<th>Payment Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>100%</td>
</tr>
<tr>
<td>Debit card</td>
<td>90.80%</td>
</tr>
<tr>
<td>Transfer</td>
<td>85.80%</td>
</tr>
<tr>
<td>Credit card</td>
<td>76.60%</td>
</tr>
</tbody>
</table>


From the above data reflect the different payment methods used by retail customers depending on whether the purchase is made in offline retail stores or online retailers we can conclude as follows. The first element to note is that in the case of payment method offline retailers the numbers of payment methods that can be used are smaller. It is also important to note that consumers in retail offline tend to use one other type of payment method most interchangeably or in the case of retail online markets.
In the case of payment by customers to online retailers, PayPal is the method most used regardless of the platform through which payment is carried out, followed by debit card. In the case of payment in retail offline, different types of methods have similar data, but it is in "first position" in terms of its use is the cash (cash), being used by all people at some time and closely followed by debit cards.

**PART II:**

**4. USE OF NEW TECHNOLOGIES BY THE RETAILERS**

The information and communication technologies (ICT) are a key to the success and development of organizations, particularly in the case of small and medium enterprises (SMEs) factor and therefore the commercial sector. The implementation of ICT in these businesses has many advantages in that it can reduce operating costs and human resources, increase the added value of products and services and to promote the competitive advantage of the company (Premkumar, 2003; Nguyen et al., 2007).

ICT is essential for retail, since it means you save time and costs, gives them a comfortable customer management and supplier without moving, get information at all times, allowing better communication between customers and retailers globally, and it generates improved business opportunities. It also improves the competitiveness of the company, and allows access to new markets and at the same time provides assurance for the customer innovation (Trade Tec, 2015).

**4.1 ICT online**

**4.1.1 Control tools people online**

Relating what has been stated in the previous block with respect to the "sales funnel" with "ICT". We can say that the "ICT" online help control traffic and to obtain information about customers.

One of the main tools of control people by the online retail are the KPI (Key Performance Indicator).

As Carolina Nicolás says (2014, p.96):

The KPI were popularized after has been called “management by objectives”, as interpreted by Drucker (1954), and retaken by the “movement” of measuring

The KPI (Key Performance Indicator) is a key indicator for results. That is, measurement units, variables or objectives elements, that provides date for themselves on the operation of a particular aspect of the web strategy of the retailer. Indicators provide information financial and non-financial to for a performance measurement system, these indicators have to meet the characteristics associated with the acronym “SMART” (Specific, Measurable, Achievable, Realistic and defined in time).

Focusing on the KPI indicators of a web page, they show evolves traffic and how users navigate on the website. It is essential to keep a check on these indicators in order to optimize the design and improve the functioning of the web at all times.

There are a number of key indicators to check the proper functioning of the website of online retailers. Through web analytics tools such as “Google Analytics”, “True Social Metric” or “Woopra” among many others.

Through this tool we can measure the number of users visiting the website of the retailers over a period of time, it also indicates which are sections of the website that users have visited, so we will know the popularity among the different information is provided on the website. Another very important element that measure are the sessions, this is, the number of visits by adding new visitors and regulars. If a user visits the website of the retailer twice, the tool counted it as a single user but in different session.

Another rate that is of great importance is the so-called “bounce rate”. This rate reflects those users who enter the website of the retailer and consume information but leave without interacting with the content. There are indicators that indicate the web site page traffic in the case where there are different channels through which they can access, what the most used and what looks each user are considering the channel through entering the retail website. And the residence time of users.

Metrics related to the list of people who subscribe or derecognized on the page are also collected by the KPI indexes. In the first case, that is, control of people who subscribe to a particular time period, also serves to retails to obtain as much information to their databases, to know what is the reason that moves users to become subscribers and to strengthen those elements.
On the opposite side are the subscribers that retailers have lost or been discharged. Knowing why has led the user to make that decision is very important for retailers as they serve to try to fix them if possible.

All previously mentioned analytical reference KPI. But there KPI’s for each Digital are, SEO, SEM\(^9\), Social Media\(^10\), E-mailing, broadcasting\(^{11}\), podcasting and others.

Within the financial performance KPIs is the ROI\(^{12}\). It allows retailers to know the objective economic benefit in relation to the investment made, so the KPI’s are essential to know the performance of the website and company in general.

The IOR\(^{13}\) on the other hand, is within the area KPI's referring to Social Media. It is used to determine the impact of the brand on social networks, meet the relationship and rating by users and followers. This index is one of the most important digital level and is based on quantifying the actions of the mark from four variables. Authority branded content, that is the entries is marked outside their Social Media profiles. The influence of the brand on social media refers to the number of followers or subscribers have the brand in social media. Follower’s participation in the profiles of the brand. Finally, the traffic generated by the content of the brand in the media to the website of the brand.

With all the data obtained by the KPI, the retailer is implementing relationship marketing. The Relationship marketing focuses on customer retention, is oriented towards the benefits of the product, poses a long-term view, it puts a great emphasis on customer service, a high level of commitment and customer contact and to concern for quality(Payne, Christopher, Ballantyne, 1991).

Following the aforementioned relationship marketing and sales funnel has been mention in block I, the last element thereof, is loyalty. Such loyalty is one of the most important for retail, as in the last year element, the number of online stores have increased by 25%. For this reason, it has become essential that the company online

---

\(^9\) SEM: is a form of internet marketing which aims to increase the visibility of web pages on the "paid results" (ads) of search engines through a pay per click (Solutum, 2016).

\(^{10}\) Social media: A group of Internet-based applications that are developed on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content (Kaplan A and Haenlein M, 2010)

\(^{11}\) Broadcasting: broadcast networks include different types of channels: analog and digital, physical and virtual, linear and nonlinear through a retailer can advertise (Dozescu, 2012).

\(^{12}\) ROI: It is a financial indicator that measures the profitability of an investment, that is the relationship between net income or profit obtained, and investment (Crecenegocios, 2014).

\(^{13}\) IOR: Return on sales to see if the strategy works or not and what benefits it brings us (Gimeno, 2015).
know and has information about their customers and the needs of these. And try to be fair to customers to make them repeat purchases.

The first of the multiple reasons why online retail prefer to loyal customers is because they spend 60% more for each new customer transaction. A loyal customer base is good business and should be an important part of the retailer's strategy. (News Ciceron, 2015).

Customer acquisition costs in e-commerce are high, to recoup your investment you need to convince customers to return to your site time again (Bain & Company, INC). Another reason that has the online retail to keep loyal customer, it is that when they need another product also will go to our e-commerce to buy it.

There are different ways to achieve customer loyalty. For example: e-commences use “by word of mouth”, is the single most effective and economical for to publish the e-commerce, and at the same time the new customer has already confidence and is easier in the future will be a loyal customer. For that reason, it is necessary for retailers to research on the needs and desires of potential customers. When they learn what customers want, retailers should strive to meet these needs and earn their loyalty.

The main way to get customer loyalty is to know your needs, and you know what they value, what they want, and what they expect from us. In the United States, they conducted a survey on how customers look to buy online. From this study it was concluded that the main determinants of online shopping for customers are a discounts\(^\text{14}\), cash back\(^\text{15}\), rebates\(^\text{16}\), earn status\(^\text{17}\), maintain status\(^\text{18}\) and personalization\(^\text{19}\). In the following graph we can see what percentage the above-named elements attract consumers to shop online.

---

\(^\text{14}\) Discount: Sold or offered for sale at a low or reduced price: discount merchandise. (Dictionary, 2009).

\(^\text{15}\) Cash Back: Term used in the case that if you pay by debit card there is a possibility of overpaying and then you get that extra amount in cash (Ricardo, 2010).

\(^\text{16}\) - Rebates: A rebate is an amount paid by way of reduction, return, or refund on what has already been paid or contributed. It is a type of sales promotion that marketers use primarily as incentives or supplements to product sales. Some examples are the discount coupons (Wikipedia, 2011).

\(^\text{17}\) - Earn status: Earn a social status a person from buying products. (Cambridge Dictionaries, 2016).

\(^\text{18}\) Maintain status: Maintain a social status a person from buying products. (Cambridge Dictionaries, 2016).

\(^\text{19}\) Personalization: The process of making something suitable for the needs of a particular person (Cambridge Dictionaries, 2016).
Graph 10: Determinants for online purchase in Spain

Source: Ciceron (2016)

In the above graph, we can see the result of the customer loyalty program. This study took into account six elements that indicate the importance consumers give these elements to become loyal customers in companies or online stores.

These are questions on separate elements with each other. In the case of a “discounts” 79% of the conducted customers say they have in mind to repeat purchase at a particular online store. Second is “cash back” 71% of customers' surveyed say it is also very an important element. In the case of “Earn status”, the percentage drops to 62% in importance to build customer loyalty.

The last two items of importance are the "Maintain status" and “Personalization”. These two items are what customers have less in deciding to be faithful to a company or store.

The result of this study is clear, the most important elements to achieve customer loyalty are discounts, cash back and rebates. For this reason, the online companies should offer this type of action for loyal customers. In many cases, people decide to buy online because only through the Internet they can take advantage of a discount, which purchasing offline could not offer.

You also have to keep in mind that 77% of customers prefers a great product followed by brand recognition and trust at 69% (Cicerón 2015).

Social relations are also very important for customer loyalty. Social network theory describes organizational outcomes as a function of the social relationships between
organizations or individuals within organizations (Jones et al. 1997; Reagans & Zuckerman 2001).

An efficient way to create social relationships is the monetization of social media. The strategic placement of button to share links with friends is essential, because if the person receives the link from a friend is already predisposed to trust the page. It is important to address feedback from customers, because they felt that the company pays attention to them. About 90% of people say that positive online reviews of companies, influencing their purchase decision.

It is important to have presence on social networks. But the company has to take into account the target audience and join social networks that are target audience. It is better to own poor social networks and many cannot meet them properly.

It should be borne in mind that it has to combine social networking with other marketing strategies, to have a positive and trusting relationship with the customer.

4.1.2 Big Data

There are many different definitions of big data. This is because “big data” is a new and still emerging area. Some of more important definitions are the following.
<table>
<thead>
<tr>
<th>Author</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Artur (2013)</td>
<td>Big data is a collection of data from traditional and digital sources inside and outside your company that represents a source for ongoing discovery and analysis. In defining big data, it’s also important to understand the mix of unstructured and multi-structured data that comprises the volume of information.</td>
</tr>
<tr>
<td>Eivan and Levin (2014)</td>
<td>New data may impact economic policy and economic research. Large-scale administrative data sets and proprietary private sector data can greatly improve the way we measure, track, and describe economic activity. They can also enable novel research designs that allow researchers to trace the consequences of different events or policies.</td>
</tr>
<tr>
<td>Minealli, Chambers and Dhiraj (2013)</td>
<td>Big Data is the next generation of data warehousing and business analytics and is poised to deliver top line revenues cost efficiently for enterprises.</td>
</tr>
</tbody>
</table>

Based on previous definitions of Big Data (see table 4), you can say that Big Data is a useful tool for retailers, both online and offline (although it is most commonly used in the case of online retail because of the ease of information management) businesses. It serves to improve data collection whether structured or unstructured, management and analysis in a more efficient manner. Thus you can get reliable information that helps making appropriate decisions for retail.

It is important to know, that “Big Data” has been in development for many years. Some retailers that have been handling large amount of data over the years, but is now when the “Big Data” taking more importance.
Some of reasons why the “Big Data” is developing more right now is due to the great development of technology. This makes the use of technology is cheaper. The emergence of social networks and mobile computing, the emergence of cloud and high technology development, also made managing “Big Data”.

Another reason is the large increase in date transactions over the last decade, and this requires the creation of a management system faster and reliable.

Finally the “traditional data management and analytics software and hardware technologies, open-source technology, and commodity hardware are merging to create new alternatives for IT and business executives to address Big Data analytics” (Michael Minelli, Michele Chambers and Amiga Dhiraj 2013, p.4)

Then we will see a graphic number 5, that shows the evolution of technological advances to reach the “Big Data” (in the footer you will see a short description of the different components).

**Figure 3: Timeline of Recent Technology Developments**

---

**Source:** *Big Data and marketing digital (2014)*

---

**ERP:** Enterprise Resource Planning. It is a software package that manages all business processes of an enterprise, integrating various management functions in a single system (elegir ERP, 2016).

**CRM:** Customer relationship management (CRM) is a term that refers to practices, strategies and technologies that companies use to manage and analyze customer interactions and data throughout the customer lifecycle, with the goal of improving business relationships with customers, assisting in customer retention and driving sales growth (Rouse,2014).

**E-commerce:** E-commerce means buying and selling of goods and services including digital products, conducted over digital and electronic network (Delhi,2015).

**Big Data Analytics:** Is the process of examining large data sets containing a variety of data types to uncover hidden patterns, unknown correlations, market trends, customer preferences and other useful business information. The analytical findings can lead to more effective marketing, new revenue opportunities, better customer service, improved operational efficiency, competitive advantages over rival organizations and other business benefits (Rouse, w.d)
During 1990s, many companies invested in technologies to improve customer service and add value, but they didn’t succeed at all.

During 2000s, many companies invested in e-commerce, but they realized that the real important thing was managing all the information in order to better reach customers in a better and more proper way.

Finally in 2010 the “Big Data” began to develop very quickly. At this moment, the most difficult part is to manage gathered by “Big Data”.

It is essential to know that the “Big Data” affects practically every industry, such as banking, education, government, health care, manufacturing and retail. The latter is where we will be focusing on.

4.1.2.1 Components and big data applications

After hearing the description of Big Data out it is to bring an exhibition of its components and uses thereof. Within the virtual world, the “Big Data” has four essential components. These components are called “The four V’s of Big Data”. Thanks to these components it is easy to learn and benefit that gives us the “Big Data”.

The first component it is **volume** (scale of data). Based on the knowledge that the “Big Data” refers to a large amount of data, it is necessary they can be classified to make decisions. In digital marketing, the volume of data can tell us many customer characteristics, for example his age, frequency of access to the web page, time of presence on the web page, clicks does on the website, sex… among others. It is estimated that 2300 billion Gigabytes are generated every day in web pages.

The second component it is **velocity** (analysis of streaming data). One of the main features of the online world is the speed at which thing happen, even in real life. The “Big Data” should be flexible and agile for respond best to these continuous changes. To that online retailing function properly it is necessary that information flows in real time.

The third component it is **variety** (different forms of data). In the variety of “Big Data” and quantitative and qualitative date are mixed, these data are retrieved from many different sources. For all these data are useful for digital marketing, it is necessary to structure the information as best as possible, with tools that help us to record information in real life, analyze and interpret it.
The last component it is **veracity** (uncertainty of data). This is the most important component. If the above components are not true they are useless. You need to be measured by the “Big Data” the veracity of the data. It is necessary for the operation of digital marketing. If the information you have is not true, decisions made by retailing will not be adequate and there will be a malfunction of the business.

4.1.2.2 Advantages and disadvantages of Big Data

After learning what the "Big Data", its components, or at least some of the most important, failure to stress upon the advantages and disadvantages of using this method of information management for retailers.

Some **disadvantages** of Big Data are as follows. Some economists argue that the “Big Data” has many positive things, but we mustn’t forget that this system also has negative parts.

One of the drawbacks we can make is the economists not wanting the “Big Data” because of the unstructured nature of such data and the complexity of the linkages often contained within it. This upsets the usual econometric assumption that data points are because it is not interdependent, or at least are interdependent in certain defined ways. As Einav and Levin (2013) point out, this complexity presents an econometric challenge in terms of untangling this dependence structure and understanding the data”

Another disadvantage that has the “Big Data” is the difficulty of obtaining reliable data and of good quality. Having so much data stored poses a risk to privacy and confidentiality if someone manages to steal them.

On the other hand, according Einav and Levin (2013), the “Big Data” has some **benefits** that improve and makes online commerce easier. Get greater segmentation of users than traditional techniques. This increased segmentation helps the online commerce to have more precision towards target audience in campaigns. In addition, the information obtained by “Big Data” allow for the company to anticipate to the needs of customers and offer new services. Thanks to the information that is received continuously through the “Big Data” the price could be improved with respect to competitors and to reach more clients.

To make consumers feel safe, it must be able to know where your order at any time, thanks to the “Big Data”, this is possible, because it performs continuous monitoring.
Another important benefit it is the detection of fraud. “Big Data” provides real-life information, for this reason, it can detect fraud quickly. The “Big Data” also helps in the decision making process of the organization.

Some online companies as eBay, Google, Netflix... and many others, use the “Big Data” to improve their online business and is an essential element for its success.

Then I will expose, based on ecommerce Manual (2016), some examples showing the great benefits of the use of Big Data.

There are companies Big Data studying the behavior of users on the network in order to obtain such important items such as those that create greater interaction between users, which is used to predict future trends. This information is used by companies to direct their production towards these elements and seek to improve its visibility both online and offline stores.

The use of Big data has established databases of users at provincial and regional level, thus companies get hit more efficiently on new users and can present their catalog of products before its competitors. An example of the use of Big Data by online companies is eBay, which has used data analysis to determine the workload of each component installed on their "data centers". And they have gotten to know deficiencies on their servers, which have been solved and thus have managed to save millions of dollars.

An example of the use of Big Data in offline stores is the case enterprise CVS, the second largest US pharmacy chain, which found that a third of its consumers stopped taking their medications after one month and 50% at year’s end (Manual ecommerce, 2016). What made you take steps to remind customers when they had to apply their new prescriptions. These reminders were conducted through SMS, phone calls and sending emails, and also added a feature through which pharmacists could chat with those who had stopped taking his pills.
4.2 ICT offline

The technology used by retailers to get the attention of customers, can be introduced into one of the first steps of the sales funnel. There are different tools to get the attention of potential customers. Here they are to name a few of the most used, although they are not alone.

4.2.1 Newsletter, location marketing

Retailer’s offline businesses also use new technologies to attract customer’s attention and that they come to the local shop.

One of the techniques used by retailers to attract customers is the "Newsletter marketing". Through this practice the retailers send informational and product-focused content via an emailed letter to a subscriber list that comprises potential and existing customers (Bigcommerce, 2015).

This type of technology is used by retailers to send promotions, to inform customers the new production collection, interesting news, keep up on brands, products or services, including congratulate him on his birthday through email. They also offer discounts, promotions and others...

To carry out a good use of the newsletters, it is imperative that retailers know the characteristics of customers, such as your preferences, age, sex, geographic location among others. Thus, the emails sent includes information that may be interested customer. Retailers have to take in account the frequency of sending emails. Excessive shipping can be perceived as Spam by the consumers, and lose all effectiveness. Women between 25 and 34 years old are more akin to receive offers, promotions and discounts segment.

According to the research study on the use and perception of email marketing in Spain (Adigital,2015), 46% of retailers use newsletters to get customer loyalty, only surpassed by those looking to generate sales or renew, with 56%.

According to the same study cited in the previous paragraph, 57% of retailers invest less than 10% of its total Budget on this type of advertising to achieve customer loyalty. 20% spend between 10% and 20% of its total budget. And only 8% invest to more than 20% of its total budget for marketing.
Through software, retailers can account for and control the number of customers who open the newsletters send by the company, which offered information, offers, discounts… also control the number of people that using these discounts.

Newsletters perception by customers can be positive or negative. Retailers have to keep in mind both the positive aspects to strengthen them. But also the negative, to try to alleviate them.

According to the research study on the use and perception of email marketing in Spain (Adigital, 2015). Regarding the positive aspects perceived by customers. We can say that 72% of respondents, expressed receive offers products that may interest them. And 36% said than the information received is relevant and that newsletters are useful to be aware of the state of the company.

On the other hand, referring to the same study reported above. It can be said that 31% of respondents think they get too many emails. 23% say they receive newsletters of companies that do not remember signing up. 11% admit not open it, 5% who do not like receiving them, 6% who do not find it interesting the information, and finally, 4% who think that emails are intrusive.

This method of customer loyalty, accounts for 10% of the total of all methods used by retailers. And with a very low cost, so usually it is widely used by retailers to maintain feedback with customers and meet their needs.

Source: Adigital (2015)
Another way to attract customers to the store offline is through marketing location, this type of marketing allows the retailer to define the products or services with pricing and appropriate advertising based on geographic location of the consumer (Wharton, sf).

Within this type of marketing, there are different types. The first of these is called LBS (Location Based Services). The retailer provides information, entertainment, coupons or discounts and reports on events and news of the store to try to attract customers. The second type of location marketing is called LBA (Location Based Advertising). Users who are browsing near the local internet are sent in the form of advertising displays or banners offering promotions, discounts, rebates and others.

4.2.2 Street control

Following the procedure of "sales funnel" of offline stores, the offline retail uses technology to meet the people that pass in front of the premises through a system called "Street Control".

The "Street control" not only is it important to have information about the customer behavior within the store. It is also important to know their behavior towards the store window, before entering the property. Knowing what is that to pay attention to more potential customers, to offer it and bring back their interest and desire.

T-street is an integrated company T-Cuento and are a different sensors which are installed on the outside of the store. Thanks to these sensors pedestrian traffic information is obtained outside the establishment. The information about people who stand to see the store window, and areas of it that most arouse their interest is very important to improve potential attracting customers.

This system provides information that accumulates in periods of 24 hours and for time slot.

The installation of the T-street, facilitates meet potential customers, people who enter the establishment and indicates the suitability of the localization of the property. It also

---

21 T-Cuento is a company founded in 2007, currently it is the leader in the development of tools for controlling of pedestrian traffic in and out of commercial establishments (T-story). Its purpose is to provide useful and accurate information to establishments (http://www.t-cuento.com/es/)

22 T-street: They have a wide range of technological advances in retail that increase profitability, business efficiency and customer service and maximize the potential of their outlets (http://www.tc-street.com/).
provides information to apply advertising efforts in the days and hours of the most suitable week.

In the graph 11, we can see an example of a report about the comparative pedestrian traffic between the “Calle Alcalá” and “Calle León XIII”. This report contains data collected by sensors in one day.

**Graph 12: Comparison daily pedestrian traffic, between “Calle Alcalá” and “Calle León XIII”**

![Graph 12: Comparison daily pedestrian traffic, between “Calle Alcalá” and “Calle León XIII”](image)


In the following graph 12, we can see a comparative that providing information on pedestrian traffic of the two streets, but on a monthly basis.

**Graph 13: Monthly comparative**

![Graph 13: Monthly comparative](image)


Finally, in the next set of graph we can see comparisons of pedestrian traffic between the streets “Pota Ferrissa” and “León XIII” in monthly reports.
The graphs above are examples of the way in which reports are presented to stores so that they can make decisions according to the results.

There is another device called TC-store\textsuperscript{23}. It works the same way as TC-street, accounting sensors are used.

Provide information on inputs customers in store, thus, you can know the time of day or day of the week with there are more attendance of potential customer. Thus, stores can better optimize customer resources and the conversion ratio is also known.

The sensors also provide information on the capacity and the average stay time of the average customer is also important to assign staff.

\textsuperscript{23} Measures the following ratios: conversion ratio, ratio of attraction, loyalty ratio, medium capacity, average residence time, exterior pedestrian traffic, client entries, repeat entries and cost per lead (http://www.tcgroupsolutions.com/es/tc-street-solutions-1/).
A very important feature in this device is that it have the ability to recognizer if a person has already entered more times in the store or any other store in the group. Thus it is providing valuable information on repeat customers shopping at the store. With this information, stores can make important decisions. They can take into account customers who come over to their tents, that is, the loyal customers and know what they are buying more, they also know what the customers are interested, they prefer ... and from this information to make decisions consistent with the behavior of these loyal customers.

The type of sensors used is:

**Figure 4: Type of sensors**

![Type of sensors](http://www.tc-street.com/es/producto/)

There are a number of important ratios that trade should take into account. The ratios of attraction, conversion and loyalty are important to know the effectiveness of the showcase or shop in general. And this new technology provides information on all these ratios.

- Attraction Ratio: percentage of potential customers coming into the store.
- Conversion ratio: percentage of potential customers who have made a purchase.
- Loyalty Ratio: percentage of repeaters customers versus new entries.
4.2.3 Beacon technology

When a client has decided to enter the retail establishment, you can apply technology to understand the behavior of these within the facility for proximity marketing more effective.

As outlined Herrera and Pintado (2014, p. 129):

*Proximity marketing is a communication tool by which advertising messages are sent to mobile via Bluetooth or BLE. The method, although simple, has the disadvantage of raising the possible invasion of privacy posed by this system.*

With the proximity marketing, direct and single channel is achieved to reach customers, also manages to attract customers to a specific promotion, total control of campaigns over the internet with the best statistics in real time in the same: penetration, detected devices, advertising sent etc. (Sánchez and Pintado, 2014)

![Figure 5: Proximity marketing](source)

*Source: Own elaboration. Based in Marketinet (2011)*

Following the proximity marketing, as indicate by Adrián Moliner (2014, p.11) in her TFG.

*In 2013 Apple develops a technology called “Ibeacon”, whose purpose is to promote and add value to the retail sector. This sector includes all shops and areas devoted to physical selling products to the final consumer.*

*Currently, this sector does not have many means to monitor and extract information about preferences and user behavior in real time. In returns, the user will receive*
personalized services that can help create a more individualized experience and will involve an added value.

This new technology provides information about customer behavior in real time. It takes advantages of a technology called BLE (Bluetooth low energy), this technology emit constant signals low energy cost, despite begin a technology created by Apple, the “beacon” are available with other operating systems such as Android. On Android 4.0 devices can also introduce technology “beacon” for information.

The signal emitted by the “beacon” technology is caught by beacons that are inside the store. In this way, you can know the pattern of customer behavior. The scope of the signal emitted by the device can reach up to 70 meters away.

**Figure 6: Within range of the Beacon technology**

Source: Sanchez (2014)

This technology can be used to capture the attention and customers interest through offers sent to mobile devices depending on the local area in which the customer is located. Customize welcome messages.

Check the tour that people make and what is that to providing them greater importance or more searches, among others.
4.3 Customer loyalty in retail store offline

The main reason for retailers seeking to retain customers through customer loyalty is the growing competition in the markets. The opening of trade borders has made the competition is getting more intense. That is the importance of programs of customer loyalty, it is necessary that the company different from the other, and therefore can increase your sales, so the company grow and maintain over time.

In order to achieve customer loyalty, retailers should not only know the importance of getting customer retention they already have, in addition, they must provide their needs to attract new potential customers. For this, that is, to retain the best customers and attract new, retailers use loyalty strategies.

These strategies are tailored to the needs of business customers and add more value to the relationship. If this is achieved optimally, this process will result in greater profitability and value for the retailer.

Retailers should be aware that there are many different types of loyalty strategies, and must know the right for every moment, because if it does not, the actions will not have the expected benefit.

One of the elements more important is that customers get loyalty is the best buying experience for the consumer. According to the study e-commerce Observatory (Cetelem, 2015). Despite the increasing of importance of e-commerce, people still prefer to shop in offline commerce. This study indicates that in 2015, 70% of respondents prefer to shop in offline store. One of the main reasons why people still prefer to buy offline, is the importance attributed customers ‘shopping experience.

Customer’s preferences have changed over time, and retailers must adapt to these new preferences to meet your expectations. The customer has become more direct and less impulsive; they are looking better informed and personalized products. They give great importance to product quality, price and shopping experience. So it is harder to get a loyal customer.
To try to understand how to meet these emotional needs is "Customer Experience" or "Marketing of experience". According to the expectations report in 2015, Time to Achieve great results (Deloitte, 2015), the purpose of Customer Experience is to improve perception the customer has of the brand by mitigating the bad experiences that may arise in the interactions throughout the lifecycle (called moments of pain) or increase successful experience.

To improve the consumer experience and that they feel that retailers care about their emotions are **loyalty cards** because, by making purchases it subsidizes them in future purchases. Then they will develop loyalty cards.

The definition of a “loyalty card” is a follow: A "loyalty card" is a card that is given to a customer by a business, used by the business to reward the customer for buying goods or services and to record information about what they buy (Cambridge Dictionaries online, 2016).

The Loyalty card is more often used by retailers to keep customers happy through discounts, coupons price reduction, accumulation of points redeemable for gifts, financial services without costs among other techniques.

But the truth is that "loyalty cards" gives the retailers a lot of important customer information.

With the use of the card by the customers, the retailers can meet the trend of buying it, the average cost per purchase made, the assiduity of assistance to the establishment, the geographical location of the customer, different chain stores in the they usually buy, among much other information.

With this information, a retailers can create a map of the behavior and needs of the client, thus can offer discounts or promotions at the right time.

From the tactical point of view, stores can set Prices, product offering and different promotions, according to the behavior of loyal costumer. With the information gathered can also be reach decisions as removing products, lower prices and more.

---

24 Customer experience try to establish connections between brands and consumers . This type of marketing promises Sense of Consumers and allows them to physically interact with Mark (Christ, 2015).
Loyalty cards have also been adapted to new times. Today, there are various mobile applications as "stocard" or "nokadi", that allow customers no longer have to carry cards on physical media.

PART III

5. OMNI-CHANNEL

With the development of technology a retailer has evolved, and as I said, offline stores have been interconnected with the online shops.

**Multi-channel** is using multiple channels to sell or connect, but each channel retains its identity. There's an attempt to tie together elements like inventory, so online preparatory shopping doesn't show products as available that aren't actually in the store when the customer gets there, but there's no real attempt to produce a truly seamless customer experience (Campbell, 2014). CRM (Customer relationship management) tools helped retailers make decisions about which public purposes must be directed communications, when and which channel, based on the historical information contained in its database marketing (Timetomark, 2014).

The **"Cross-channel"** is an evolution of the multi-channel. The customer uses different channels with retailers have to go interacting with each other and make decisions that suit them. In each channel the message it is different, according to the best adequacy of the means by which it is broadcasting. There are three important expressions in the "Cross-channel".

The first expression used in the "Cross-channel" is showrooiming. This term is used to refer customers that looking and products are tested in the offline store but then buy online.

La siguiente gráfica que vamos a observar está dividida en cuatro combinaciones online/offline que llevan a cabo los clientes cuando deciden llevar a cabo la compra. Se puede observar que las combinaciones que expresa dicho gráfico hacen referencia a métodos que se están exponiendo en este apartado.

In the case of "Research offline / purchase offline" would refer to offline retailing. The case of "Research offline / online purchase" would refer to showrooming. The "Research online / offline purchase" would refer to ROPO. Finally, the "Research online / purchase online" would refer to online retailing.
In the chart below we will observer data pertaining to the year 2014/2015:

**Graph 15: Combination of search and buy products from online and offline methods**

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research offline / purchase offline</td>
<td>43%</td>
</tr>
<tr>
<td>Research offline / purchase online</td>
<td>11%</td>
</tr>
<tr>
<td>Research online / purchase offline</td>
<td>27%</td>
</tr>
<tr>
<td>Research online/ purchase online</td>
<td>27%</td>
</tr>
</tbody>
</table>

*Source: Consumer Barometrer (2014/2015).*

In this graph we can see how 43% of respondents opt for the product to look and buy in retail store offline. People looking for products and services online will buy online represent 27% of respondents, the same percentage as in the case of those seeking online and buy offline. Finally, only 11% of respondents show that prefer finding products in offline retail stores and shop online. With this we can conclude that despite the increase in technology is increasing and that buying through internet is also doing, it is still far from the confidence that gives customers shopping in retail stores offline.

The second expression used is “ROPO” (Research online and Purchase offline), the online channel for information and use it finally materializes buying in retail store offline. Therefore, retailers must provide comprehensive and easy to analyze on their product offering through its website information, as well as work on the virility of this information through channels such as email marketing and / or social networks, among others, in order to subsequently complete the sale in store. And it is very advantageous that remain linked both channels (Experian,2013).

Finally, the third important expression in the “Cross –Channel” is “DOROPO”(Discovery Online, Research Online and Purchase Offline). Consumers take advantage of the wealth of information available on the web to discover new products and services and compare before buying in stores. Here lies the difference with the ROPO, which in
the case of DOROPO the client compare products with others through the Internet and in the case of ROPO this comparison is not carried out simply information product or service itself is obtained same (Experian, 2013).

The "Omni-channel" is the evolution of the previous two, is the most widely used today. The “Omni-channel” is using all channels as though they were variations of each other. There’s no difference between goods, pricing and other aspects between online and offline experiences. This is the seamless experience customers really want (Campbell, 2014).

“Omni-channel is the way consumers prefer to shop. The modern consumer is ‘channel-agnostic,’ in the phrase of Carsten Thoma. That means consumers don’t care about channels, they care about experience. They’re online, offline, on the web, on apps (Kris Lake, 2014). Consumers are increasingly drawn to digital channels and expect a seamless experience across all the touch points they have with a retail brand, whether it be an offline store, a mobile app, or a web shop (Wincor Nixdorf, 2015). Omni-channel retail is about ensuring that organizations provide a seamless experience for customers across all these channels. Offerings, pricing and promotions need to be consistent across the board, essentially providing customers with a single account and view of the retailer’s products database, while giving the retailer a single view of the customer’s interaction across the breadth of the organization. (Wincor Nixdorf, 2015). This integration of the different channels can be seen in the figure below:

Figure 7: Omni-channel

Source: Kris Lake (2014)
Experience marketing tries to relate the brand image value with positive experiences or sensations experienced by the target audience in their spare time, bringing the company to its customers (Rodriguez, 2015). Due to the great competition in our time and the great variety of options available to consumers is essential to identify those aspects that make the only people, this is important for the retailer to obtain the information necessary to offer a unique shopping experience and memorable to your customers and why the successful implementation of a good experience marketing has to be through harmonization of key technology pillars that have most organizations: big data, mobile, content ... (Hernandez, 2015) and that is where the "Omni-channel".

In order to develop an effective Omni-channel model, retailers have to keep in mind various elements. The first element that retailers should consider is change its organizational structure to provide ongoing management through different channels. And therefore, it could generate a consistent customer experience, integration of online services in the store online and offline in-store service online store. For this, retailers should begin to accept the digital revolution and the improvements that these changes mean for them. A clear example of the acceptance of digital evolution is integration in digital communities and social networks, although it is necessary to create new specialized departments in this sector.

Finally, for all this to work properly, it is necessary that retailers invest in CRM (Customer relationship Management), analysis and monitoring techniques of social networks and digital communities (See in page 36).

Currently, customers have increasing access to information, no longer limited only to information of the offline store or online store, but combine both, and retailers must take this into account and act accordingly to gain competitive advantage. According to the Omni-channel retailer Spanish (IAB, 2015), 41% of retailers allow customers to make the return of online purchases in offline stores. 39% of retailers analyzed, allow the collection in the offline store of products that have been bought online. 15% of retailers surveyed, allow customers to check the availability of products in store through internet, and 3% of retailers allow customers to make booking your products online form. Here you can see the figure that reflects the data presented.
All facilities that provide retailers have to improve, but especially those that allow customers to check the availability of products in offline store and the possibility of booking products form online, because, so far, the percentage of retailers that offer these possibilities is very low.

In the same study named above, Omni-channel retailer Spanish (IAB, 2015), we can see in the graph, how retailers have still a long way to go to fully integrate their business Omni-channel.
As we have seen, none of the companies surveyed have an integration of all services. The services are offered more online shopping and return in offline store and online shopping and store pickup. But on the other hand, only two of the studied companies offer online booking service and payment collection and offline store.
The data that we have observed in the graph above clearly shows how even though the Omni-channel is being integrated into between retailers, there is still a long way to full integration occurs.

As wing form of customer communication with the company through the Omni-channel must say that the customer expects feedback from the company, and feel unique and important. Customers are contacted with retailers through social networks, Smartphone, digital kiosk and others at any time of day, and expect the retailer to respond, so it is important to know how to adapt efficiently to meet the communication with the client. (Slotnisky, 2014). The "face to face" has become increasingly important in recent years, are spaces that are generated on websites intended for the customer and the company have more direct treatment (SEA, 2015), thanks to this type of customer contact - retailer, you can increase customer loyalty because of the personalized service that is given. Another method in which through the Omni-channale the customer contacts the company, is through "chats", so customers can avoid waiting times and do other things while seeking service customer (News Center, 2015). Rates of use of chat to carry out communication between the customer and the company have increased in the last three years between 30% and 43%, satisfaction rates for the chat are 63% only superseded by those voice with 69%. (News Center, 2015).

These are only some of the different ways in which customers are contacted with the retailers, but the truth is that thanks to the evolution of technology there are many more.

Then will expose an outstanding example of an organization that is giving much importance to the implementation of “Omni-channel” method, this company is the FNAC.

The Fnac is the first distributor in Europe of technological and cultural products, and is a unique example of partnership between trade, culture and technology. In their stores books, records, film, image, sound, computer, video games and children's universe converge in a place of purchase, advice, discovery and encounter. The Fnac has an area of 46,211 square meter sales spread over 25 plus virtual physical stores (Fnac, 2016).

Fnac's main commitment differentiation as key to increasing the number of customers. To achieve this differentiation is essential that the company meets the digital
transformation, the difficulty lies in the speed of change of the medium. To adapt to this change Fnac has a strategic and comprehensive plan that allows them to overcome digital disruptions and achieve competitive advantage (Manual e-commerce, 2016). The implementation of "Omni-channel" is essential for the digital transformation in the commercial plane, the "Omni-channel" strategy enables the company to adapt to new types of customers, who are also “Omni-channel” (Manual e-commerce, 2016). To accommodate these new customers have implemented the “Click&Collect” 25 and “ClickinStore”26, these elements "Omni-channel" makes them stand out from other competitors such as Pure Players.

The company takes into account that for each step / flow / improvement carried out a review of many processes that are being used and their systems is necessary, as these were thought to one, so this change to suit the "Omni-channel" is essential, but makes it more difficult.

Another element that has implemented the Fnac has been the only Stock (SU) to improve the efficiency of "ClickinStore" since it allows providing information to customer’s ecommerce store stocks, the central warehouse, the other warehouse stores and shops stock to the public. In order to accomplish this it is necessary for continuous monitoring of such reviews are maintained to prevent sales.

Another initiative of the Fnac is the Single Client, that is, integrating all customer information regardless of the method that the client used to access the company, thus allowing them to better study of the customers and higher easy to customize their offerings.

Finally, Fnac is very clear that the most important and difficult changes that lead to change in order to adapt to the digital age are the organizational and professional profiles necessary changes to make this possible. The "Omni-channel" requires that employees are familiar with the digital elements in all functional departments, as well as a vertical department "Omni-channel" with a responsibility to design a digital strategic and comprehensive business plan and coordinate deployment (Manual ecommerce, 2016). Fnac has since 2014 by adapting its organization to "Omni-channel" system.

25 The customers buy a product online and pick it up at the store or receive it at home (Manual e-commerce, 2016).
26 The customer buys a product in the store is physically elsewhere, to pick it up in the store or receive it at home (Manual e-commerce, 2016).
6. CONCLUSION

As a result of the research on new technologies applied to the retail trade, it is possible to conclude that there has been a substantial increase in the use of technology by retailers both in the case of offline commerce and online commerce, with in order to have a better understanding of customers or potential customers and to thereby increase sales. The information obtained is managed and classified through different types of software such as Big Data, the "Business Intelligence" or any other specialized software. This management information is very important for decisions made by retailers are as beneficial as possible.

Moreover, although the online and offline retail seem to have little in common, this is not true, because we can say that the two types of retailers are intended to attract consumers, grab their attention with different types techniques, to shop at their stores whether online and offline, and ultimately greater loyalty, these is repeat (AIDA method). These actions are carried out differently, but the aim is the same. It should be noted that the different methods used to achieve customer loyalty have in common that they can be invasive and reach customers may feel pressured by retailers, this being counterproductive to the business.

The sales funnel that presented in this project represents the different way that has both the online retail, such as retail offline to refer to the various phases of the sales process. A retail uses this method to quantify and select transaction opportunities and act accordingly to achieve them.

A very prominent fact that we have seen during this project is the large increase in mobile devices as a means through which are carried out purchases via the Internet. Despite this increase and that retailers have realized the growing importance this purchase method, in some cases retailers have not yet sufficiently adapted their selling methods such devices. Following the online retailers, another fact to note is that although there are a variety of payment methods, most customers opt significantly by the "pay pal" and payment through the "cards due ". The explanation for this is that today many customers still rely to provide their bank details to make payments online and prefer alternative methods to give the number of your credit card. This confidence or lack of it to make purchases online also depends heavily on socioeconomic, demographic, gender or age aspects.
As for the offline stores, some of the most advanced and innovative control people and their behavior, technologies are: "Beacon Technology" or "Street Control". It is a good way to get information for retailers, but is also invading the privacy of customers to feel these observed while they are doing their shopping, that thing can lead in some cases to cause a rejection or a feeling of invasion of privacy trade by using these methods of obtaining information. So that retailers should be careful with its use because it can be counterproductive to their interests.

We must also conclude that if we analyze the advantages and disadvantages that online and offline commerce are usually opposite, that is, the disadvantages of one helps the other and vice versa. Because of this, in recent years there has been an increase in the number of retailers who have decided to merge the two sales methods to thereby be able to mitigate the negative effects of one use of the other.

As for the economic aspects it shows that since 2007 (the year in which the Spanish economic crisis began), the offline trade has experienced a decline in sales and instead the online trade has been gradually increasing them. This is because trade through the Internet often offers deals that are not in offline stores, and this coupled with the declining purchasing power of the population because of the crisis has made people more aware the price of goods and services If the trend continues, in a few years we can see how both types of trades are matched in numbers. It should be noted that e-commerce is very close and in sales figures in certain products or services, such as the acquisition of travel, technological applications or products for conducting sports.

Changing trends and increasing demands of consumers when they carry out a purchase either online or offline retail stores, you have led retailers to use the channels known as "Omni-channel". Thanks to the use of this type of channel retailers have managed to provide customers a better shopping experience, as the different stages of the sales process are interconnected with each other and function as a single, integrated physical channels with virtual and getting one is the extension of the other. Thus an increase in customers who are willing to buy in the retail business that uses them is achieved, and increasingly retailers are implementing this type of technology in their businesses.

As a final conclusion, we can say that the use of technology by both the online trade and by trade offline has resulted in increased knowledge among retailers about their customers, better management of information obtained and so a better way to manage and serve customers.
7. BIBLIOGRAPHY


Berman, B; R.Evans; J. (2013). Retail Managemen. United States of America: Pearson


Bitcoin (w.d). Bitcoin, la moneda que está cambiando el mundo. Recuperado el día 16 de Marzo de 2016 de https://www.queesbitcoin.info/


*Emerging practices and perspectives on Big Data analysis in economics: Bigger and better or more of the same?*. Sage Journals (2014). Accessed 2 February 2016 of http://bds.sagepub.com/content/1/2/2053951714536877


Gallego, J.A (2014). *Comunidades virtuales y redes sociales. Commons Reconocimiento No comercial C0mpartirlgual.*


González-Román (2015). *No sabes que sabes de Branding.* Accessed 30 April 2016 of https://www.linkedin.com/pulse/sabes-que-sabes-de-branding-rub%C3%A9n-gonz%C3%A1lez-rom%C3%A1n-queignon


Herrero, A; San Martín, H; García, MM; Collado, J (2013). *La adopción de las tecnologías de gestión en el sector comercial minorista*. Available in http://www.mercasa.es/files/multimedios/1387540884_La_adopcion_de_las_tecnologias_de_gestion_en_el_sector_comercial_minorista.pdf


INE (b) (2012). *Personas que han comprado por Internet en los últimos 12 meses por características socioeconómicas y origen de los vendedores*. Accessed 19 May 2016 of http://www.ine.es/jaxi/Datos.htm?path=t25/p450/base_2011/a2012/l0/&file=04048px

INE (b) (2013). *Personas que han comprado por Internet en los últimos 12 meses por características socioeconómicas y origen de los vendedores*. Accessed 19 May 2016 of http://www.ine.es/jaxi/Datos.htm?path=t25/p450/base_2011/a2013/l0/&file=04036px


INE(c) (2008). *Resultados según la ubicación de los locales por principales magnitudes, y ciudades autónomas y agrupaciones de actividades*. Recuperado el 20 de Mayo de 2016 de http://www.ine.es/jaxi/Datos.htm?path=t09/e01/cnae09/a2008/l0/&file=05001.px

INE(c) (2009). *Resultados según la ubicación de los locales por principales magnitudes, y ciudades autónomas y agrupaciones de actividades*. Accessed 20 May 2016 of http://www.ine.es/jaxi/Datos.htm?path=t09/e01/cnae09/a2009/l0/&file=05001.px

INE(c) (2010). *Resultados según la ubicación de los locales por principales magnitudes, y ciudades autónomas y agrupaciones de actividades*. Accessed 20 May 2016 of http://www.ine.es/jaxi/Datos.htm?path=t09/e01/cnae09/a2010/l0/&file=05001.px

INE(c) (2011). *Resultados según la ubicación de los locales por principales magnitudes, y ciudades autónomas y agrupaciones de actividades*. Accessed 20 May 2016 of http://www.ine.es/jaxi/Datos.htm?path=t09/e01/cnae09/a2011/l0/&file=05001.px
INE(c) (2012). Resultados según la ubicación de los locales por principales magnitudes, y ciudades autónomas y agrupaciones de actividades. Accessed 20 May 2016 of http://www.ine.es/jaxi/Datos.htm?path=t09/e01/cnae09/a2012/l0/&file=05001.px

INE(c) (2013). Resultados según la ubicación de los locales por principales magnitudes, y ciudades autónomas y agrupaciones de actividades. Accessed 20 May 2016 of http://www.ine.es/jaxi/Datos.htm?path=t09/e01/cnae09/a2013/l0/&file=05001.px

INE (c) (2014). Resultados según la ubicación de los locales por principales magnitudes, y ciudades autónomas y agrupaciones de actividades. Accessed 20 May 2016 of http://www.ine.es/jaxi/Datos.htm?path=t09/e01/cnae09/a2014/l0/&file=05001.px


Junta de Castilla y león ; FUNDETEC (2010). Libro Blanco de las TIC en el sector comercio Minorista. Santander: Cervatina


Minelli, M; Chambers, M; Dhiraj, A (2013). Big Data, Big Analytics: emerging Business Intelligence and Analytic Trends for Today’s Businesses. EEUU: Wiley


News Center LATAM (2015). 5 razones por las que es momento de hablar por chat con sus clientes. Accessed 4 May 2016 of https://news.microsoft.com/es-xl/5-razones-por-las-que-es-momento-de-hablar-por-chat-con-sus-clientes/#sm.00008x6cioobaf6u82z1kwgeuygq


Ribes, L; Ruíz, JI; Burgos, E; Rivero, F; Solanes, S; Castelló, J ; Valverde, J ; Muñoz, B. Customer experience , (p.p 20-28) Available in http://www.thecustomerexperience.es/descargas.html


marketing-o-unidades-de-medida/http://josefacchin.com/2015/05/12/indicadores-kpi-marketing-o-unidades-de-medida/


Vazquez-Casielles, R; Trespalacios, J.A; Estrada, E; González, C (w.d). Estrategias de distribución y comportamiento de compra multicanal: tendencias y oportunidades para que fabricante y distribuidor rentabilicen sus decisiones de marketing. Asturias: KRK ediciones.

Velilla, J (2015). La experiencia del cliente desde la perspectiva de la marca y la comunicación: Alfaro, E; Velilla, Javier; Bruenetta, H; Navarro, B; Molina, C; Martinez-Ribes, L; Ruiz, JI; Burgos, E; Rivero, F; Solanes, S; Castellón, J ; Valverde, J ; Muñoz, B. Customer experience , (p.p 20-28) Available in http://www.thecustomerexperience.es/descargas.html


