



ANALYSIS OF THE WINE SECTOR

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1. INTRODUCTION

In this research consists in to analyse the wine sector, the innovation projects that are in the current wine sector and analyze consumer attitudes and habits about drinking wine through an empirical analysis.

- Justification

The wine sector is of great importance in our country, especially because it generates great economic value. Spain is the country with the most planted vineyard area in the world and it has 85 production areas of quality wines with Designation of Origin. In addition, it is the world's leading supplier of wine in terms of volume and second in terms of value.

However, the figures for wine consumption not put Spain in a good place, as it becomes the tail of European countries. But the most worrying factor is the low wine consumption among young people aged 18 to 35 years, the study published by SYNOVATE (2009) shows that 45% of respondents agree that know the wine before having 18, because the family environment or celebrations, but only 5.5% of young people between 18 and 25 declare to consume wine regularly and only 10% of young people between 26 and 35 years declares to consume quite often.

With these data it shows that there is a problem among the younger society and consumption of wine. The age at which young people start drinking it advances increasingly and the quantities of alcohol they consumed are greater. It is interesting to analyze because it is a rare drink in the habitual consumption and to raise a number of solutions that can canviar the frequency of consumption.

- Objectives

The main objectives of this work is the knowledge of consumer attitudes wine of the Valencian society. To achieve this goal, it is proposed as a tool, a survey or market research to provide us with data for analysis and thus can arrive at useful conclusions.

- Structure

This research has been structured as follows:

First, a series of theoretical notions about the history of wine as an economic activity, on the types in a more important and the process of winemaking, the wine situation in our country are exposed. Then we will talk about innovation in the sector, where the latest models of innovation are exposed. Finally, there has realized a survey with a sample of people of Valencia. Once the results of the questionnaire made are obtained, they have been analyzed to obtain various useful conclusions for the objectives proposed in this research. Once the findings are obtained, a number of proposals for improvement have been made, with the aim of improving consumption figures, mainly among young people.

In short, in this research, it is expected to know that people consume less wine and what are the faults and prejudices that make the wine is unattractive in the consumption of the population.

2. HISTORY OF WINE AS AN ECONOMIC ACTIVITY IN SPAIN

The wine history is lost in the history of mankind. The first crop of grapes in Spain began has made 3000 years ago (Iglesias, 1995). This section of work the evolution of the Spanish wine sector is analyzed in the last 150 years, in these years happen very important facts such as: the great expansion of exports, the arrival of phylloxera, the production of quality wines in Spain, changes in demand or changes in the technological process.

In the last 150 years, production and marketing of wine has undergone great changes in the world. In the second half of the nineteenth century, the international wine market was formed, in which France had a central position, of its importaciones and exports. France especially exported quality wines and it was a major importer due to the phylloxera plague that devastated the vineyards.

In this context, Spain experienced a major expansion of its exports, both to France as to other destinations. The spectacular results at the outputs the wine, had its counterpart in the descent of the quality in the exported product, most of which can be considered a raw material for *coupagues* with French wine, that is to say, the wines with different characteristics are mixed in order to get another wine having the characteristics of the wines involved in the mix. The change of the French trade policy caused a major crisis in the sector, which was worsened by the arrival of phylloxera. The problems escalated with the low growth in consumption of the industrialized countries of northwestern Europe and protectionism in other continents.

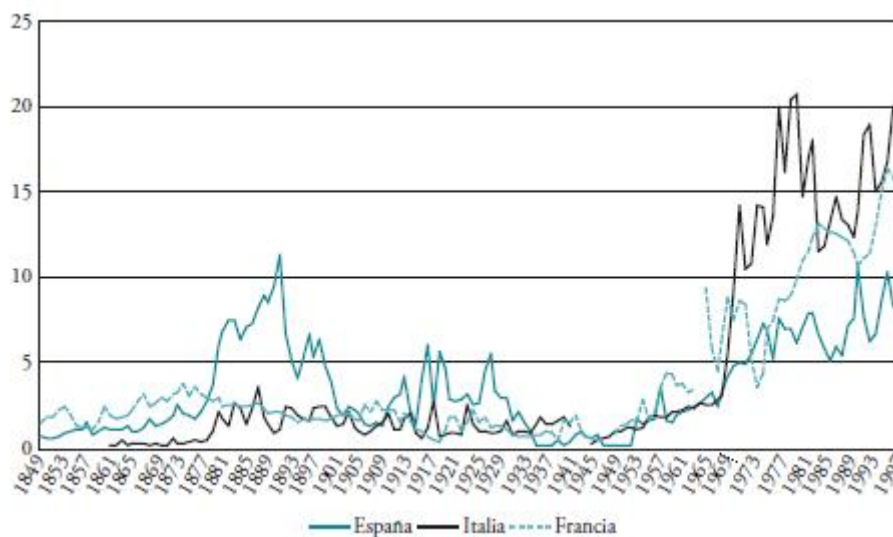
In the first third of the twentieth century, the great work was to replant the entire vineyard which had been affected by phylloxera, without that the domestic demand produce more significant changes and with more serious consequences. The domestic demand was geared mainly to low quality wines. Still, the tariff measures taken by Spain against France generated opportunities f¹or the production of quality wines in Spain. Until the late nineteenth century sherry was the great exception of quality wine and was oriented to the British market, Spanish wines were continued with a low quality. In the last decade of the century, the wineries producing good quality wines grew. The great examples and epicenters of technical change in the Spanish wine industry are: *La Rioja*, with table wine and the *Penedes* with sparkling wine.

¹ This section has been based on: Castillo and Compes (2014).

Post-Civil War decades offer no large changes in the sector, Spain seems trapped in the production of low quality wines, because it is in what had specialized, as a result both of the few changes in the domestic demand as the expansion of the demand for this type of wine in the international market. Consequently, Spain lost positions in international markets and misses significant changes in external demand, such as the strong growth of wine consumption in developed countries.

In the late twentieth century, the sector significantly was transformed, thanks to the technologies available for the production and the imitation of the quality Spanish producers who offered a different product for over a hundred years. Successes in the export of sparkling wine or growing share of the bottled wines of medium or high quality are the clearest signs of changes.

Figure 1. Spanish, Italian and French wine exports (1849-2000). In million hectolitres
(Castillo and Compes, 2014)



Source: Castillo and Compes, 2014

² This section has been based on: Castillo and Compes (2014).

3. TYPES OF GRAPE VARIETES AND WINE MAKING

This section will analyse the type of grape varieties and the process of winemaking. First will be presented, the types of major varieties of grapes in Spain and in the foreign. Then will explain in detail, the stages of the production process of red wine and white wine.

3.1. Types of grape varieties

The grape variety is very important to understand wine, as in some countries differ their wines through the type of grape and consequently people when they go to buy wine, they seek which is the variety used for production.

The grape varieties from Spain and some foreign varieties more important they are:

3.1.1. Red varieties

- *Tempranillo*

It is the most common variety and typical of Spain. It has this name because it is collected before other varieties. It is a grape with very fruity and aromatic touch, aging well in barrel. In Ribera del Duero and Toro it is called “ink of the country” or “ink of the Toro” so you can acquire differential characteristics compared to other regions.

- *Garnacha*

This grape variety is typical in the northeast of the country such as La Rioja, Navarra, Aragon and Catalonia. It is a very fruity grape but not age so well in barrel as the tempranillo.

- *Mencía*

This type of grape is specific in Spain and only grown in the Denomination of Origin Bierzo (*Leon*) and the Denomination of Origin Ribeira Sacea (*Ourense*). It is rough and dry grapes but it has lots of carácter.

- *Monastrell*

This is a typical grape of *Murcia* and of south of *Valencia*. It produces powerful wines, with great structure an alcoholic degree something above normal.

- *Cabernet Sauvignon*

It is the most widespread French grape and grape most commonly used in many of the best red wines in the world. It gives the wine a pleasant acidity and aged remarkably well in barrel therefore, it is widely used in the mixture of varieties to give more structure and duration wines

- *Merlot*

It is characterized by its finesse and its softness without leaving of being aromatic and meaty. It is native to the region of *Bordeaux*, France, where it is the most cultivated variety, after the *Cabernet Sauvignon*.

- *Syrah*

This type of grape is French and is widespread but its characteristics vary depending on where it is grown and the climate. In Spain, for example, there are some wines from *Syrah* with extraordinary power and smoothness, that differ much from the French *Syrah* which they are more acidic and soft. In *Castilla la Mancha* there are wineries that have specialized in their development and in the wine production in *Australia* are produced very interesting wines.

3.1.2. White varieties

- *Verdejo*

It is one of the best white grapes of great quality in Spain. It provides an extraordinarily aromatic wine, which often resembles the smell of tropical fruits. This type of grape is abundant in the southern province of *Valladolid* especially in the municipalities of *Rueda*, where it is considered the main variety of this Denomination of Origin.

- *Albariño*

It is a type of white grape which is only grown in *Galicia*, as well as the wines produced with this grape are those of the Designation of Origin *Rias Baixas*. It produces an acid, dry, refreshing and very particular aroma wine.

- *Godello*

It is a type of grape which is used especially in northwest Spain (*Galicia* and *Leon*). This grape is known from only a few years ago, as previously it was cultivated sparsely and has a capacity of aging in barrels of more than 10 years (Turismo de vino, 2016).

- *Xarelo*

It is a type of white grapes used for the production of cava and mixed with other varieties such as *Parellada* and *Macabeo*. The wine is usually aromatic, balanced, silky and tasty. It can be fermented in barrel, but it does not work as a young wine (Turismo de vino, 2016).

- *Parellada*

It is a type of Catalan white grape. Also it is used for the elaboration of cava together with the *Xarelo* and *Macabeo*. Although this variety is very fine and difficult to care as it is sensitive to disease and to drought (Turismo de vino, 2016).

- *Macabeo (o Viura)*

It is one of the most widespread grape varieties by Spain. It is used to produce slightly acidic, pale and light wines. Traditionally, this grape was mixed with *Xarelo* and *Parellada* to produce cava (Turismo de vino, 2016).

- *Riesling*

It is a grape variety originally from Germany. It is used to obtain dry, fruity, sweet, fresh and scented wines without the need for mixing with other varieties nor need the contribution of oak barrels to produce a good wine. Its production is limited (AzureAzure, 2014).

- *Gewurztraminer*

It is a white grape variety which has a special relevance in France and Germany. It produces dry and aromatic wines and it can produce very dry or very sweet wines. These wines combine well with Asian food (Vinosselección, 2016).

- *Pinot Gris*

It is a white grape variety of French origin, it distinguishes for its floral fragrance and offers delicate wines with citrus, creamy and spaced flavours. Depending on the maturity of the grapes and the winemaking technique, they can be lighter or stronger wines (Grand Cru, 2012).

- *Moscatel*

From this grape you can obtain a dry, aromatic or semi-sweet wine. It can also get a liqueur wine, usually it called mistela in the *Valencia* area (Turismo de vino, 2016).

3.2. Wine Making

Since the sixties the methods of making and aging wines have undergone a major evolution. New methods have been introduced to maintain control on the grape harvest monitoring the primary aromas of the fruit or the order and hygiene that must to keep a hold. Spain in particular, became one of the countries which less investing in innovation, since many wineries were still using traditional methods. Over the years Spain has gone on to have the most modern wineries in Europe.

Each type of wine has different processing methods and different aspects that influence the final result. As: vintage, wine colour or juice extraction.

- Vintage

It is a very important process, as the first selection of the fruit is done at this stage and success will depend largely on the work carried out in this process. The harvest is done during late August, early September and mid-October, when the fruit has acquired the desired degree of maturation. The transfer of the grapes from the vineyards to wineries, also it is very important, because the grapes can not squash neither deteriorate or break, because the grape may lose the juice in and produce undesirable primary fermentations, so it must be done carefully.

- The colour of wine

The vast majority of the grapes used in winemaking have the same coloration in its pulp, regardless of the type of grape. The main difference between the production of red and white wines are the colouring pigments, for example, in the case red wines are in the skin, why it is so important that this colouring matter present in the skins is transferred to the whole mass of the must.

³ This section has been based on: Vinos de España.

- Juice extraction

Juice extraction is a common process that is performed before starting the production process, regardless of the type of wine to be obtained. The remaining clusters vintage are offloaded into a container to proceed to crushed and must be performed precisely, what for it will not tear or break the vegetables and hard elements of a cluster, such as the nugget, the rapones or stalks (vegetable cluster structure) and husks.

A viscous paste composed by crushed grape, broken skins, seeds and stems. This paste is transferred to a series of dams, where beginning the process of developing the type of wine to be obtained. This paste is transferred to a series of dams, where beginning the process of developing the type of wine to be obtained. During transfer the mixture can not produce more breaks and the mixture can not be in contact with air to not have a premature and unwanted fermentation.

3.2.1. Red wine

The process of making red wine will be divided into 8 stages:

- 1) Reception

First through a stripping process it has removed all stalk because in the production of red wine the entire cluster is not used, as color extraction is carried out through maceration and the presence of herbaceous structure containing much potassium, subtracts acidity wines and can often provide unpleasant herbaceous flavors

- 2) Crushing

When the grapes are separated from scratch, they are crushed to extract the juice and is formed a past where the wort is together with the grape skins. This will allow greater maceration that is when the wort and the solids are deposited in a single deposit. Both flavors such as color, found in the skin of grapes, so that during this process wort extract color and aromas. The aromatic and phenolic substances pass from the skins, seeds and sometimes scrapes, the fermenting juice to provide the wine varietal aromas, color and structure, during maceration of wine. The aim is to extract the maximum nice tannins.

3) Fermentation

Red wines undergo two fermentations. The first fermentation is called alcoholic or tumultuosa fermentation. It is a process whereby the sugar of wort becomes ethyl alcohol by the action of natural yeast present in the grape husks (skin) and other elements, plus carbon dioxide release.

Fermentation is one of the key moments in winemaking. This process begins after crushing, when the dough from which we discussed in the previous stage. It is transferred to a deposit and there begins the fermentation. The tumultuous fermentation is so named, because it has a large activity of the yeast that metabolize sugars produce a large amount of carbon dioxide.

Carbon dioxide pushes up the skins, forming a barrier called hat. This barrier should be soaked to promote dissolution of dyestuffs and other elements of the wort, to it, this liquid is withdrawn from the bottom of the deposit via hose and is introduced from the higher. In addition, for that the hat is not be made excessively compact, it must be removed from time to time, this is called punching down.

The fermentation will take more or less time depending on the type of wine to be obtained, usually between eight and twelve days between 26°C and 29°C temperature. Then the liquid is extracted from the deposit and moves to another.

Sulfur dioxide is usual to use it before this process, to override oxidases which are enzymes that degrade the color of wine, it found in grapes and also help to remove the wild yeasts present on the grape skins.

The second fermentation called malolactic, begins when the liquid is transported to another deposit with wort and separate solid matter, where fermentation ends, here malic acid, which it is the stronger it becomes softer and unctuous others such as lactic acid.

This second fermentation of the wine provides fineness and softness. In this phase the wort also must be removed manually, so the liquid continues to flow, this operation is known as roll up.

⁴ This section has been based on: Vinos de España.

4) Pressing

After fermentation, when the liquid is transferred in the reservoir a solid part stays, which are the remains of the grapes and they are steeped wine. This wort is extracted using dams. The dams force the remains until almost dry. The wine obtained is called wine press characterized by being rich in coloring matter and tannins. But, above all, this wine should not be mixed with others.

5) Racking

It is to separate the wine from the lees accumulated in the bottom of the deposits and barrels. Lees are the remains of yeasts and other solid substances, which are at the bottom of the vinarios containers. These sediments not must be much time together with wine to go decreasing the turbidity.

This process aerates the wine, as it is convenient to help a good completion of fermentation and wine stabilization. This process allows the evaporation of volatiles

Sulfur dioxide is used for cleaning the tanks, generally, a tablet of 5 grams' sulfur is burned, to prevent the vinegary bacteria and mold.

6) Clarification

Many remains are removed from the wine during decanting, but smaller or lighter debris are not removed. these substances are removed with to added to wine the colloids substances of vegetable and animal origin.

Formerly, this process was done with animal blood or egg whites, gelatins are currently used. These gelatins are responsible drag all suspended impurities containing wine, to the bottom of the deposit. For a perfect clarification are needed three weeks.

This step sometimes is followed by a filtering, which involves passing the wine through a porous element to remove resistant particles at clarification process. With this debris are avoided in the bottom of the bottle.

⁵ This section has been based on: Vinos de España

7) Ageing and Upbringing

After completing the above processes, the wine is selected by qualities or bottled, if immediate trade is decided, as a young wine or wine goes into barrels to complete the processes aging and breeding, as vintage wine, reserve wine or wine great reserve (Vinos de España).

After completing the two fermentations, the wine is stored in oak barrels, which provide flavors and aromas to the wine, depending on the type (French, American ...) and the toasting level that he has given to the wood (Vinos de España).

The tanks, typically, are stored stacked in in underground cellars or fresh stores, where the wine is aging, stabilizing their color and enriching their aromas (Vinos de España).

8) Breeding in the bottle

This process involves the permanence of the wine inside the bottle in the room from the winery. It is a reductive breeding process unlike barrel aging which is oxidative (Vinos de España).

9) Bottling

The corking dispersed air in the wine, that causes a deterioration of wine, until once elapsed time, oxygen is taken up by wine and within months becomes stabilized (Vinos de España).

3.2.2. White wine

The process of making white wine is simpler and less complex than the preparation of red wine.

The process of making red wine will be divided in 4 stages:

1) Reception and separation the musts

The difference between the drafting of red wine and white wine preparation, it is that red wine should not to separated the grapes of the husk, but let it drain all together. In making white wine, the grapes must be separated from the husk of grapes and the first must obtained it is called, according to the zones, wort yolk or wort of flower or tear (La Página de Bedri).

This first must obtained is of higher quality, its main features are: a great lightness and finesse, aromatic, soft, floral and fruity (La Página de Bedri).

2) Drained and pressing

Once obtained the first wort, the pasta remains much stronger of fluid loss and it is subjected to pressure from increasingly strong that is called "first", "second", "third" or "musts press' intensity, this depends the pressing from which it is obtained. The musts that have been obtained, subsequently will ferment separately, to obtain different types of wines.

The remnants that remain in the press are marcs, which contain sugar because they have not fermented and they are called sweet or fresh pomace. These marcs can be subjected to different processes, giving rise to marcs and other alcohol derivatives.

Before starting the process of fermentation, the wort should be debourbage this process consists of to let rest the wort, but with special care, to that the wort not begin to ferment.

The solids materials are falling to the bottom by its own weight and, later, the clean musts are decanted and transferred to stainless steel deposits for fermentation, following a meticulous control.

3) Fermentation

The clean must of solid matter is fermented at a temperature ranging between 18 and 22 degrees. In this process is achieved that both the splitting of the sugars into alcohol as the release of carbon, it makes in a slow and deliberate manner.

The aim of the process is to preserve the aromas of the wine and, therefore, get a higher quality. The amount of sugar that is left in the must and the temperature is very important to control them. A rise in temperature could result the death yeast and an unwanted stop in the fermentation. This process takes between 10 and 15 days and it ends when the wine contains between 1 and 2 degrees of sugar per liter. At this point the wine is completely dry, with little presence of sugars. However, completely dry white wines are increasingly scarce, since, usually, the white wines maintained a certain proportion of residual sugars to achieve greater flavor intensity.

⁶ This section has been based on: La Pàgina de Bedri.

When the wine is fermented without the skins contact are produced very light and clean wines. This fermentation is called: fermentation in virgin. Currently the must with marc it is starting to quiet to macerate, to slow down of the fermentation with the cold. The wine obtained in this process has more body, more intense sensations and aromas more powerful. In addition, this procedure favors the evolution in the bottle and lengthens life of the wine.

4) Racking and Clarification

When the fermentation process has finished, the must is subjected to two or three rackings for to removed the solid debris that it could have. This operation must be performed low temperature, to avoid contamination by unwanted microorganisms. Because of this, the rackings must be made between the months of November and January. After selecting the wines of different qualities, itself make different mixtures with those wines, to obtain the desired wine.

The last step in making wine, before bottling is the clarification by substances to drag suspended matter, which they had been able to avoid the rackings and finally the filtering.

Finally, the wines are selected and separated by qualities, so that, through appropriate mixtures, each wine is destined for a type corresponding of desired function.

⁷ This section has been based on: La Página de Bedri.

4. INDUSTRY CHARACTERISTICS

4.1. The wine sector in Spain

The Spanish wine sector is of great importance because of three issues: the economic value it generates, to the population that occupies and the role for environmental conservation (ICEX, 2015).

As for the area of vineyards planted in Spain, there are 963,644 hectares (MAGRAMA, 2014). It ranks as the leading country in Europe and worldwide. This extension represents 30% of the total European area while France has about 23% and Italy 22%. It has been estimated that in Spain around 97.4% of the planted area is used for the manufacture of wine, 2% for table grapes, 0.3% for the production of raisins, and nurseries remaining 0.3% (ICEX, 2014).

Spain is a very privileged place for producing wines with very different characteristics thanks to the geographical location, the variety of soils and climatic differences.

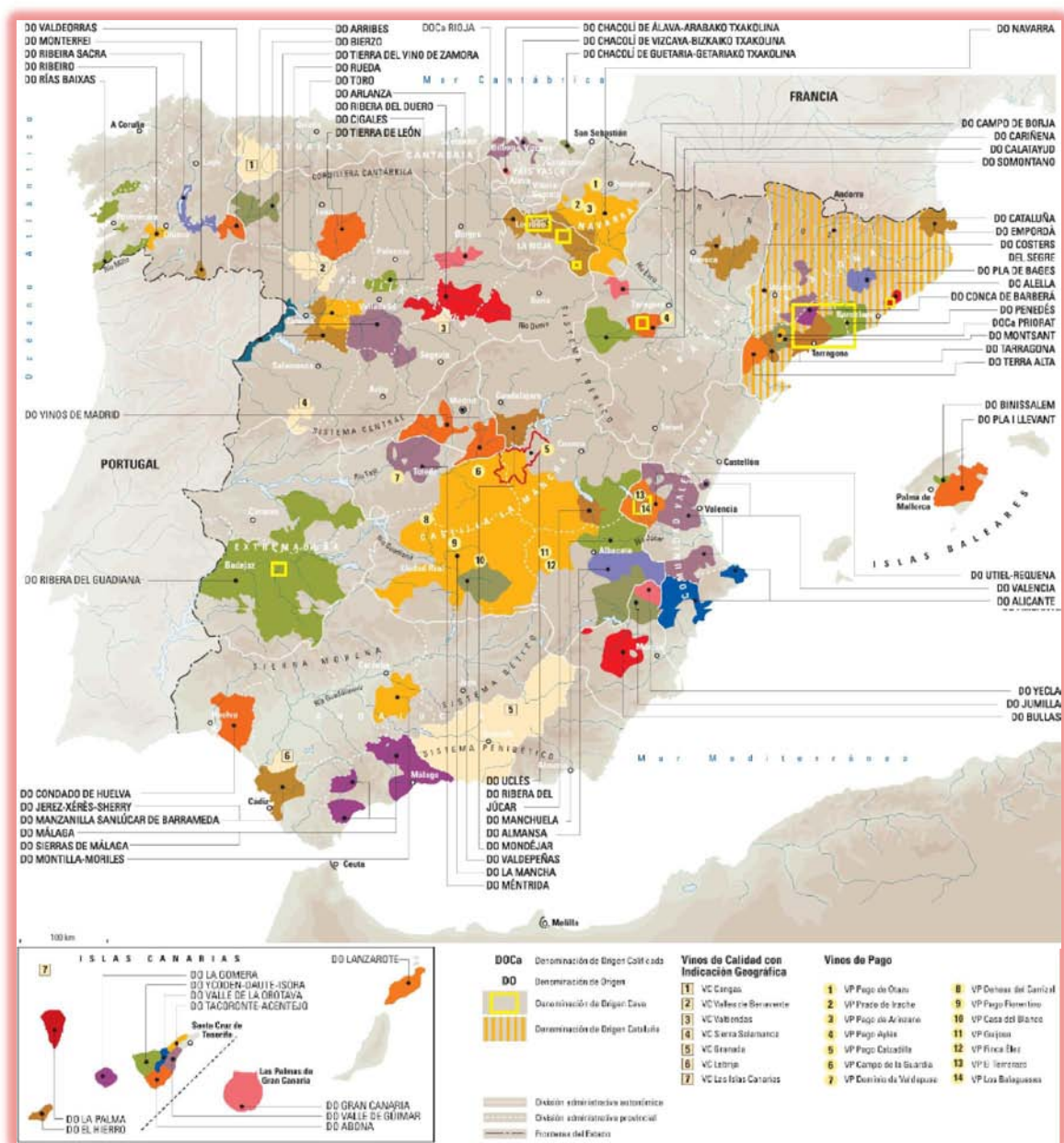
4.2. Protected Designations of Origin and Protected Geographical Indications.

Protected Designations of Origin (PDO) and protected geographical indications (PGI) form the system used to recognize the differing quality of the wines in our country. The quality is recognized by the own and differential characteristics, which are due to: the geographical location of where the raw materials are produced, where the products are developed and the influence of the human factor (MAGRAMA, 2014).

The advantages and disadvantages of belonging to a determined (PDO) or (PGI) are:

- Advantages (MAGRAMA, 2014).
 - The penetration of products in both domestic and international markets is easier.
 - The advertising and the offer of the product at a national and international level increase.
 - Products and processing thereof have a certain protection at national level and for an indefinite period. That is, the (PDO) and (PGI) are used as legal framework.
 - The organization of certain productive sector is furthered and favored.

- A level of quality and specific characteristics are guaranteed for the consumer.
- Disadvantages (MAGRAMA, 2014).
 - A brand of wine can lose value if it belongs to a (POD) or a (PGI) which is not valued.
 - The barriers to entry to belong to a (POD) or (PGI) are very strict.



Currently, the terms used to indicate that a wine belongs to a Protected Designation of Origin or a Protected Geographical Indication are: (Ministerio de Agricultura, Alimentación y Medio Ambiente, 2012)

Protected Designations of Origin

- Designation of Origin
- Qualified Designation of Origin

Quality wine with Geographical Indication

- Wine of *Pago*
- Qualified wine of *Pago*

4.2.1. Protected Designation of Origin (P.D.O)

The products listed under this name, they are protected by legislation of the European Union. This regulation ensures compliance with more requirements than other products (AEC).

The Spanish Denominations of Origin Protected most important are:

Table 1. Distribution of the marketing of D.O.P. Spanish, campaign 2013/2014

P.D.O	FOREING TRADE		DOMESTIC TRADE		TOTAL
	hl	%	hl	%	hl
RIOJA	1.750.953	63	1.016.075	37	2.767.028
CAVA	610.778	34	1.199.105	66	1.809.883
RUEDA	578.528	86	55.528	14	674.056
LA MANCHA	441.614	69	200.767	31	642.381
RIBERA DEL DUERO	571.084	89	69.001	11	640.085
VALDEPEÑAS	338.818	60	229.535	40	568.353
CATALONIA	268.337	51	259.340	49	527.677
VALENCIA	119.888	26	338.673	74	458.561
CARIÑENA	106.252	26	303.257	74	409.509
NAVARRA	257.589	64	143.327	36	400.916

Source: Own elaboration from data of MAGRAMA (2014)

4.2.2. Designation of Origin (DO)

The Designation of Origin is the name of a place which has been legally recognized to designate wines that fulfill the following conditions (MAGRAMA, 2014).

- The wines had to be made in the region or place of the Designation of Origin with grapes exclusively from that particular geographical area.
- The wines must have special characteristics and a quality that can be obtained only thanks to the geographical environment in which they have developed.
- The wines must have a high reputation for its origin on the market.
- The wines for have the recognition of Denomination of Origin, they have had to be recognized from at least 5 years before as a product of that area

The Denominations of Origin existing in Spain are: (Ministerio de Agricultura, Alimentación y Medio Ambiente, 2012)



- *Calatayud*
- *Campo de Borja*
- *Cariñena*
 - *Cava*
- *Somontano*

ARAGON



- *Monterrei*
- *Rias Baixas*
- *Ribeira Sacra*
 - *Ribeiro*
- *Valdeorras*

GALICIA



- *Abona*
- *El Hierro*
- *Gran Canaria*
- *La Gomera*
- *La Palma*
- *Lanzarote*
- *Tacoronte-Acentejo*
 - *Valle de Güimar*
- *Valle de la Orotava*
- *Ycoden-Daute-Isora*

CANARY



- *Wines of Madrid*

MADRID



- *Arribes*
- *Arianza*
- *Bierzo*
- *Cigales*
- *Ribera del Duero*
 - *Rueda*
- *Tierra de León*
- *Tierra del Vino de Zamora*
 - *Toro*

CASTILLA Y LEON



- *Bullas*
- *Jumilla*
- *Yecla*

MURCIA



- *Cava*
- *Chacolí de Álava. Bizkaino Txakolina*
- *Chacolí de Bizkaia-Bizkaiko Txakolina*
 - *Chacolí de Getaria-Getariako Txakolina*

BASQUE COUNTRY



- *Alicante*
- *Cava*
- *Utiel-Requena*
- *Valencia*

COMUNIDAD VALENCIANA



- *Alella*
- *Cataluña*
- *Cava*
- *Conca de Barberá*
- *Costers del Segre*
 - *Empordá*
 - *Montsant*
 - *Penedés*
- *Pla de Bages*
 - *Tarragona*
 - *Terra Alta*

CATALUÑA



- *Cava*
- *Jumilla*

PLURI-COMUNITARIAS



4.2.3. Qualified Designation of Origin

- The wines to belong to a Qualified Denomination of Origin, on the one hand they must meet the requirements of the PDO and the following requirements: (MAGRAMA, 2014).
- Ever since the mark was recognized as a designation of origin, at least 10 years have had to spend.
- All the bottled wine must be marketed from the enrolled wineries and located in the specific geographical area.
- A more comprehensive control over the quality and quantity of wine should be carried out from production to marketing the wine, with a physico-chemical and organoleptic controls of homogeneous lots to limited volume.
- The law prohibits to have wines in the same warehouse which belonging to a Denomination of Origin Qualified and other wines which not pertenecen. Unless these wines are Qualified Payment located in that territory.
- Wine producers must have a cartographic delimitation, by municipalities, of land suitable to produce wines entitled to the Denomination of Origin Qualified.

In Spain there are only two Qualified Denominations of Origin: *Rioja* and *Priorat* (Vivanco).

- La Rioja gets the Qualified Denomination of Origin Qualified in 1991.



The wine region of *La Rioja* have three zones of production:

- *Rioja Alta* (municipalities of *La Rioja* and of the province of Burgos).
- *Rioja Baja* (municipalities of *La Rioja* and Navarre).
- *Rioja Alavesa* (municipalities in the province of *Alava*, Basque Country).

⁸ This section has been based on: MAGRAMA, 2014.

- Designation of Origin *Priorat* achieved in 2009 its mention as Qualified Denomination of Origin (MAGRAMA, 2014).



The wine region of *Priorat* wines is in *Tarragona* and consists of nine municipalities:

- *Bellmunt del Priorat*
- *Gratallops*
- *El Lloar*
- *El Molar*
- *La Morena de Montsant Poboleda*
- *Porrera*
- *Torroja del Priorat*
- *La Vilella Alta*
- *La Vilella Baixa*

4.2.4. Quality Wines with Geographical Indication.

The wines are produced and processed in the region, area, locality or place with grapes belonging to the same place. Quality, reputation or characteristics of production, reputation or aging wine have to give thanks to the geographical environment of the particular place or human factor (MAGRAMA, 2014).

4.2.5. Wines of *Pago*.

The wines are original from a *Pago*, it is a place or rural site with different characteristics and its own microclimate, which distinguish it the wines of their environment. The wines are made with traditional and notorious forms in the cultivation of vineyards, from which wines are obtained with a unique personality and whose maximum extension are limited reglamentariamnte by the competent authority, according to the criteria of each region (MAGRAMA, 2014).

If the payment name is typically used for 5 years in the market to identify the wines produced in that particular place, it is understood that there is a notorious linkage with the culture (MAGRAMA, 2014).

Table 2. Areas Wines of Pago in Castilla La Mancha

CASTILLA LA MANCHA	<i>Campo de la Guardia</i>
	<i>Casa del Blanco</i>
	<i>Dehesa del Carrizal</i>
	<i>Dominio de Valdepusa</i>
	<i>Finca de Élez</i>
	<i>Guijoso</i>
	<i>Pago Florentino</i>

Source: Own elaboration from data of MAGRAMA (2014)

Table 3. Areas Wines of Pago in Navarre

NAVARRRE	<i>Pago de Arinzano</i>
	<i>Pago de Otazu</i>
	<i>Prado de Irache</i>

Source: Own elaboration from data of MAGRAMA (2014)

4.2.6. Wines of Qualified Pago

When wine is paid in full within a DOCa, you can get certified wine qualified payment, provided it meets the requirements of belonging to a DOCa, and is enrolled in it. The grape production, processing and bottling of wines must be made within the payment. (MAGRAMA, 2014).

Table 4. Areas Wines of Qualified Pago in Andalusia

ANDALUCIA	<i>Granada</i>
	<i>Lebrija</i>

Source: Own elaboration from data of MAGRAMA (2014)

Table 5. Areas Wines of Qualified Pago in Castilla y Leon

CASTILLA Y LEON	Sierra de Salamanca
	Valles de Benavente
	Valtiendas

Source: Own elaboration from data of MAGRAMA (2014)

Table 6. Areas Wines of Qualified Pago in Principado de Asturias

PRINCIPADO DE ASTURIAS	Cangas
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Source: Own elaboration from data of MAGRAMA (2014)

5. INNOVATION

In this section we will explain how innovation affects the wine sector. First we introduce an innovation with a theoretical definitions and then, we will put the most peculiar and present examples of innovation worldwide.

5.1. The Concept of Innovation

In this field we also find many meanings about this concept. We will state now the ones we believe are the better ones, given their accuracy:

According to the University of Melbourne, innovation is “The practical translation of ideas into new or improved products, services, processes, systems or social interactions”.

“Innovation is the generation of a new idea and its implementation into a new product (good or service), process, new marketing method, or organizational method or practice”. (Urabe, 1988)

It is widely accepted that the term innovation refers to both the concept of generating ideas as well as the process of implementing them, so that all the definitions about this concept are reduced to the following scheme:

INNOVATION = Generation of ideas + Implementation

5.2. Typology of Innovation

It is important to know the charts of the different types of innovation as it enables us to take a wider look at the existing possibilities to innovate and the difficulties any firm can come across. Given different types of innovation require different kinds of knowledge (Flor, 2014:15).

- **Innovation depending on degree of novelty.** Incremental Innovation is the one that improves a product or a service that already exists by adding extra value to it. Radical Innovation is the one that stands for a rupture with what is already established.
- **Innovation according to technology changes or changes in meaning as well as on the degree of novelty.** According to Verganti (2008) innovation may concern a product’s functional utility, its meaning or both. Moreover, functional innovation may imply an incremental or radical improvement of technical performance, also meaning innovations may be more or less radical.

- **Product, Process, Marketing and Organizational Innovation.** The OECD (2005) classifies innovation in four categories, which are reflected in the chart:

Table 7. Product, Process, Marketing and Organizational Innovation

Categories of Innovation	Definition
Product Innovation	<i>“The introduction of a good or service that is new or significantly improved with respect to its characteristics oriented uses”.</i>
Process Innovation	<i>“The implementation of a new or significantly improved production or delivery method (including significant changes in techniques, equipment and/or software)”.</i>
Marketing Innovation	<i>“The implementation of a new marketing method involving significant changes in product design or packaging, product placement, product promotion or pricing”.</i>
Organizational Innovation	<i>“Organisational innovation means the implementation of a new organisational method in the undertaking’s business practices, workplace organisation or external relations”.</i>

Source: Own elaboration

5.3. The Difussion of Innovation. Stages

According to Rogers (1983), diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system. This process of diffusion consists of 5 stages:

Knowledge: person becomes aware of an innovation and has some idea of how it functions.

- **Persuasion:** person forms a favorable or unfavorable attitude toward the innovation.
- **Decision:** person engages in activities that lead to a choice to adopt or reject the innovation.
- **Implementation:** person puts an innovation into use,
- **Confirmation:** person evaluates the results of an innovation-decision already made.

Later on, Damanpour (1991) simplified these five stages into two: beginning and implementation.

5.4. The Concept of Technological Innovation

The process of technological innovation is defined as the set of technical, industrial and commercial stages which lead to a successful launch in the market of new products and services or to the commercial use of new technical processes (Escorsa and Valls, 2004). It is a process which describes a complex activity, diversified, with several components interacting, which work as sources of new ideas, and it is very difficult to anticipate the consequences that a novelty may have (Escorsa and Valls, 2004).

According to Escobar, (2000), the overall activities of technological innovation allow:

- Introduce new or improved in the domestic or foreign market.
- Introduce new or improved services
- Implant new or improved production the processes or procedures
- Enter and validate management techniques and new or improved organizational systems.

5.5. The Innovation in the Sector

Despite the great results of the Spanish wineries during the past 2014 and 2015, the wine sector is reaping continued declines in consumption figures in our country. Wine consumption per person has fallen by 15% between 2000 and 2012, which materializes in 19.9 liters of wine of person. (Ródenas, 2015)

Therefore, the wine industry is a mature sector in the Spanish market. Because of this reason the Spanish wineries have had to plunge on the internationalization of their business and this has caused them great success. (Ródenas, 2015)

The wineries do not live only for export. The wineries should start thinking about developing new business opportunities, through product innovation, service, customer experience or business model, because doing always ditto ensures failure long-term business. (Ródenas, 2015)

The wine sector is a business totally cutting edge, since it is constantly updating and incorporation of professional and technical resources needed to meet the increasingly specialized demands, this has made many wineries at national and international level have to adapt to changing market to continue taken great importance. (Ródenas, 2015)

Some of the innovative projects in the wine sector are:

1- Innovate in process

The innovation process is probably the most worked in the sector. In this sense, there are very interesting experiences, such as the aging of the wine in the sea, which is called "submarine wines" or the use of drones to control temperature and to the degree of grape sugar (Ródenas, 2015).

- Submarines Wines

This is wine bottles found in sunken ships at sea. Over thousands of submarines subsidences and submarines findings has been shown that the evolution experienced in these wines has been a different aging experienced on land. The wineries select the bottled wines and deposit them in a submerged structure where underwater conditions are monitored. The conditions that make the sea is a good place for aging wine are temperature and water pressure, which are constant, and the absence of light and noise or movement of the sea and salinity, which create environment optimal for aging some types of wines. These wines are expected have a longer life and travel.

The result of this process is a wine that evolves very slowly, leading to products with characteristics of young and fresh wines. Apparently the wine acquires a delicious point mineral salt and a special vessel. The wine has aromatics flavors with a differents notas. It is much softer, rounder, with greater chromatic and aromatic intensity.

Examples of wines aged under the sea:

- *Bodega Mira, Napa Valley*
- *Bodega Bisson, Italy*
- *Chateau Larrivet-Hau-Brion, France*
- *Chateau Champs des Soeurs y Abbaye Sainte Eugenie, France*



⁹ This section has been based on: Bosch, (2013).

- Using drones to control the temperature and the degree of grape sugar.

The drones are equipped with thermal cameras, multispectral, able to "see" in wavelengths that the human eye does not perceive, these devices are characterized by a very powerful power of visualisation, that from aerial photographs, can examine every corner of the vineyard. This tool can produce with a high-resolution the real state of the leaves of the vineyard and with that information to analyze the health status of each sheet, its water stress, its content in chlorophyll or anthocyanins, potential output or the quality inherent upon fruit that is fed upon cluster. It also allows control over the vineyard and look



after the clamps individually when pruning, dosing of fertilizers and pesticides or knowledge of production and the quality of each clamps when in the vintage and to separate the qualities at the time of collection (Wine Spectador, 2016).

2- Innovating the business model.

Innovation in business model is always one of the most disruptive, that is to say, it generates very important and decisive changes. New technologies and new applications (Ródenas, 2015).

And in the consumer sector, innovation in business model is closely linked to the innovation in channel in recent years, with the increased use of internet as a sales channel. In fact, in recent times they are emerging small wineries which market with wines and champagne, which no longer believe in the typical model physical store and trust their sales to other channels such as internet, the retail home delivery... And although it is a bit risky, in some cases, there is even talk of telesales or catalog (Ródenas, 2015).

A great example to open new marketing channels and develop new business models would be to Enolobox, it is a startup that allows customers to find the best Spanish wines of the most original and fun way (Ródenas, 2015).

The customer has to subscribe on the website and with a price of 21 euros per month, the customer will receive a monthly box with 3 surprise wines, always ensuring a minimum guarantee of 30% discount (Ródenas, 2015).

So Enolobox gives the opportunity to receive the product at home, accompanied by a specialized information on the wine to consume without having to go to the supermarket, specialty shops or wineries. It also gives the possibility to get points to get free Enolobox simply by answering surveys wines.



3- Innovating in the channel: *Vivino* and *Delectable*

Many times, innovation comes from the hand of mobile technology. In this case, two great examples of applications in the channel innovation are: *Vivino* or *Delectable*. The two applications contain a scanner and with a simple picture such as the bottle label it recognizes the wine so that consumers can know exactly which wine they are drinking, properties that have, know opinions of experts and other users based to consumer tastes or you can also receive some botellasde wine at home.

The Delectable application, apart from having the scanner to analyze the wine, you can even comment which wines have liked most and which would be accompanied. In its application there is a section called "Pizza" in which there are suggested various wines that combine depending on the ingredients.



¹⁰ This section has been based on: Ródenas, (2015)

But not all are mobile applications, a great example of this is the project that has started at the airport in Cape Town, where a company has built its wineries, particularly in the arrivals hall, this has given it access to millions of potential customers (tourists), and also a great marketing. This news has come to occupy the covers of various media worldwide (Ródenas, 2015).

4- Innovate in product offering

In this section one of the most important terms is the packaging, aims primarily attract the attention of customers and be the main window of communication to the consumer. The product presentation is critical, since it can determine that the product success or failure (Ródenas, 2015).

There are many manufacturers who are trying to break with the traditional container and opt for bottles with different shapes and colors and different and special labels, of the importance of design and even changing the format and trying to market the "canned wine", as in the case of Union Wine Company among many others (Ródenas, 2015).

There are 14 examples of different companies in the world that have led wine marketing to the limit. Gaining some surprising, original, funny and eye-catching designs of bottles, bags and cans for wine limited edition designs (VINOPACK, 2014).

1) Homer y Marge Simpson - Wine or maybe not? - New York – United States

This design company does not yet have a supplier of wine to its market debut (VINOPACK, 2014).



2) Couleur Nouveau – McCann Vilnius, Vilna – Lithuania



This company annually creates a packaging design limited edition for the latest crop of Beaujolais. In this case has the advantage that red wine stains teeth and the agency winks entitled "Couleur Nouveau" in the can of purple paint and its corresponding teeth as logo.

3) Pinot Noir and Pinot Gris Underwood canned – Oregon Union Wine Company, United States

Producer Oregon Union Wine Company broke its traditional packaging with the launch of its canned wine *Pinot Noir* and *Pinot Gris*. A wine canned beer for practical use and saves the company 40% in packaging costs.



4) Bag in Bag – Vernissage Sofia Blomberg – Stockholm, Sweden



This release has permeated the thinking of modern and curious consumer of wine with a feminine touch. It has a capacity of 1.5 liters of high quality wine to French wine region of *Pays d'Oc*.

¹¹ This section has been based on: VINOPACK (2014)

5) Naturally Veuve Clicquot – Cédric Ragot - Reims, France

It is the first isothermal container 100% biodegradable created for *Champagne*. The container is able to keep cold a bottle that has previously been cooled until two hours. It is easy to carry thanks to its handle.



6) Paper Wine Bottle – Stranger and Stranger – New York, United States



In 2011 the first bottles of paper in the world were created. Bottles compressed recycled paper, printed on natural inks and recyclable inner sheath as wine boxes. They are tough and rigid; they are able to last 3 hours in a bucket.

7) La Piquette – Caserne – Quebec, Canada

The French term "Piquette" means a cheap and ordinary wine. In a study the French-Canadian, Caserne, he made a original packaging, which seem a cork a table wine. This small product of wine fictional in powder for cooking, it accompanied with a mini glass of wine to make the right amount.



¹² This section has been based on: VINOPACK (2014)

8) “Sviezias Kraujas (Fresh Blood)” – Astos Dizainas McCann Erickson – Lithuania

The intention is to convey the concept with fresh ideas, young people, energy and positive charge the containers of transfusion for vampire’s wine, it has had an excellent and sympathetic acceptance.



9) Possesion The Unoholy Wine Collection – Norway



It is a collection of limited edition with profane wines composed of: Evil Demon – Bloody Shiraz, Haunting Ghost – Spooky Cabernet and Old Witch – Curser Pinot Noir. But that's not all, each wine has its own container box coffin

10) Rethink Wine – Vancouver, Canada

This design is inspired by the idea that many of the world's problems have been solved with a glass of wine. Hundred bottles covered ideas and its chinks hung neck, an invitation to a collaborative design process between the client and the agency.



¹³ This section has been based on: VINOPACK (2014)

11) Square Wine Bottle – Stranger and Stranger – New York, United States.



They are called "California Square", they launch into the world of innovation with the first range of wines in square bottles. They have square shape, retro graphics and screen printed label dates back to ancient liquor bottles.

12) Wine Pouch (R)evolution – Reverse Innovation – Milan, Italy

It is a suggestive and elegant design with sophisticated materials in black, it has managed to restore the bad image of the "bag-in-box", where utility and aesthetics are not mutually exclusive.



13) Zaha Hadid – Teardrop – London, United Kingdom.



Teardrop bottle is inspired by the shape of a drop of wine. The concave groove and the surface of the bottle with the same curvature, allow the fastening of the bottle. Established with a software based in NURBS and glass material formed in molds of cast iron.

¹⁴ This section has been based on: VINOPACK (2014)

14) Vinhos Lagosta – Serious About Wine, Portugal

Directed to recreate and modernize the traditional bottle for the most sophisticated audience. The project also includes new packaging for green Vinho. Name and design for two refreshing wines, Vinho Rosé and green, which pasted with all kinds of seafood. (VINOPACK, 2014).



5- Innovating the customer experience

Is very fashionable now to outsell more experiences that products. The concept of taking wines can be repositioned, for example, organised blind tastings as the company Vinoaciegas has done or other companies as Eventoplus has collected some of the most significant examples regarding activities to enjoy good wine. Some of the most original activities: (Ródenas, 2015).



- Wines and Music

For the younger ones, they have devised a modern tasting, where young people have to seek the best sensory association between four young wines and four musical rhythms. The aim of the fun activity is to promote awareness and moderate wine consumption among young people (Ródenas, 2015).

- The Wine Academy

Here participants play to be oenologists and they are divided into different groups to promote and sell their own wine. Each team owns an imaginary winery in southern France, where they produce different varieties of grapes. In addition to creating your own wine, each team has to design its own commercial and marketing strategy and even they should to design the type of label for to package. The activity ends with a blind



tasting of different wines made for different teams to choose the best and the worst wine (Ródenas, 2015).

- Let's play to be Winemakers

The aim of this activity is to promote cohesion between teams and decision-making, it has a stage, where "winemakers" using different strategies such as: buy land, strains and grapes, with the aim of producing the best possible wine and get the best return (Ródenas, 2015).



1. EMPIRICAL ANALYSIS

To perform this analysis, we have chosen a series of questions about wine consumption in our community. The sample size is 100 respondents, of which 39 are men and 61 women aged between 18 and 60 (approximately).

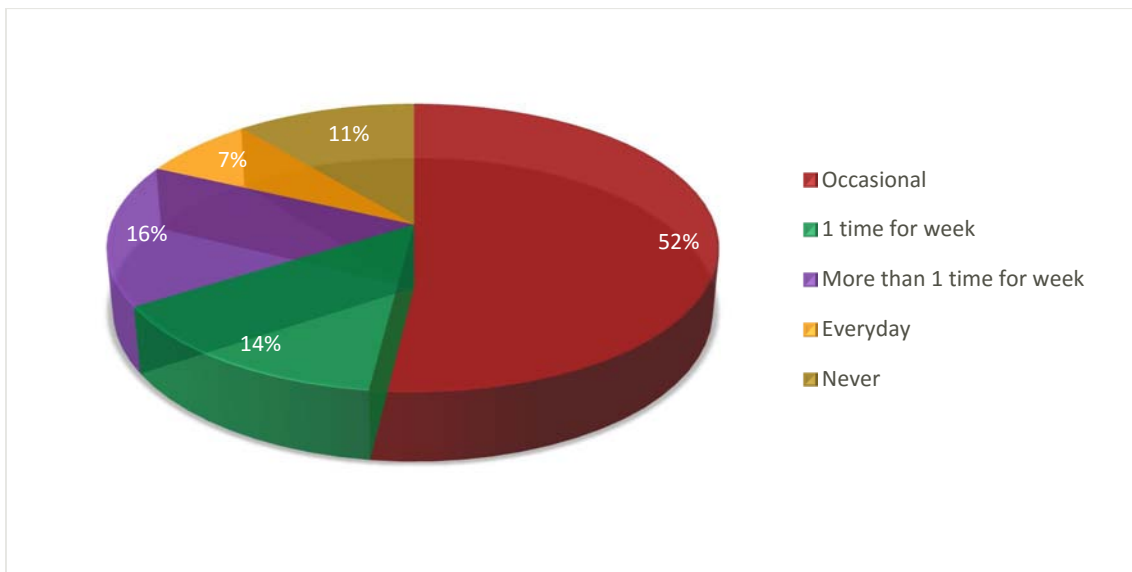
1.1. Questions about the attitude of wine consumption

Table 8. Percentages of often of consumption

P.1. How often do you consume wine?				
Occasional	1 time for week	More than 1 time for week	Everyday	Never
52%	14%	16%	7%	11%

Source: Own elaboration

Figure 2. Distribution of the frequency of consumption



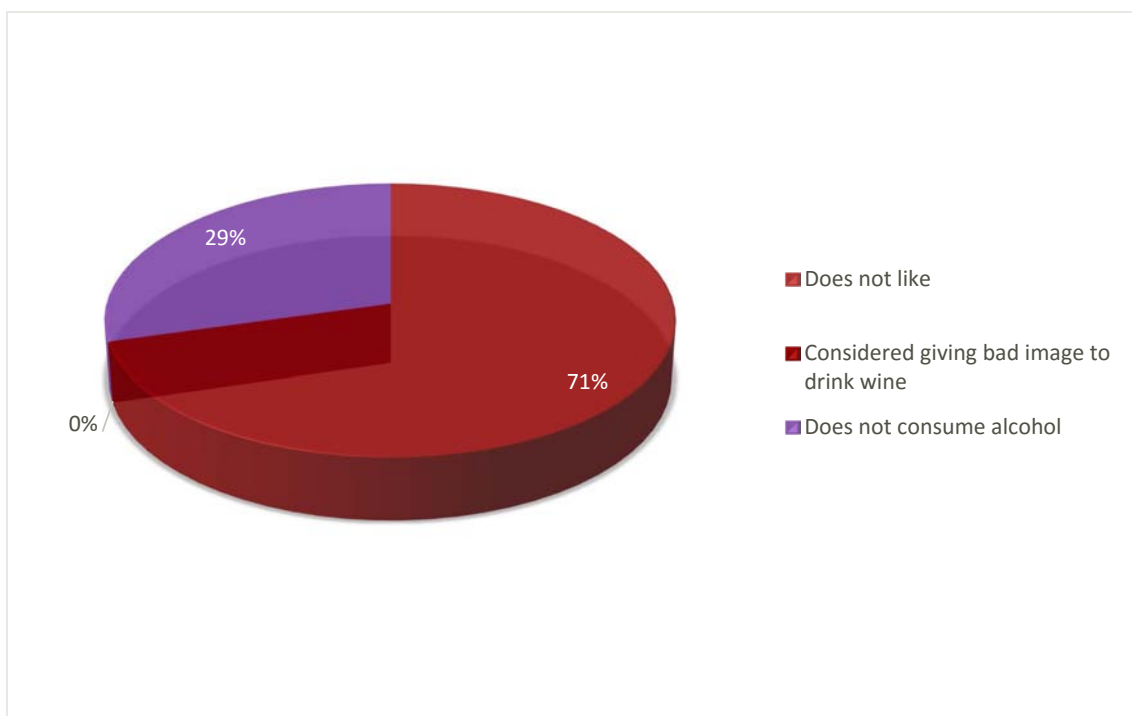
Source: Own elaboration

Among the surveyed population it has been found that 52% consume wine occasionally, followed by 16% who consume wine more than 1 time per week and 14% consumed wine 1 time per week. Only 7% of the population are consumers of wine every day. And finally 11% do not consume wine.

Table 9. Percentages of because people do not consume wine

P.2. If ever. Why?		
Does not like	Considered giving bad image to drink wine	Does not consume alcohol
70.6%	0%	29.4%

Source: Own elaboration.

Figure 3. Distribution of because people do not consume wine

Source: Own elaboration

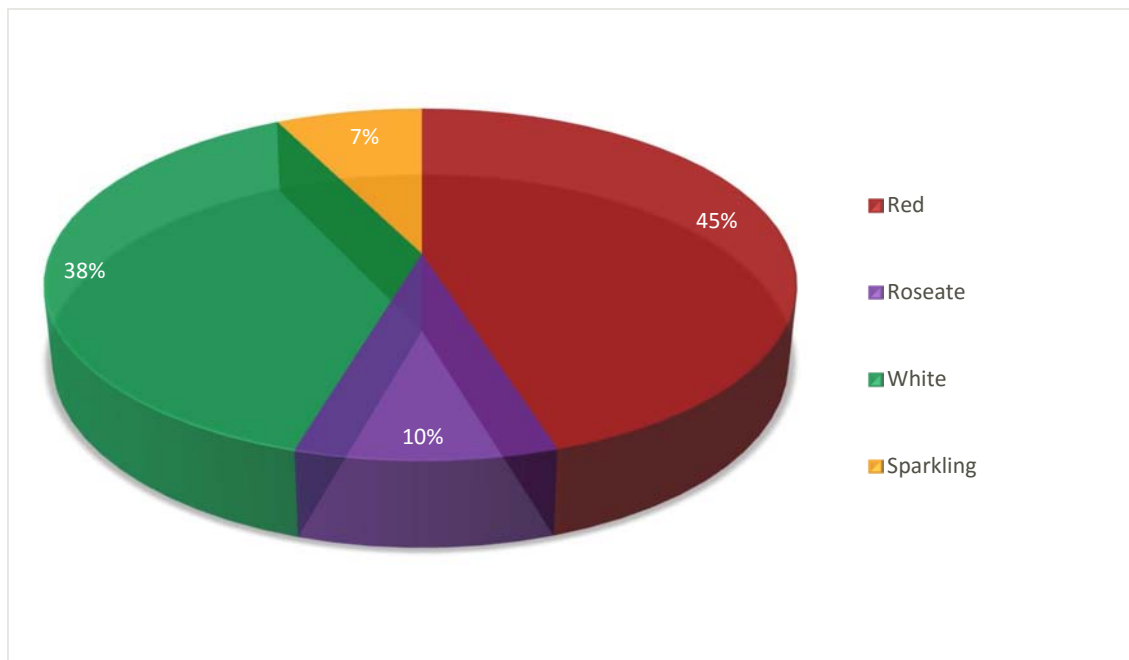
The reasons why a 7% of respondents in the previous question have been selected who never drink wine are: 70.6% say they do not like the wine and 29.4% of respondents do not drink wine because they do not consume alcohol. However, among respondents, nobody believes that drinking wine gives bad image.

Table 10. Percentages about the type of wine which consumers prefer

P.3 What kind of wine you usually to consume?			
Red	Roseate	White	Sparkling
45.3%	9.5%	37.9%	7.4%

Source: Own elaboration

Figure 4. Distribution about the type of wine which consumers prefer



Source: Own elaboration

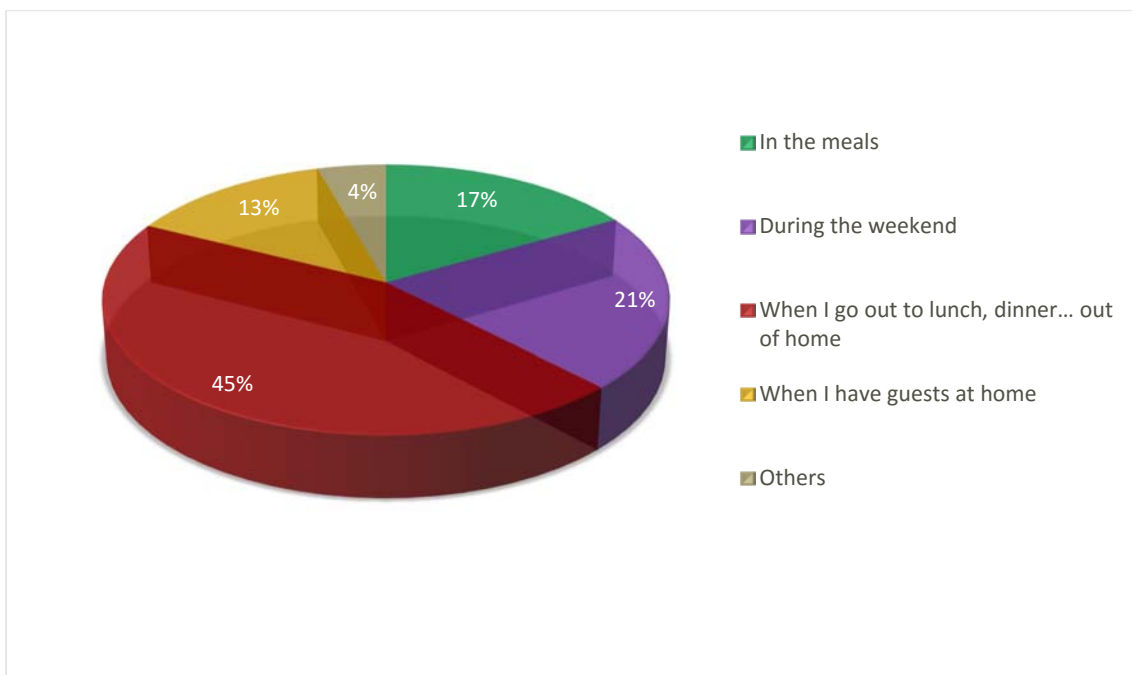
Of the total respondents 7.4% consumed sparkling wines and 9.5% rose wines, while 37.9% of the population surveyed consumed white wine and a large majority as 45.3% consume red wines.

Table 11. Percentages about the consumption situations

P.4 What sometimes you drink wine?				
In the meals	During the weekend	When I go out to lunch, dinner...out of home	When I have guests at home	Others
20%	25.3%	53.7%	15.8%	5.3%

Source: Own elaboration

Figure 5. Distribution about the consumption situations



Source: Own elaboration

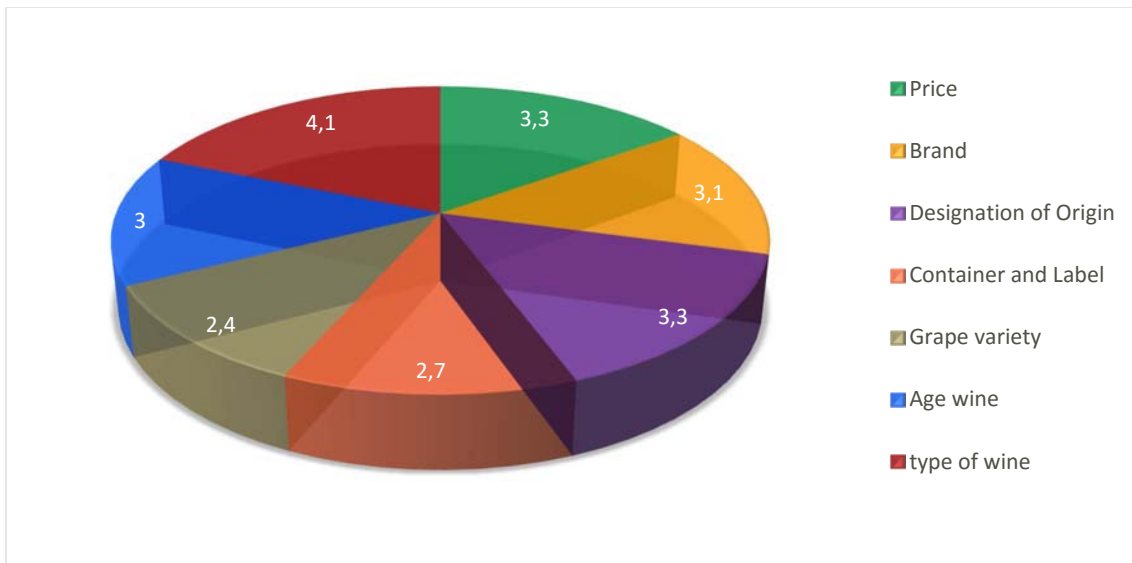
Among the population surveyed more than half, 53.7% consume wine when they leave out followed by 25.3% of the population consumes only came during the weekend. 20% consumed wine during meals every day, 15.8% when they have guests at home and lastly as a minority is consumed wine 5.3% in other situations not named, such as: the restaurant owner and sommelier of it continually consume wine, when you have a quiet time, both inside and outside the home, when the wine craved in the time the day or the place whatever, the wine can also be used for cooking or during holidays, among others.

Table 12. Percentages about the importance of aspects of wine, when consumers purchase

P.5 When you are buying a wine. What aspects gives more importance?					
	1	2	3	4	5
Price	3.3%	12%	48.9%	23.9%	12%
Brand	15.1%	14%	32.3%	28%	10.8%
Designation of Origin	14.1%	19.6%	14.1%	33.7%	18.5%
Container and Label	19.1%	23.6%	32.6%	19.1%	5.6%
Grape variety	29.1%	20.9%	31.4%	14%	4.7%
Age wine	18%	15.7%	27%	23.6%	15.7%
Type of wine	5.6%	5.6%	14.4%	26.7%	47.8%

Source: Own elaboration

Figure 6. Distribution about the importance of aspects of wine, when consumers purchase



Source: Own elaboration

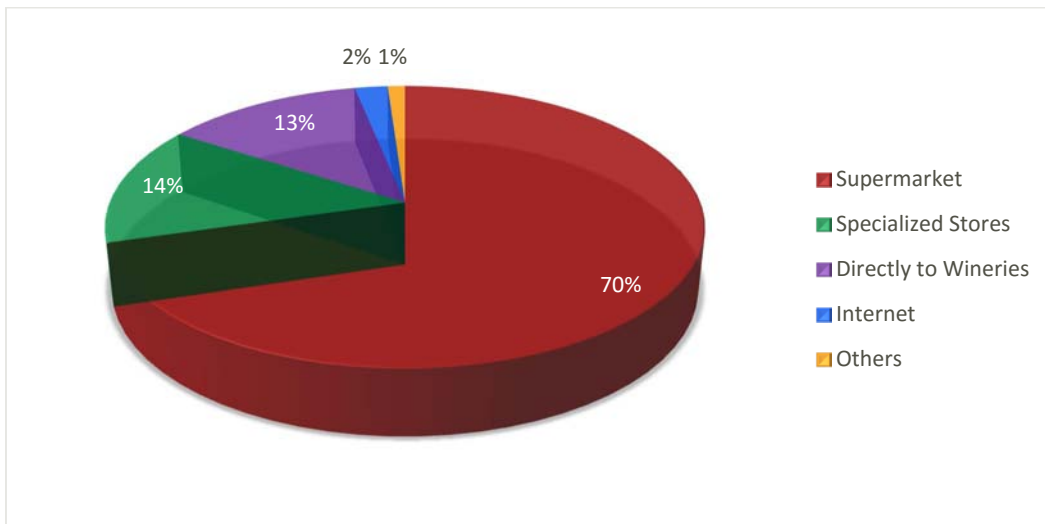
Of all respondents, the most important aspect when they go to buy the wine is the type of wine, that is to say, if the wine is red, white, pink or sparkling, with 47.8%. In this aspect follows the designation of origin with 33.7% with great importance, the aspect in which the population is undecided whether or not it is a very important aspect is the price with 48.9% and aspects that give less importance with 23.6% are the packaging and labels and 29.1% is the grape variety.

Table 13. Percentages about the place where the purchase is made.

P.6 Where do you usually make purchases of wine normally?				
Supermarket	Specialized Stores	Directly to Wineries	Internet	Others
70.5%	13.7%	12.6%	2.1%	1.1%

Source: Own elaboration

Figure 7. Distribution about the place where the purchase is made.



Source: Own elaboration

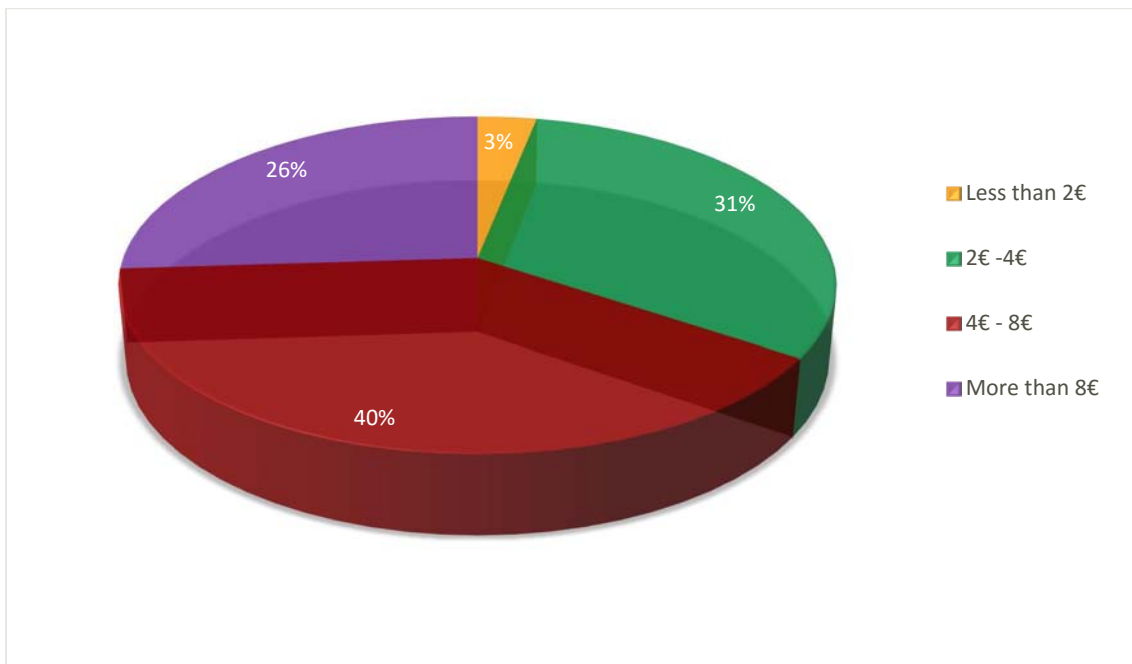
Among the surveyed population, the vast majority as 70.5% performed their wine purchases at the supermarket, with a difference of percentage the 13.7% performed their purchases in specialty shops and 12.6% make purchase directly from the wineries, 2.1% make their purchases on the internet and 1.1% in other places that have not been mentioned or they do not realize the purchase.

Table 14. Percentages about the price which the consumers are willing to pay in a supermarket

P.7. What price you would be willing to pay for a bottle in a supermarket?			
Less than 2€	2€ - 4€	4€ - 8€	More than 8€
3.1%	31.3%	39.6%	26%

Source: Own elaboration

Figure 8. Distribution about the price which the consumers are willing to pay in a supermarket



Source: Own elaboration

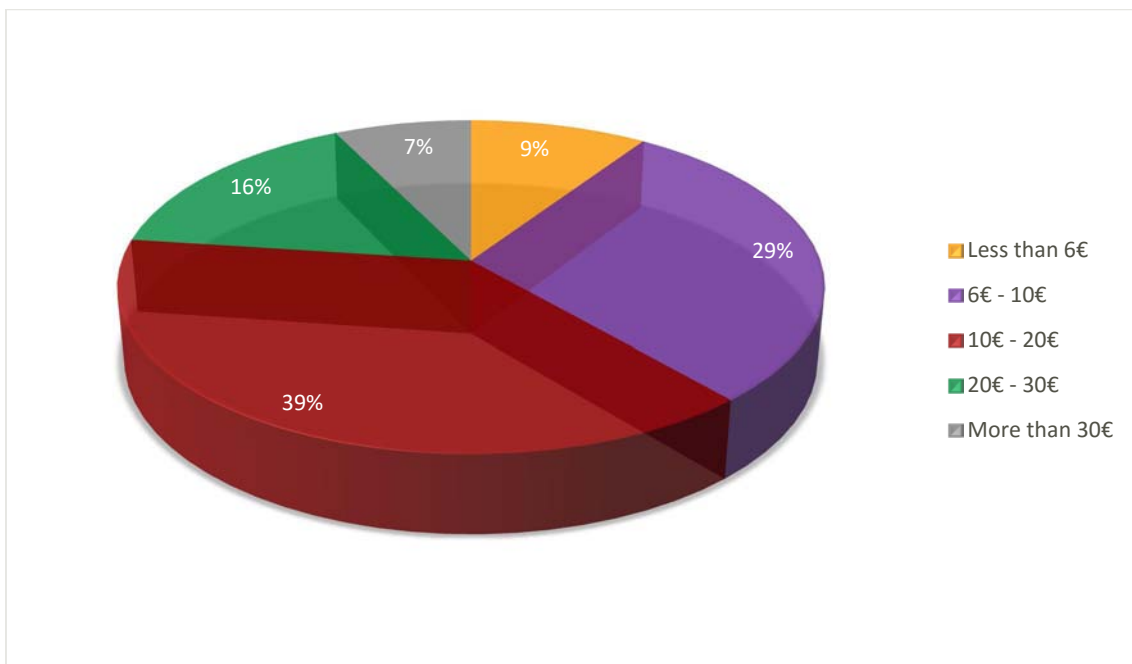
Of the total respondents 39.6% were willing to pay between 4 and 8 euros for a bottle of wine in a supermarket, it was followed by a 31.3% that would be willing to pay between 2 and 4 euros, 26% would pay more than 8 euros and a minority as 3.1% pay less than 2 euros for a bottle of wine in a supermarket.

Table 15. Percentage about the price which the consumers are willing to pay in a restaurant

P.8 What price you would be willing to pay for a bottle of wine in a restaurant?				
Less than 6€	6€ - 10€	10€ - 20€	20€ - 30€	More than 30€
9.4%	29.2%	38.5%	15.6%	7.3%

Source: Own elaboration

Figure 9. Distribution about the price which the consumers are willing to pay in a restaurant



Source: Own elaboration

Among the surveyed population, 38.5% would be willing to pay between 10 and 20 euros per bottle of wine in a restaurant, followed by 29.2% of the population they would be willing to pay between 6 and 10 euros. With lower percentages would be the population that is willing to pay between 20 and 30 euros, 9.4% would be willing to pay less than 6 euros and 7.3% of the population would pay more than 30 euros for a bottle of wine in a restaurant.

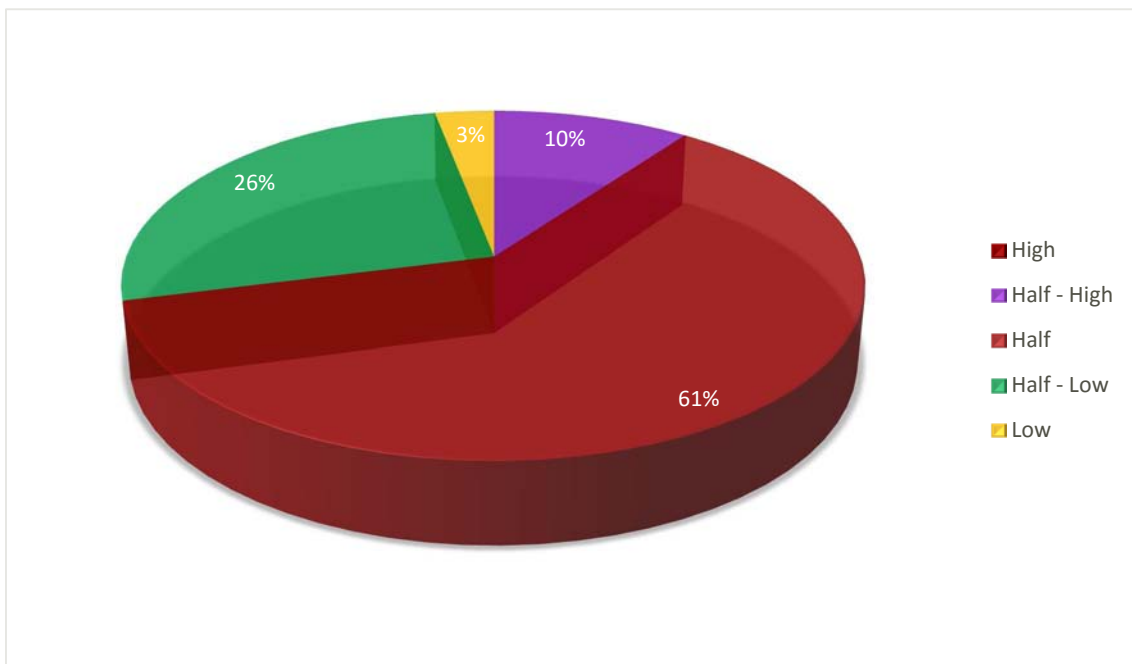
1.2. Overall profile

Table 16. Percentages about the social class the respondents

P.9. What social class you would place?				
High	Half – High	Half	Half – Low	Low
0%	10%	61%	26%	3%

Source: Own elaboration

Figure 10. Distribution about the social class the respondents



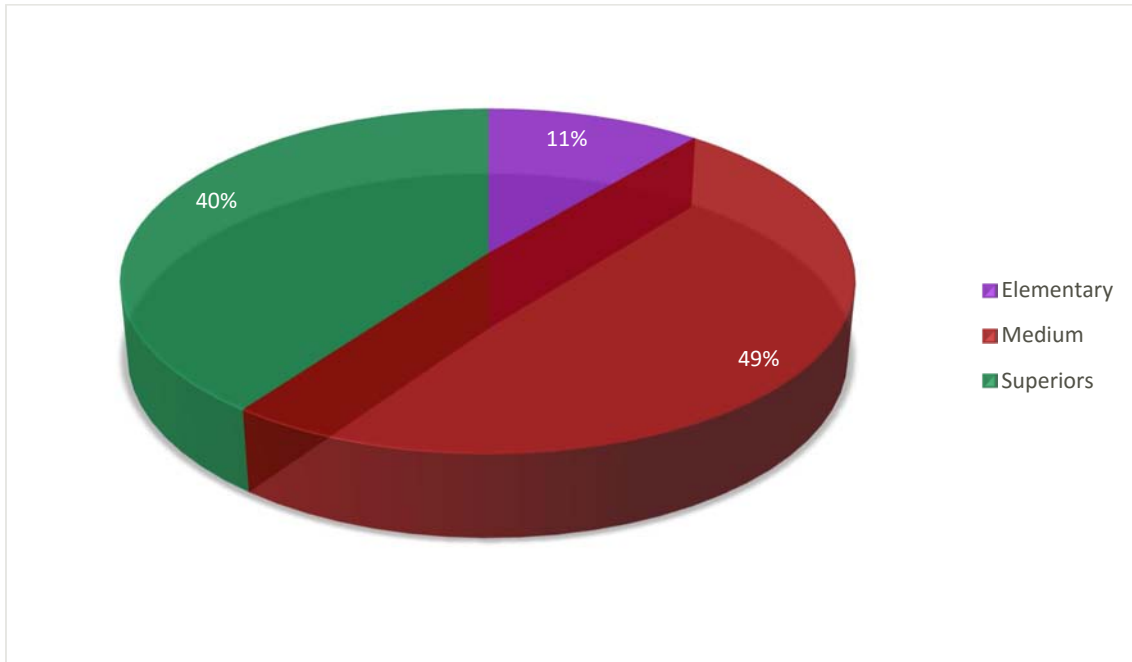
Source: Own elaboration

Of the total population surveyed 61% belong to the middle class, 26% of the population belongs to a lower middle class, 10% to a medium-high social class, 3% to a lower social class and no respondent belonging to a higher social class.

Table 17. Percentages about the level of education in the responders

P.10 Level of education		
Elementary	Medium	Superiors
11%	49%	40%

Source: Own elaboration

Figure 11. Distribution about the level of education in the responders

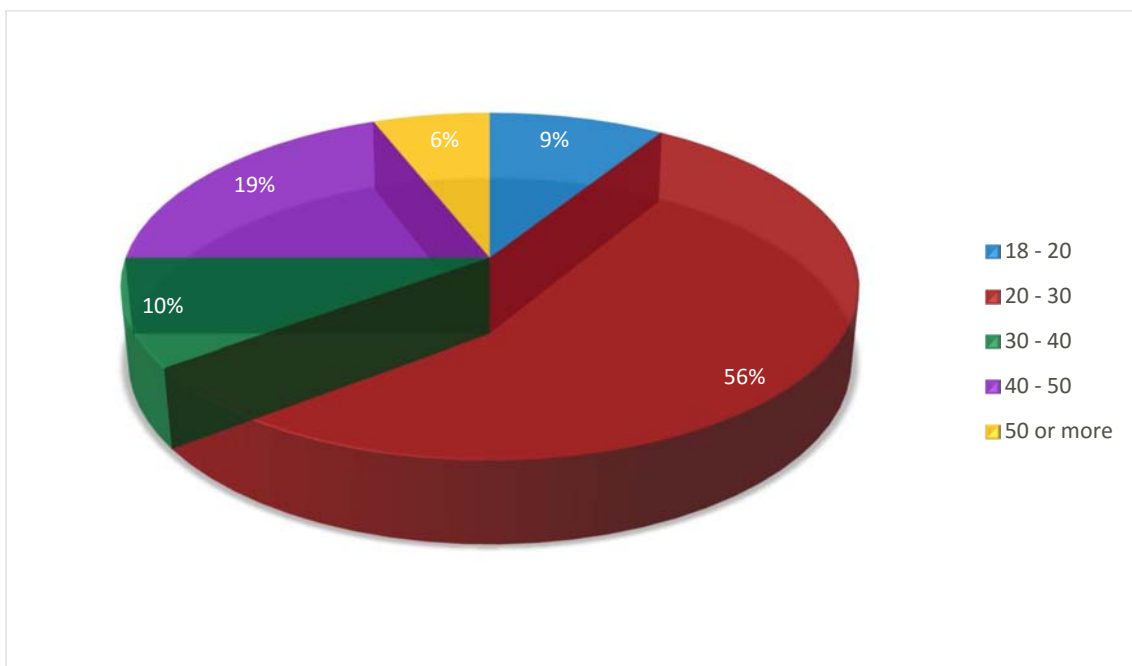
Source: Own elaboration

Most respondents have an average level of education, such as 49%, another large part have higher studies such as the 40% of respondents and finally with 11% of the surveyed population has a level of elementary school.

Table 18. Percentajes about the age of the responders

P.11 Age				
18 – 20	20 – 30	30 – 40	40 - 50	50 or more
9%	56%	10%	19%	6%

Source: Own elaboration

Figure 12. Distribution about the age of the responders

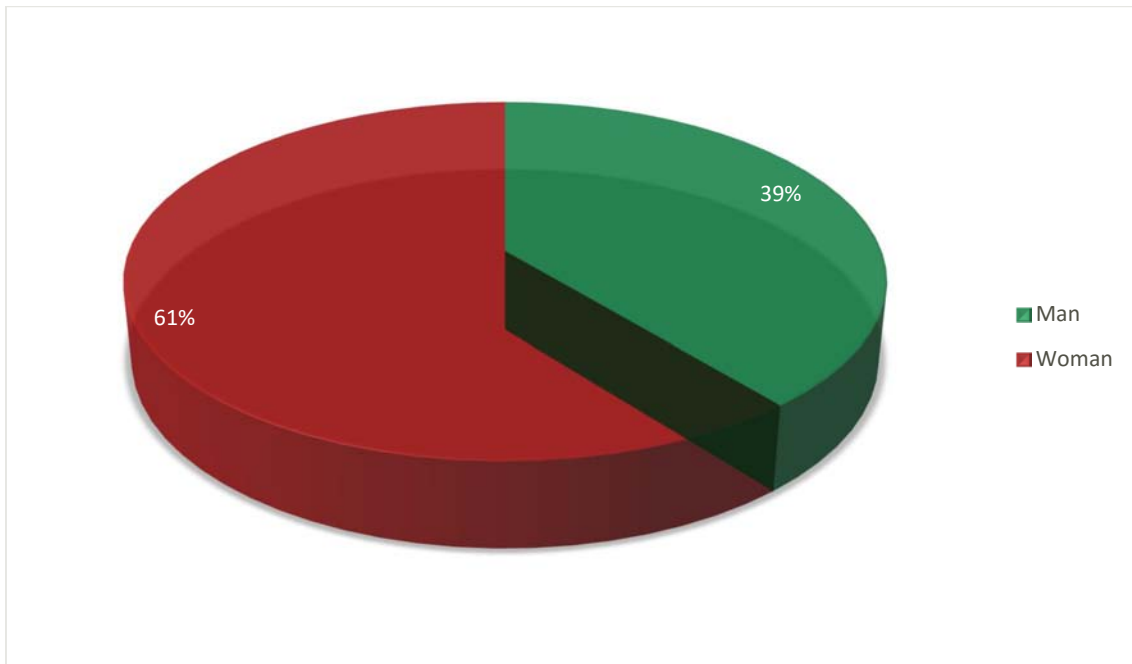
Source: Own elaboration.

Large proportion as the 56% of the surveyed population are between 20 and 30 years, 19% are between 40 and 50 years, 10% are between 30 and 40 years, 9% are between 18 and 20 years and finally 6% are 50 years or older.

Table 19. Percentages of respondents by sex

P.12 Sex	
Man	Woman
39%	61%

Source: Own elaboration

Figure 13. Distribution of respondents by sex

Source: Own elaboration.

Of the population surveyed 61% are women and 39% of respondents are men.

1.3. Results

The survey made online through a questionnaire in Survio, with questions mentioned above, 100 people responded, of which concludes

1. Depending on the level of studies

Respondents regardless of level of study concur that consume wine occasionally, the vast majority who do not consume wine is not because they think it's bad image but because they do not like or do not consume alcohol. Moreover, aspects that are more importance to them are mainly with 40% the type of wine, whether white, red, sparkling or pink and with 35% Designation of Origin and 70% of respondents consume wine when they eat, dine ... away from home. Purchases concur that 75% make purchases in the supermarket. But in the case of the wine respondents with a higher education prefer white wine, while respondents with a level middle and elementary prefer red wine. People with higher levels of study means and are willing to pay more for a bottle of wine at a supermarket and a restaurant, between 4 and 8 euros in a supermarket and between 10 and 20 euros in a restaurant. Instead, respondents with an elementary level of education are willing to spend on a bottle of wine in a supermarket between 2 and 4 euros and a restaurant between 6 and 10 euros.

You could say that people with average or higher levels could have a better job and thus can afford to pay more money for a bottle of wine in a supermarket or restaurant.

2. According to social class

All respondents who belong to different social classes agree that consume wine occasionally.

People who belong to a lower social class prefer to consume red wine, they give the most important aspect give is the price and the Designation of Origin, usually they do their shopping at the supermarket and are willing to spend on a bottle of wine in a supermarket entity 2 and 8 euros and a restaurant less than 6 euros.

People who belong to a lower middle class, prefer white wine, they usually consume when they lunch, dine ... away from home, the aspect most important for they are the type of wine and with a big difference over others and the 70% prefer to do their shopping in the supermarket and the 60% being willing to pay for a bottle of wine between 2 and 4 euros in a supermarket and the 50% between 10 to 20 euros in a restaurant.

The surveyed people who belong to a middle class prefers red wine with 30%, they consume wine when they eat away from home, the most important aspects are: 23%

Protected Designation of Origin and with 35% the type of wine in general do their shopping at the supermarket, although there is a 30% they also make their purchases directly from the wineries and are willing to pay for a bottle of wine in a supermarket between 4 and 8 euros or even a high number of people who would be willing to pay more than 8 euros and a restaurant 10 and 20 euros.

Respondents belonging to an upper middle class, 70% prefer to consume red wine when they eat away from home or during the weekend, the aspects more important for them are: 40% brand and 50% type of wine, they do their shopping in supermarkets and a bottle of wine in a supermarket they are willing to pay between 4 and 8 euros and a restaurant between 10 and 20 euros.

3. According sex.

45% of women prefer to consume white wine, during the weekend and when they eat, dine ... away from home, the aspect of wine that give more importance when buying a wine is 55% the type of wine it is. The vast majority do their shopping at the supermarket and are willing to pay for a bottle of wine in a supermarket between 4 and 8 euros and in a restaurant between 6 and 10 euros.

Respondents men, with a very high figure of 70% prefer to consume red wine, mostly when they eat, dine ... away from home. Aspects that give them more importance are the first with 26% of the type of wine and then with 22% Designation of Origin. The vast majority made purchases in the supermarket and are willing to pay for a bottle of wine at the supermarket between 4 and 8 euros, but a large number of respondents also willing to pay more than 8 euros and a restaurant would be willing to pay between 10 and 20 euros

An important fact is that none of the men surveyed has not shown that don't consume wine, while women if that has shown that a few not consume wine either because they do not like or do not consume alcohol. In the case of the prices are men who are willing to pay a higher price for a bottle of wine.

4. According age

Respondents between 18 and 20 years, 30% say they drink wine occasionally and another 30% say they do not drink never, because they do not like or because they not consume alcohol. They prefer red wine and aspects that give more importance are: the price, the brand and type of wine. 60% do their shopping in supermarkets and 70% of respondents are willing to pay for a bottle of wine in a restaurant between 2 and 4 euros and a restaurant 60% would be willing to pay between 6 and 10 euros.

People surveyed between 20 and 30 years, 76% say consume wine occasionally, 50% of people prefer white wine and 40% prefer red wine, 65% drink wine when they go out to eat dinner ... outside home. The most important aspects for them are: with 38% are the type of wine and 19% Designation of Origin. 80% make purchases at supermarkets and are willing to pay between 4 and 8 euros in a supermarket and a restaurant between 10 and 20 euros.

Respondents between 30 and 40 years, 50% say they drink wine occasionally, 50% prefer a red wine when they go out to eat dinner ... away from home. When they go to make the purchase the aspects that matter most are with 32% the type of wine and 20% age wine, 50% make purchases in supermarkets and 40% in specialty stores. 50% are willing to spend more than 8 euros for a bottle of wine in a supermarket and 35% over 30 euros for a bottle of wine in a restaurant.

Of the total respondents who are between 40 and 50 years, 40% say they drink wine more than 1 time per week and 40% prefer red wine. 35% consumed during meals and when they go to make the purchase the issues that matter most are give Designation of Origin with 28% and 20% type of wine. 78% of people between 40 and 50 years make buying wine at the supermarket and 36% are willing to pay for a bottle in a supermarket between EUR 4 and 8, also the same percentage, 36% would be willing to pay more than 8 euros a restaurant and 35% would be willing to pay between 20 and 30 euros.

Respondents who are 50 or older, 50% said drinking wine 1 to week mostly on weekends and 80% prefer red wine. The most important aspects for them are, with a 25% type of wine, with a 20% mark and the Designation of Origin. 80% do their shopping in supermarkets, they being willing to spend between 4 and 8 euros for a bottle in a supermarket and a restaurant 20 and 30 euros.

People between 40 and 50 and 50 and more, they are consuming more wine more often, and people between 30 and 40 years are those that would be willing to pay a higher price for a bottle of wine in a restaurant or in a supermarket. With respect to age the most important aspect that consumers value generally is the type of wine.

1.4. Conclusions

Depending on the factors that we have analyzed, we found that:

- There is an important relationship between the people who buy in supermarkets and people who buy directly from the wineries or specialty stores, since the latter are willing to pay higher prices for the wine bottle.
- Of respondents depending on the social class that belongs and the purchasing power they have, they would be willing to pay a lower or higher price on a bottle of wine, as we can see people belonging to lower or middle lower class they pay lower prices for a bottle of wine while people belonging to a higher social class would be willing to pay higher prices.
- One thing that is relevant is that very few people or almost none of the respondents have the profile that consume wine everyday in their houses, but consume on holidays such as weekends or when they go home they were.
- None of the respondents believed that drinking wine gives bad image.
- Men consume more wine than women, since that of men surveyed there is none that says never consumes wine, however, even though the number of women surveyed is greater, the number of women who say do not drink wine because they don't consume alcohol or do not like is also higher.

One of the factors that attracted the most attention is that people who consume less wine are the 18 to 20 years, when each time, young people begin drinking alcohol before. Interestingly enter this situation and understand why it is a rare drink at these ages and is far from being the favorite drink of young people, the causes of this situation can be:

- Because they prefer other beverages like water, drinks or beer, because wine them seem very rough and prefer soft drinks or prefer healthier drinks such as water drinks.
- Another great cause as have responded respondents who do not consume ever wine is because they do not like, not because they do not consume alcohol. They do not like because of its strong presence to take and slightly harsh taste.
- In the absence of of habit, it can also be, because there are very few households who regularly consume wine or even go to a restaurant and order a glass of wine in young people is very unusual

- The times when consuming wines are usually very specific such as weddings, communions, basically, when they go away with friends.

1.5. Improvement proposals

We will propose some proposals for improvements to encourage wine consumption among young people.

- In order to increase the consumption of wine in the young sector of the population, it could launch a campaign from, for example, bands or music festivals which attract many young or to associate the wine with sports competitions as do beer brands make when the competitions start as is currently the European Championship in France, use such events to promote beer brands. Campaigns could be aimed at changing the mindset that young people towards traditional wine, drink rough and to people who understand this sector. And strengthen the attribution of qualities as for example, healthy, good taste and modern among others. But without forgetting to announce that wine it is an alcoholic beverage and should remember especially the younger ones that should consume the wine with the right amounts.

This campaign is especially aimed at young people between 18 and 20 who are those least consumed. However, you should not leave out the older youth, although consumers are more quantity than younger ones, do not stop being a very small numbers.

- The restaurants as showing different beers to choose from, could do the same with the wines. Have different brands and types so that the consumer can choose the one you like and show a striking way such as having some barrels and to server directly, with the aim of drawing attention to that seems curious to consumers and may be sure the wine chosen will like because he knows.
- Wine producers, especially the wineries should consider creating a new market segment, the wines for youth. These wines may have different characteristics such as being sweeter, less harsh and more palatable. In order to encourage wine consumption in this population. Moreover, the pioneer in this new market segment would obtain a competitive advantage associated with innovation involved.

- Moreover, the wineries could enter the trend of wine tourism, enabling the spaces in its cellars for display to visitors and this would bring own benefits. During these visits the tourists know the whole process of winemaking, the architecture of the winery and a tasting usually performed to taste wines and 80% of visitors buy a bottle of wine and can be future customers. This activity the wineries could encourage young visitors to wine consumption in the future.
- Appellations of Origin should undertake actions to promote wine culture among young people. Some companies are already doing as discussed in paragraph innovation, where young people can attend to learn about wine and a series of tastings are conducted in order to remedy the problem of the lack of wine consumption among young people.
- Improve distribution channels, for example, brands of beer in bars mounted the devices for to serve beer and when they stop being providers, they withdraw device. Wine marks should provide the same service with the appropriate devices, for example, in the case of beer are cañeros in the case of wine would be the barrels.
- Enter wine knowledge within the educational system, provided that the degree has a relationship with the sector.
- Make marketing practices that work in substitutes products, such as mainly beer, water or soft drinks.

2. CONCLUSIONS

The Spanish wine sector has greatly evolved over the years. It is very important, even Spain is the most important wine export country and it has major brands. Over the years the wineries have had to adapt to the changes that have occurred since, the companies in the sector which have not been able to adapt to changes have ended up disappearing.

These changes have been possible thanks to innovation; innovate the process allows making wines in different ways and therefore produce wines with different characteristics or to have very controlled vineyards to care for them as they need not lacking anything and thus produce grapes with higher quality and therefore better wine, at work, we discussed current and very different examples, submarines wines and the use of drones for temperature control; innovate in the business model opens up new marketing channels and develop new business models, it is very important to reach other customers. A great example that we have at work is to Enolobox, which gives the opportunity to receive bottles of wine at home without having to go grocery shopping, wineries, specialty shops ...; innovate in the channel, two great examples are applications such as Vivino smartphones and Delectables, this allows the most curious people interested in these applications and thus acquire information about the wines; innovation in product offering, companies increasingly are getting more original and surprising designs to market with an incredible wine packaging and attract the attention of consumers.

But all these changes only affect the consumption of wine in Spain, since the amounts of wine consumed more and more reduced, since wine is replaced by other products. The most relevant data of the low consumption of wine is that people who consume less wine are younger, when other alcoholic beverages is reversed, it is young people who soon start drinking and the most amount consumed.

This can have different causes such as young people prefer other alternative beverages such as beer, water, soft drinks ... the price is too high, they have no habit of drinking it regularly at home or sometimes they are not special, they do not like because it is rough and prefer soft drinks ...

In order to change this situation must be analyzed more this segment market is the east wine consumed and propose strategies to motivate young people, for example, would events, advertising ... Strategies that are widely used by beer brands, which is the most competent wine product.

Over the years this sector will evolve in an incredible way, each time there is more technology and competition from other countries is higher, then companies will have to defend themselves and make the most of all types of innovation from the moment of caring the vine until the time to market bottled wine to sell.

3. REFERENCES

- AEC. *Denominación de Origen Protegida*. Recuperado el 15 de abril de 2016 de <http://www.aec.es/web/guest/centro-conocimiento/denominacion-de-origen-prottegida>.
- AzureAzure (2014). *Vinos de Alemania*. Recuperado el 4 de abril de 2016 de <http://azureazure.com/gastronomia/vinos-uva-riesling-excelencia-alemana>
- Bosch, A. (2013). *Vinos submarinos*. Recuperado el 25 de abril de 2016 de <http://www.verema.com/blog/verema/1100466-vinos-submarinos-envejecidos-mar>
- Castillo, J.S; Compés, R. (2014). La economía del vino en España y en el mundo. *Publicaciones Cajamar: economía*, 23, 67-92.
- Damanpour, F. (1991): "Organizational innovation: A meta-analysis of effects of determinants and moderators". *Academy of management journal*, 34(3), 555-590.
- Escobar, N.V. (2000). La Innovación Tecnológica. *Medisan*, 4 (4), 3.
- Flor, M.L (2014): Innovación: conceptos básicos. Materiales elaborados para el módulo "Dirección en la innovación de la empresa (AE1041)". Universitat Jaume I de Castelló.
- Grand Cru (2012). *Pinot Gris*. Recuperado el 4 de abril de 2016 de <http://vinos.grandcru.com.ar/vinos/pinot-gris-una-variedad-alternativa-entre-los-blancos/>
- ICEX. *Historia de los vinos en España*. Recuperado el 20 de abril de 2016 de http://www.winesfromspain.com/icex/cda/controller/pageGen/0,3346,1559872_6779257_6779013_0,00.html
- Iglesias, J.J. (1995). *Historia y cultura del vino en Andalucía*. Universidad de Sevilla.
- La Página de Bedri. *Vinos Blancos*. Recuperado el 20 de abril de 2016 de http://www.bedri.es/Comer_y_beber/Vino/Tipos_de_vino/Vino_blanco.htm
- MAGRAMA. *Mapa de las denominaciones de origen protegidas de vino de España*. Recuperado el 15 de mayo de 2016 de http://www.magrama.gob.es/es/alimentacion/temas/calidadagroalimentaria/DO_vinos_2_008-2_tcm7-260810.pdf
- MAGRAMA (2014). *Información general de interés*. Recuperado el 20 de marzo de 2016 de <http://www.magrama.gob.es/es/alimentacion/temas/calidad-agroalimentaria/calidad-diferenciada/dop/htm/informacion.aspx>
- MAGRAMA. (2014). *Datos comercialización DOPs de vinos campaña vitivinícola 2014/2015*. Recuperado el 20 de Abril de 2016 de <http://www.magrama.gob.es/es/alimentacion/temas/calidad-agroalimentaria/calidad-diferenciada/dop/htm/cifrasydatos.aspx>
- Ministerio de Agricultura, Alimentación y Medio Ambiente. (2012). *Datos de las denominaciones de origen protegidas de vinos (DOPs)*. Recuperado el día 25 de abril de 2016 de http://www.magrama.gob.es/es/alimentacion/temas/calidad-agroalimentaria/Informe_DOPs_2010-2011_WEB2_tcm7-214607.pdf

- OECD. (2005): *The Measurement of Scientific and Technological Activities: Guidelines for Collecting and Interpreting Innovation Data: Oslo manual*, Paris, France: OECD.
- Ródenas, S. (2015). *Proyectos innovadores en el Sector Vitivinícola*. Recuperado el 10 de marzo de 2016 de <http://www.sociadaddelainnovacion.es/8-proyectos-innovadores-en-el-sector-vitivinicola-salud/>.
- Rogers, Everett M. (1983): *Diffusion of Innovations*. New York: Free Press.
- Turismo de vino. *Varietales y tipo de uva*. Recuperado el 1 de abril de 2016 de <http://turismodevino.com/saber-de-vino/tipos-de-uva-en-el-vino/>.
- Urabe, K., Child, J., & Kagono, T. (Eds.). (1988): *Innovation and management: International comparisons* (Vol. 13). Walter de Gruyter.
- Verganti, R. (2008): "Design, meanings, and radical innovation: A metamodel and a research agenda". *Journal of product innovation management*, 25(5), 436-456.
- Vinos de España. *Elaboración y Crianza*. Recuperado el 20 de abril de 2016 de http://www.winesfromspain.com/icex/cda/controller/pageGen/0,3346,1559872_6779305_6779013_0,00.html
- VINOPACK. (2014). *15 Ejemplos De Marketing De Vinos Llevados Al Límite*. Recuperado el 9 de abril de 2016 de <http://www.vinopack.es/15-ejemplos-de-marketing-de-vinos-llevados-al-limite>.
- Vinoselección (2016). *Gewürztraminer*. Recuperado el 4 de abril de 2016 de <http://www.vinoseleccion.com/variedades-de-uva/gewurztraminer>.
- Vivanco. *Denominaciones de Origen del vino en España*. Recuperado el 19 de Marzo de 2016 de <http://vivancoculturadevino.es/blog/2015/04/23/denominaciones-origen-vino-espana/>
- Wine Spectador. (2016). *Uso de drones en el sector vitivinícola*. Recuperado el 9 de abril de 2016 de <http://www.icex.es/icex/es/navegacion-principal/todos-nuestros-servicios/informacion-de-mercados/paises/navegacion-principal/noticias/NEW2016614690.html?idPais=US>

4. ANNEXES

ENCUESTA SOBRE EL CONSUMO DE VINO

¿Con qué frecuencia consume usted vino?

- Ocasional
 1 vez por semana
 Más de 1 vez por semana
 Todos los días
 Nunca

Si es nunca, ¿por que?

- No le gusta
 Considera que da mala imagen beber vino
 No consume alcohol

¿Qué tipo de vino suele consumir?

- Tinto
 Rosado
 Blanco
 Espumosos

¿En qué ocasiones consume vino?

- En las comidas
 Durante el fin de semana
 Cuando salgo a comer, cenar... fuera de casa
 Cuando tengo invitados en casa
 Otro (por favor, especifique)

Cuando va a comprar un vino. ¿A qué aspectos le da más importancia?

Precio	1	2	3	4	5	Precio
Marca	1	2	3	4	5	Marca
Denominación de Origen	1	2	3	4	5	Denominación de Origen
Envase y etiqueta	1	2	3	4	5	Envase y etiqueta
Variedad de uva	1	2	3	4	5	Variedad de uva
Edad del vino (joven, crianza, reserva, gran reserva)	1	2	3	4	5	Edad del vino (joven, crianza, reserva, gran reserva)
Tipo de vino (blanco, rosado, tinto)	1	2	3	4	5	Tipo de vino (blanco, rosado, tinto)

¿Dónde suele realizar sus compras de vino normalmente?

- Supermercado
 Tiendas especializadas
 Directamente a las bodegas
 Internet
 Otros

¿Qué precio estaría dispuesto a pagar por una botella en un supermercado?

- Menos de 2€
 2€ - 4€
 4€ - 8€
 Más de 8€

¿Qué precio estaría dispuesto a pagar por una botella de vino en un restaurante?

- Menos de 6€
 6€ - 10€
 10€ - 20€
 20€ - 30€
 Más de 30 €

¿En que clase social se situaría usted?

- Alta
 Media-Alta
 Media
 Media-Baja
 Baja

Nivel de estudios

- Elemental
 Medio
 Superior

Edad

- 18-20
 20-30
 30-40
 40-50
 50 o más

Sexo

- Hombre
 Mujer



