



UNIVERSIDADE CATÓLICA PORTUGUESA

# NFTs and Porto Ferreira's Premium

A Blue Ocean or an ephemeral bet on  
differentiation?

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por

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*A sorte ajuda os audazes*

Virgílio

A todos os que sempre estiveram do meu lado, me deram força mesmo quando caí e me viram cortar esta meta da vida.

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# Resumo

Apesar de Portugal desempenhar um papel importante na comercialização de Vinho do Porto, o consumo deste vinho apresentou, nos últimos anos, um decréscimo.

No presente Trabalho Final de Mestrado (TFM) apresenta-se uma estratégia para inverter a tendência decrescente do seu consumo, mais especificamente nos Premium da Porto Ferreira. A Sogrape é uma empresa com um peso importante no mercado nacional do Vinho do Porto, o que faz com que seja um caso de estudo pertinente.

Assim, propõe-se dar uma resposta à seguinte Questão de Investigação: "Como reverter a tendência decrescente no consumo do Vinho do Porto Premium da Porto Ferreira através de NFTs?".

O objetivo passa por entender que fatores têm impacto na performance da indústria do Vinho do Porto a fim de criar uma estratégia que vá ao encontro das necessidades do mercado. Para tal, o método utilizado no presente trabalho é qualitativo, adotando um caso de estudo exploratório.

De forma a inverter esta trajetória decrescente, é proposta a criação de uma estratégia de Blue Ocean. Assim, e com o intuito de criar um novo mercado e nova procura, é então proposta a entrada da Sogrape com os seus Premium da Porto Ferreira no mundo da propriedade digital, através de NFTs.

Concluiu-se, atendendo às oportunidades e riscos que podem ser enfrentadas ao operar neste mercado, que é possível a integração da Sogrape e dos seus Premium da Porto Ferreira nos NFTs.

## **Palavras-chave**

Vinho do Porto; Premium da Porto Ferreira; Estratégia Blue Ocean; Non-Fungible Token



# Abstract

Although Portugal plays an important role in the commercialization of Port Wine, the consumption of this wine has decreased in recent years.

In this Master's Final Work (TFM) is presented a strategy to reverse the downward trend of its consumption, more specifically in Porto Ferreira's Premium. Sogrape is a company with an important weight in the national Port Wine market, which makes it a pertinent case study.

Thus, we propose to answer the following Research Question: "How to reverse the decreasing trend in Porto Ferreira's Premium Port Wine consumption through NFTs?".

The objective is to understand which factors impact the performance of the Port Wine industry to create a strategy that meets the market needs. To this end, the method used in this work is qualitative, adopting an exploratory case study.

In order to reverse this downward trajectory, the creation of a Blue Ocean strategy is proposed. Therefore, and to create a new market and new demand, it is then proposed that Sogrape and its Porto Ferreira Premiums enter the world of digital property, through NFTs.

It was concluded, given the opportunities and risks that can be faced when operating in this market, that the integration of Sogrape and its Porto Ferreira Premiums in NFTs is viable.

## **Keywords**

Port Wine; Porto Ferreira's Premium; Blue Ocean Strategy; Non-Fungible Token

**Number of Words:** 9,994



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# Abbreviations

VdP- Vinho do Porto / Port Wine

IVDP- Instituto do Vinho do Douro e do Porto / Douro and Port Wine Institute

DO- Denominação de Origem / Denomination of Origin

NFT- Non-fungible token

IGB- Box that can come with the wine

PAC- Política Agrícola Comum / Common Agricultural Policy



# Introduction

This work was developed during my internship at Sogrape, more specifically in the Port Wine team.

Port Wine is a unique product that distinguishes itself from others by its peculiar characteristics. It is a type of wine that can only be legally developed in the Douro Demarcated Region of Portugal and approved by the *Instituto dos Vinhos do Douro e Porto*. In addition, it is a product with an extreme importance in the Portuguese culture and economy, that is offered in over 120 countries and reached a value of over 330 million euros in exports in 2021 (AEVP, 2021).

However, Port consumption has been declining in recent years. If in 2016, sales in Portugal totalled almost €13 million, in 2020 this figure was just over 9 million (IVDP, n.d.). Internationally, this drop has also been observed over the years, and between 2017 and 2020 Portugal recorded a loss of more than €24 million.

In the context of my internship, the opportunity to reflect on this challenge emerged, and also to explore the potential of using NFTs as a bet to reverse the tendency in what concerns Premium Port Wines. The research question formulated was: How to reverse the declining trend of Porto Ferreira's Port Wine consumption through NFTs?

As will be later explored in Chapter 3, the supply of alcoholic beverages is very wide, which gives the consumer the ability to fulfill his needs through a variety of substitute drinks.

Moreover, and combined with the company's willingness to evolve with the new technological generations, the hypothesis of exploring the digital world of digital ownership through Non-Fungible Tokens, or NFTs, and cryptocurrencies, may be pertinent to overcome this massive offer and intense competition.

Sometimes, it is necessary to get out of the overcast waters and find out where and how it is possible to develop a product or service that does not struggle within an overwhelmed competitive world.

Blue Ocean is an analogy used to illustrate the huge, deep, and untapped potential of market space (Kim & Mauborgne, 2005a), and according to its proponents, in order to accomplish it, a company should look for a business that focuses on differentiation and low cost as strategies.

This thesis seeks to explore the world of digital property, integrating the company's Premium Port Wine into new technologies - the aforementioned NFTs - and therefore into the world of cryptocurrencies, which have had a clear uptake worldwide with an increase in users of about 190% between 2018 and 2020 (Statista Research Department, 2022). My first explorations of this market revealed a potential Sogrape was also interested in, as it might offer an opportunity of business (re)creation that would differentiate its brands from competitors'.

To answer the proposed research question, Chapter 1 presents the methodology used, which was qualitative through an exploratory case study. Chapter 2 provides a context for readers to understand what Port Wine is and to know about Sogrape. In Chapter 3 two analyses were done to understand what is affecting this industry and leading to a decline in demand: a Micro and Macroenvironment analysis of the Port Wine industry, and an analysis of the competition in the industry. In Chapter 4 a literature review was undertaken on the two main concepts adopted to strategically act in this industry: Blue Ocean and NFTs. Finally, in Chapter 5, and as the goal of this work is to reverse the downward trend of Port consumption, a strategy to boost the presence of this wine was sought, applying the two concepts to the practical case, more specifically to Sogrape's Premium Port Wine, from Porto Ferreira.

# Chapter 1- Methodology

This work aims to develop a strategy that meets the market trends and thus reverses the downward trend in Port Wine consumption. The primary focus is to differentiate Porto Ferreira in an extremely competitive market and thus increase the consumption of its Premium Wine.

To answer the research question, a qualitative approach through a case study was undertaken as methodology. Given that consumption trends are always changing, it is necessary to understand, through an empirical research technique (Yin, 2018), what strategies are possible to use to reverse the decline in Port Wine consumption. By using several sources of information, documents, papers, and official reports were read, analysed, classified, and interpreted to conduct a systematic research, being the goal to write and explain what is found on the topic of boosting Premium Porto Ferreira's consumption (Meirinhos & Osório, 2010; Zucker, 2009).

For Yin (2009), the methodology in question is considered the most appropriate to combine the understanding, description, and explanation of a set of contents of a high level of complexity that involve the influence of certain factors simultaneously, and in which the researcher has little or almost no control. In fact, some external influences over which control is hard or impossible, such as social and economic factors, may be leading to a decrease in Port consumption, which impacts the performance of the Porto Ferreira brand.

There are three different types of case studies, according to Yin (2009): explanatory, descriptive, and exploratory. They are distinguished through the type of research question raised, the scope of control that the researcher has over behavioural events, and the degree of focus on contemporary, as opposed to historical, events.

The type of case study conducted for this project was an exploratory one, given the fact that there is no predetermined outcome and only the questions "how" and "what" need to be answered (Yin, 2014), to understand what strategies can be used to create more awareness of the specific Port Wine, and a willingness to buy. According to Gil (2002), exploratory research aims to provide greater familiarity with the problem to make it more explicit or to construct hypotheses to improve ideas or discover intentions. Therefore, I started by conducting an industry analysis to understand what factors can influence the consumer of this wine, and then conducted a competitive analysis to understand what substitutes can satisfy the consumer in an equivalent way. Thus, I looked for strategies that would differentiate Port in the market and meet current trends, through a Blue Ocean strategy framework.

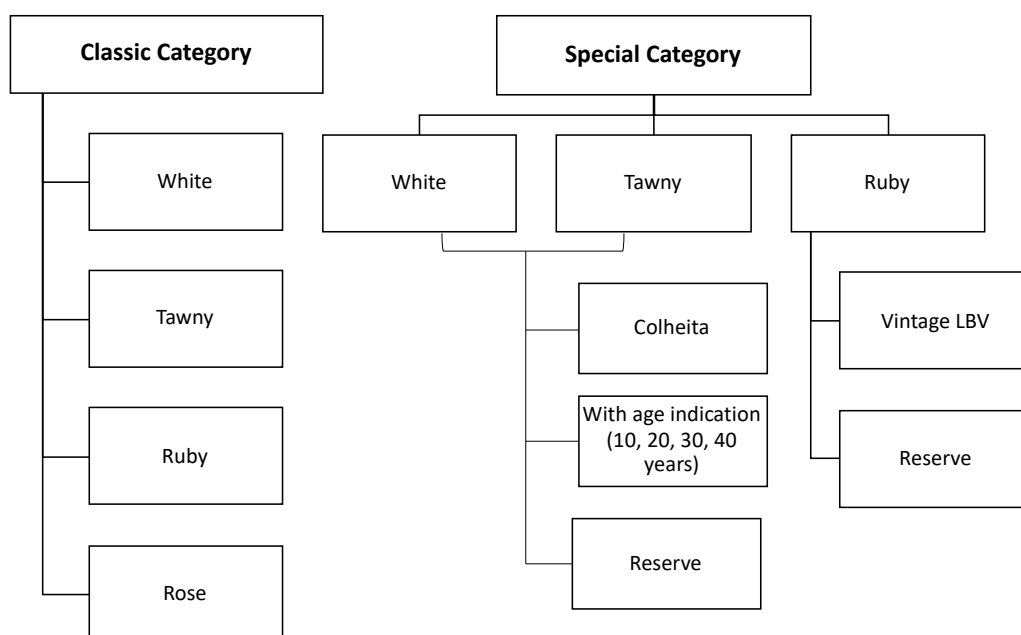
# Chapter 2- Port Wine and Sogrape

This chapter presents an introduction about Port Wine and Sogrape, the company where this TFM was developed.

## 2.1 What is Port Wine

Port Wine (Sogrape, 2021a) is a fortified wine, naturally sweet, produced exclusively in the Demarcated Douro Region in Portugal and certified by IVDP, according to the rules of the Denomination of Origin (see Appendix1).

Port Wine (Figure 1; Figure 2), can be from a Classic or Special category, as well as from a single harvest or from several. For the present work it is important to be aware of these distinctions, as **the focus will be on Vintage Port Wine**.



**Figure 1-** Types of Port Wine

Source: Author, based on Internal Information, 2021

		Ruby	Tawny	White	Rose
Single Harvest	Vintage**	2 Years Bottled in the 2nd year after harvest			
	LBV*	4 to 6 Years Bottled 4 to 6 years after harvest			
	Colheita		Minimum of 7 years in wood		
	Age Indication		Average age 10, 20, 30, 40 years in wood		
Several Harvest	Reserva	Average age 3 to 4 years in wood	Minimum of 6 years in wood		
	Classic	Average age 3 years in wood			

\*Ready to drink or ages in bottle

\*\*Ages in bottle

**Figure 2**-Average aging time in wood  
Source: Author, based on Internal Information, 2021

## 2.2 Sogrape

Sogrape (2021b) is driven by a dream: to be admired as the most successful family-owned Port wine company.

1942 was the year that marked the beginning of this legacy with the establishment of Sociedade Comercial do Vinhos de Mesa de Portugal, now Sogrape, by Fernando van Zeller Guedes and 15 friends.

The company's expansion was made by acquisitions. Today, it stands out in the market for being the largest national wine group (Sogrape, 2020), with more than 30 brands, present in more than 120 markets and with more than 150 bottles sold per minute. In terms of the company's financial structure, over the last five years, EBITDA fell between 2016 and 2017, from 41.5M€ to 34.1M€, respectively, but has been steadily increasing since then, ending 2020 with EBITDA of 42.2M€, which signals it is in good financial health.

The company's three Port brands portfolios are presented in Figure 3 and in Appendix2. They are aimed at different audiences and Porto Ferreira is the brand that has been in the company's hands the longest.



# Chapter 3- Industry analysis

In order to understand what can impact the consumption of Port Wine and lead to its decline, it was important to identify what challenges a company faces presently in this industry. Therefore, this chapter presents a micro and macroenvironment analysis of the Port industry, as well as a competition analysis in the domestic market.

## 3.1 The Port Wine Industry

Port wine is available across all five continents and contributes significantly to the vitivinicultural economy of Portugal (OIV, n.d.).

Regarding Port's main commercialization markets (**Table 1**), Portugal and France almost always remains in first and second places, apart from 2020 when Portugal moved to third place with a drop of more than €27 million in sales, recovering in 2021 by 34.3% compared to the same period of the previous year (IVDP, 2017-2021).

Main markets of commercialization of Port Wine								
	2017				2018			
		€	% Market	Variation %		€	% Market	Variation %
France	2º	70.932.244	19,2	-3,6	2º	69.221.883	19,3	-2,4
Portugal	1º	73.695.573	19,4	6,1	1º	71.705.434	19,4	-2,7
EUA	5º	33.465.836	8,8	-0,7	5º	34.392.831	9,3	2,8
UK	3º	49.520.315	13,2	5,3	3º	41.842.871	11,5	-15,5
Belgium	6º	1.175.396	7,5	-5,5	6º	30.971.373	8,4	8,2

	2019				2020			
		€	% Market	Variation %		€	% Market	Variation %
France	2º	69.241.975	18,7	0	1º	64.527.818	19,4	-6,8
Portugal	1º	73.769.709	19,4	2,9	3º	46.452.904	13,6	-37
EUA	5º	36.405.008	9,6	5,9	5º	33.564.832	9,9	-7,8
UK	3º	45.655.123	12,1	9,1	2º	46.935.997	13,8	2,8
Belgium	6º	29.996.523	7,9	7,7	6º	30.820.385	9	2,7

	Jan - Nov 2021			
		€	% Market	Variation %
France	1º	63.238.533	18	7,4
Portugal	2º	52.018.645	14,4	34,3
EUA	4º	39.757.561	11	37,1
UK	3º	48.841.286	13,7	10,6
Belgium	5º	32.105.434	8,9	26,3

Variation %: Variations in relation to the same period of the previous year

**Table 1-** Main markets of Port Commercialization

Source: Author, based on IVDP data

### 3.2 Micro and Macroenvironment analysis

To analyse Port Wine industry's micro and macroenvironment, Porter's Five Forces and PESTEL models will be used. Porter's Five Forces is a model widely used to support corporate strategy formulation because it helps determining opportunities and threats determined by the industry by identifying and analysing five competitive forces. Through a PESTEL analysis it is possible to identify external forces that impact the industry and its markets and determining how they may affect their business directly, through key long and short-term environmental patterns (Gupta, 2013; HO, 2014).

### 3.2.1 Microenvironment analysis

In terms of Porter's Five Forces, the **threat of entry of new competitors is low**, given the control done by the IVDP (see point 3.2.2) and given the ability of the European Union's Common Agricultural Policy (PAC) to control the vine planting area, being the level of planting restriction very high in the Douro region (IVV, n.d.).

In terms of **substitute products**, the supply in the market is quite wide, which gives consumers the ability to satisfy their needs with several products, making this **threat high** (see point 3.3.2).

The **bargaining power of suppliers is a strong threat**. The two sectors that should be considered are the cork sector to produce stoppers and the glass packaging sector for bottles. These sectors impact a lot on the wine industry, as they are the indispensable complements since they guarantee the preservation of the wine's characteristics and quality (Alberto & Ferreira, 2007).

The **bargaining power of customers is high**, since globalization and technological advances give customers the ability to access a lot of information, such as prices and available products, thus giving them the ability to satisfy the same need with different products (Almeida, 2017; Carolina & Mendes, 2016).

The last factor, **competition in the industry is intense**, as the market offers a wide range of alternative Port Wine brands (see point 3.3.1).

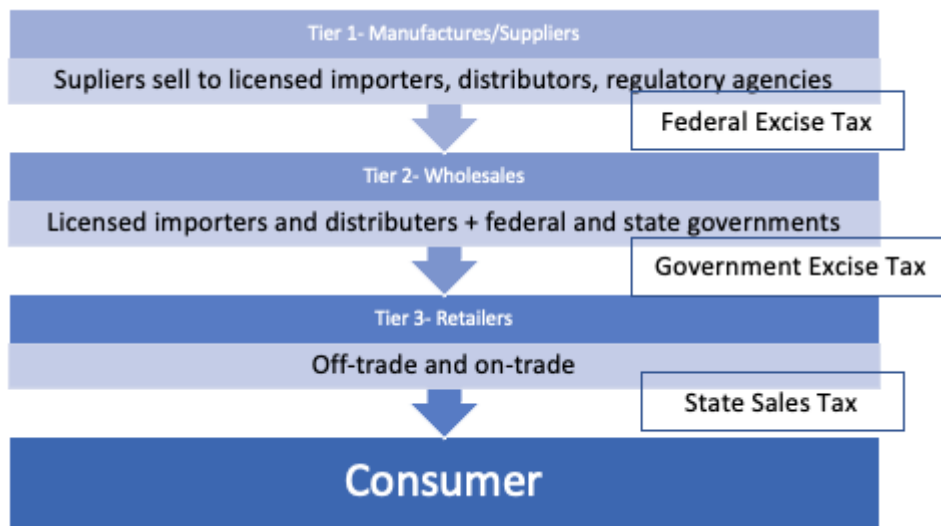
In view of the above it is possible to conclude that the industry is moderately attractive.

### 3.2.2 Macroenvironment analysis

#### **Political/Legal Factors**

The Port industry is governed by the IVDP, under Law-Decree n.166/86 of 26 June (Diário da República, 1986).

Moreover, there are countries with a very high impact on wine exports as they do not ease the entry of alcohol beverages. In the USA, for instance, to where Sandeman wine is widely exported, the Three Tier System (**Figure 4**) is applied and is used to ensure that the government does not lose income from alcohol beverage (Distributors, n.d.).



**Figure 4-** Three Tier System  
Source: Author, based on Distributors, n.d.

### Social Factors

Changes in consumer lifestyle, tastes, behaviour, and habits in the face of globalization, impact Wine Port consumption. Wine companies have already understood that having a good winery and making high quality wine is no longer enough to compete. Thus, the primary focus of wine companies is no longer only on technical quality aspects, but on anticipating both market trends and buyer behaviour. This is a particular problem in established wine regions where, for economic, historical, cultural and social reasons, wine producers have focused on the product rather than the consumer (Silva & Rebelo, 2019).

A study conducted by Amint (2021) about Port wine consumption behaviour found that during a 4-year period under review (2016-2020) women's consumption of Port increased by 14% and men's went from 72% to 68%; Port

(first) tasting has been advanced from 22 to 20 years old; the consumption is made 84% of the time at home and 16% out, mainly without food, and 92% of the consumption made with someone else; “Best Taste” and “Best Quality” are the main drivers of choosing a brand as the preferred brand for any of the brands, and when choosing a bottle of Port 61% of the consumer decision is driven by the brand and 31% by the price.

## **Technology**

Technology is changing the purchasing habits. The Portuguese eCommerce market grew by 30% in 2020 (eCommerce Market Portugal, n.d.). It is worth noting the significance of COVID-19 in this trend's penetration. In June 2020, global e-commerce retail traffic hit a new high of 22 billion monthly visits (Dumanska et al., 2021).

During Web Summit 2021, Cryptos and NFTs have been a topic of discussion in the technological revolution. “Web 3.0 will move all the money in the world into digital finance” said the Celsius CEO (TURNER WRIGHT, 2021).

## **Environment**

Global warming can directly affect the quality of wine, since temperature is the most important aspect influencing the maturity and quality of grapes (Gladstones, 2011; Zoecklein, 2018).

Although the carbon footprint of wine is small, it still contributes significantly to environmental degradation and global warming through soil destruction, decrease of biodiversity, pollution of groundwater, as well as in transportation and packaging – although bottles are recyclable and important for wine aging, glass production requires a lot of energy consumption (Decanter, 2021a).

The major opportunities and threats that Port industry is facing are summarised below (Table 2).

<b>Main opportunities</b>	<b>Main threats</b>
Consumers taste Port Wine earlier	Legislation applied by the IVDP and main exports countries that makes this sector extremely regulated
Increased use of technologies for the acquisition of goods and services	Changes in consumer style in the face of globalization
Good quality of Portuguese soils for wine production	Global Warming

**Table 2-** Main opportunities and threats for the Port industry  
Source: Author

### 3.3 Competition

The decline in Port Wine consumption is the main problem which this thesis departs from. It is therefore pertinent to analyse the competition that Porto Ferreira faces in the Portuguese market.

The competition analysis was done with a broad perspective: I started by analysing the direct competition from other Port Wine brands, and then I expanded the analysis, through data extracted from the Continente card to the competition from other alcoholic drinks available in the market, that can be classified as substitute products.

Furthermore, and because the proposal of this work is to explore the ground for a strategy to increase the consumption of Port through NFTs, I conducted an even broader competition analysis to understand with which other products Port Wine may compete in this digital universe.

### 3.3.1 Port Wine competition

To overcome the lack of specific information on the Vintages, this analysis focuses on the global results per Port Wine brand.

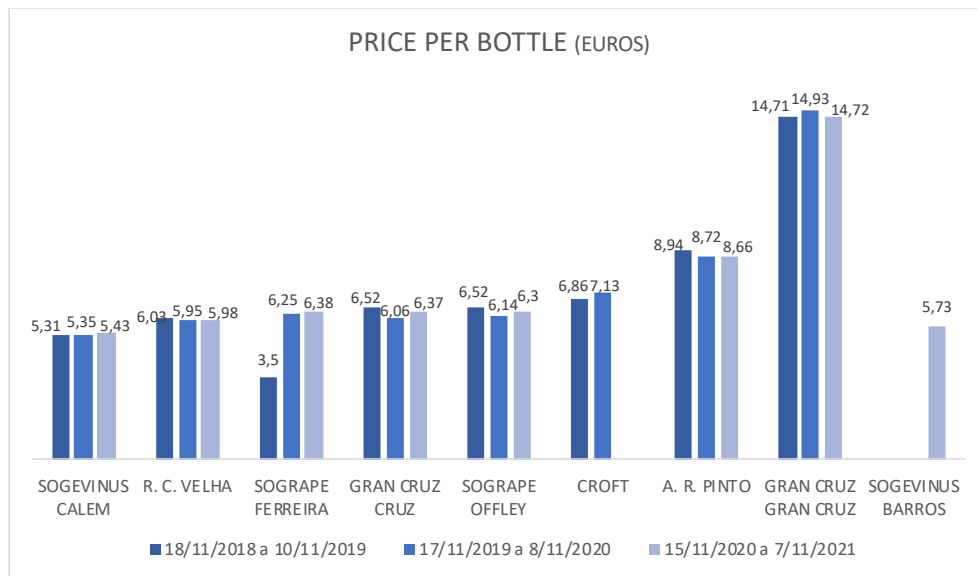
In terms of direct competition, in 2020 there was a big drop in the volume of sales of all brands (Nielsen, 2021), which was due to the pandemic that decreased the demand for this wine by tourists and emigrants, who are the most relevant market for Port Wine in the country (**Table 3**). From 2020 to 2021 there has already been a great improvement in the sales volume.

Sales in volume (75cl)					
PORTUGAL MARKET	2019	2020	2021	2021-2019	2021-2020
FERREIRA	136 988	89 817	112 711	-18%	25%
CALEM	100 554	80 964	96 463	-4%	19%
CRUZ	65 900	40 174	56 498	-14%	41%
OFFLEY	65 836	32 342	36 164	-45%	12%
CROFT	78 307	39 266	40 458	-48%	3%
GRAN CRUZ	18 593	11 186	20 546	11%	84%
BARROS	5 628	4 125	13 352	137%	224%
GRAHAMS	19 598	5 019	6 483	-39%	29%
TAYLORS	10 841	5 708	7 706	-29%	35%
SANDEMAN	2 785	1 872	2 364	-15%	26%
REAL COMPANHIA VELHA	2 239	1 447	2 049	-8%	42%

**Table 3-** Sales volume of Port brands, Sogrape brands in blue  
Source: Author, based on Nielsen, 2021

In the three years under review Porto Ferreira was the brand with the highest volume of sales, and despite a general decline in 2019, between 2020-2021 its sales increased by 25%; close by is always Calém which had an increase of 19% under the same period.

Regarding the price charged by the brands (**Chart 1**), Gran Cruz is the most expensive, with prices around 14,72€ per unit; Calém and Porto Ferreira have always practiced very identical prices, around 6€.



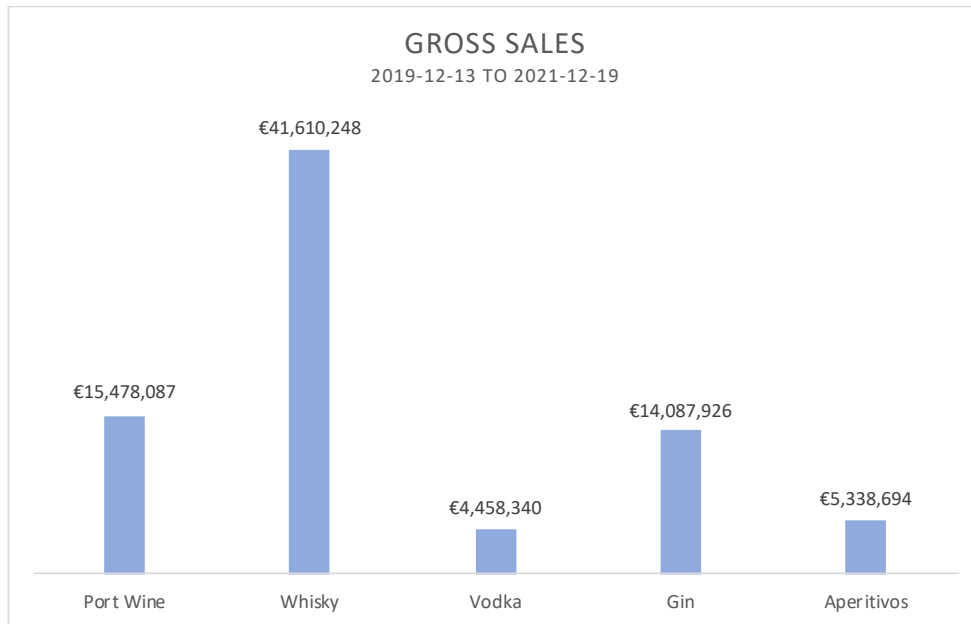
**Chart 1-** Price per bottle  
Source: Author, based on Nielsen, 2021

### 3.3.2 Competition in the alcoholic beverage market

Competition of other alcoholic beverages is also a factor to consider since Port Wine consumers can choose other drinks that satisfy their needs in a similar way.

In the world of distilled beverages, over a three-year period (Dec 2019-Dec 2021), the Whisky category was the one with the highest gross sales volume (€41.5M) (**Chart 2**). Port Wine, despite a €26.1M difference from Whisky, came in second place with a sales volume of €15.5M (Aimia, 2021).

In terms of customers who buy these drinks (**Chart 3**), during the same period of analysis, Port Wine and Whisky had a very close total number of customers with 687K and 637K, respectively. Therefore, although the value of Whisky gross sales is higher than Port Wine, Port has a higher number of customers looking for items in this category (Aimia, 2021).



**Chart 2-** Gross Sales in distilled beverages

Source: Author, based on AIMIA, 2021



**Chart 3-** Clients of distilled beverages

Source: Author, based on AIMIA, 2021

### 3.3.3 Beverage competition in the NFT world

Since some beverage producers have already entered the world of NFTs with wine, champagne, and even spirits, it is pertinent to briefly cover some of these cases.

Penfolds is the first wine brand to partner with BlockBar, which is a platform for NFTs of luxury wines and spirits that has its products also available for sale at OpenSea, an NFT marketplace. Penfolds has released a limited edition NFT of its unique Magill Cellar 3 barrel of wine, manufactured from the 2021 vintage. (The drinks business, 2021).

Another NFT case in the wine industry is the US-based Robert Mondavi Winery brand, that launched a special edition called MCMLXVI. The buyer will receive the wine in a single a piece of art developed in collaboration with a French porcelain house. "This is on the forefront of how we think, in the future, luxury wine is going to be distributed, especially to fine wine collectors", said Robert Hanson, president of wine & spirits at Constellation Brands (Decanter, 2021b; Robert Mondavi winery, n.d.).

Two cases of champagne NFTs are Taittinger Prestige Rosé Street Love Flumus and Duval Leroy Femme De Champagne Titanium, which are unique hand-painted bottles in Street Art Style. Still in this scope, a unique collaboration between the brand Dom Pérignon and the singer Lady Gaga, gave rise to two limited editions of Rosé Vintage 2006 and Vintage 2010, in an exclusive sculpture.

# Chapter 4- Literature Review

This chapter presents a literature review of the two main themes that will support my answer to the research question. The first and most important is the Blue Ocean, since it was the strategy used to get a broad view of the Port industry critical success factors in the present, and thus understand how to develop a different strategy to reverse the declining trend. Next, the theme of NFTs, which was the specific strategy explored as a possibility.

## 4.1 Blue Ocean

### 4.1.1 What is a Blue Ocean

Porter's (1980, 1986) "competitive strategy" is based on achieving a competitive advantage through "differentiation" or "cost leadership" within the constraints of a given market structure and industry (Cho & Jung, 2013). However, Hill (1988) disagreed because a combination of cost strategy and differentiation, which leads according to Porter to a 'stuck-in-the-middle' position, may be necessary for companies to achieve a sustainable competitive advantage.

Value Innovation, the cornerstone of the Blue Ocean Strategy, follows Hill, as it seeks to simultaneously generate value for the company and the customer. Thus, innovation creates value for the market through strategies that eliminate or reduce aspects less relevant to the consumer and reducing costs for the company.

Furthermore, Blue Ocean method's concept is perplexing: it has nothing to do with the need for new technology, but with the need to offer a significant jump in value for buyers (Kim & Mauborgne, 2017). The core technology is usually already in place, and producers link it to buyer value; so, it is not needed to fly

to far-flung lands to generate Blue Oceans: much of it is produced within existing industries, not outside of them (Kim & Mauborgne, 2004).

These aspects illustrate how the authors are not aligned with Porter's perspective that successful companies are those that follow either a low-cost strategy or a differentiation strategy. Instead, companies that opt for the Blue Ocean Strategy, use both types of strategy.

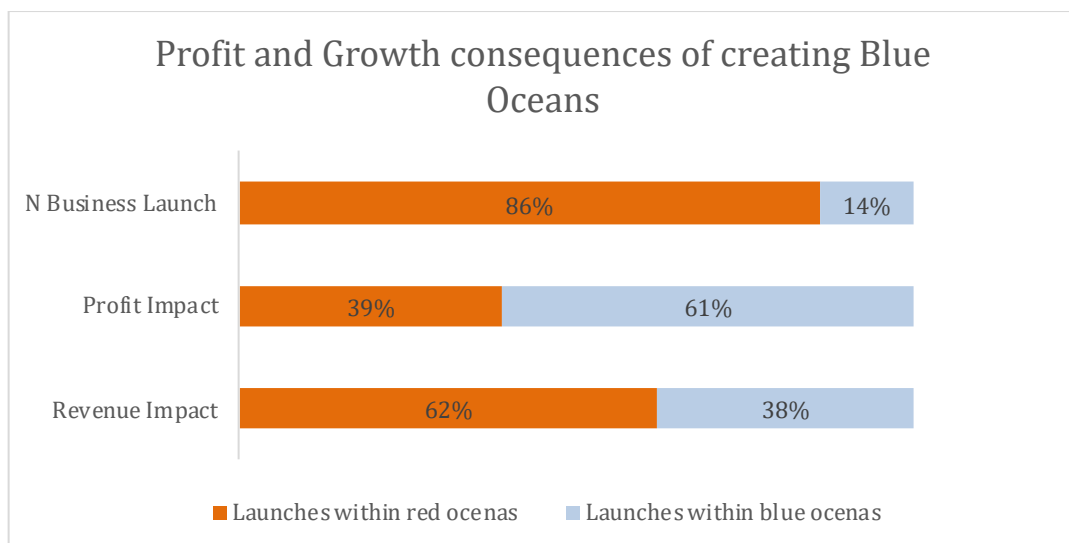
The expression "Blue Ocean" is an analogy used to illustrate the huge, deep, and untapped potential of market space (Kim & Mauborgne, 2005b), which is also described by the authors as "market-creating moves" (Kim & Mauborgne, 2017).

The need to create Blue Oceans has become more evident with globalization: trade barriers between nations and regions were removed so knowledge on products and prices becomes quickly and worldwide available; new technologies have significantly improved production efficiency and allowed suppliers to generate an unprecedented range of products and services. However, even as supply grows, demand does not, price wars are escalating, and profit margins are decreasing (Kim & Mauborgne, 2005b).

The opposite of the Blue Ocean is known as Red Oceans or "market-competing moves" (Kim & Mauborgne, 2017), where competition is centred on overcrowded markets, and companies are trying to outperform competitors by establishing a stronghold inside the established industry order. However, in many industries, where supply exceeds demand, competing for a portion of decreasing markets will not be enough to maintain good performance, so companies must go beyond established industries for success. And that's why Blue Ocean creators use value innovation, making competition irrelevant by creating a leap in value for consumers and organization, thereby creating new and uncontested market space; this is when companies align innovation with utility, price, and cost positions (Kim & Mauborgne, 2005b).

According to Kim & Mauborgne (2017), to make a shift in thinking from a Red to a Blue Ocean it is necessary to understand that: market conditions cannot be considered given and therefore must be reshaped, because like imagination, industry boundaries flow; the goal is not to fight competition but to make it irrelevant, because while incremental improvements can bring competitive advantages, only large leaps can make competition irrelevant; the focus is on capturing new demand rather than fighting for a greater percentage on existing customers; the goal is to end value-cost trade off, achieving differentiation and low cost simultaneously.

The advantages of generating Blue Oceans in terms of performance are clear (**Chart 4**). Only 14% of business launches were focused at developing new markets, Blue Oceans, and the majority focused on minor changes to the existing offer. For those, the ones made within red waters, had a profit impact of 39% while the others within blue waters, had 61%. In other words, launching a business within red waters, has a very positive impact compared to a Blue Ocean in terms of money coming in due to the activity. However, the profit made from the activity is much higher when the business is a Blue Ocean (Kim & Mauborgne, 2005b).



**Chart 4-** Profit and Growth consequences of creating Blue Oceans  
 Source: Author, based on Kim & Mauborgne, 2005

Kim & Mauborgne (2005b) present several analytical tools and frameworks that help us develop Blue Oceans. Some of the more relevant tools are the Strategic Canvas, The Four Actions Framework, The Eliminate-Reduce-Create Grid, The Three Levels of Non-Customers.

The **Strategy Canvas**, which captures the current state of play in the known market space, is both a diagnostic and an action framework for developing a compelling Blue Ocean strategy. It allows to understand where the competition is currently investing, the factors on which the industry competes, and what customer gets from the competitive market offerings. And that's why the creation process must begin with the development of a strategy canvas, so that we can have a broad vision of the market where we intend to act - with a simple image-to broaden our horizon of ideas. This is possible because creating a strategy canvas accomplishes three goals: it shows the strategic profile of an industry, through the factors that influence competition; it demonstrates the strategic profile of existing and potential competitors; it portrays the strategic profile of the company, portraying how it invests in competitive factors now and in the future.

Furthermore, and to find evidence of Focus and Divergence, the authors suggest the use of a tool called **Four Actions Framework**. Its focus are the key points where a company must draw its attention, that is, the characteristics that will differentiate a business from the others, thus allowing costs to be low and the business model to be easy to create and implement. Divergence is what allows us to create value curves that are unmatched by the competition, thus seeking alternatives to the needs of the market.

The objective is to push companies to simultaneously pursue differentiation and low costs, to break the value-cost trade-off through a thought of what industry factors should be "Reduced", "Eliminated", "Created" and "Raised"

(Andrew V. Shipilov, 2008; Kim & Mauborgne, 2005b). While the first two provide insight into how to reduce costs in comparison to competitors, the second two motivate us to increase consumer value (Kim & Mauborgne, 2017).

Another and widely used method to create Blue Oceans, is the **Six Path Framework**, which is used to understand how to recreate market needs since it enables to identify out of the already existing market possibilities, creating commercially compelling new offers by reconstructing market boundaries (Kim & Mauborgne, 2005b). In this sense, this framework allows creators to look at six dimensions to see where they can change the competition: industries, strategic groups, buyers, complementary products or services, functional-emotional orientation, and time.

Another fundamental component of generating value innovation is to focus on "reaching beyond existing demand". Instead of focusing on consumers, the goal is to focus on noncustomers, to create new demand and grow the industry (Kim & Mauborgne, 2017). Every company in the market has customers, but they also have three sorts of non-customers: "soon-to-be", driven by those who use the market's offers very rarely and are willing to leave if a better opportunity arises; "refusing", compounded by people who refuse to use or can't afford to use the industry's offerings; "unexplored", characterized by people who have never considered markets' offerings as an option (Kim & Mauborgne, 2005b). Those non-customers can only be attracted if a corporation lowers adoption barriers (Andrew V. Shipilov, 2008).

A Blue Ocean shift is based on transferring both team and company from competitive markets to new markets where people own and drive the process. According to Kim & Mauborgne (2017) to make it possible is necessary to: adopt a Blue Ocean perspective to expand horizons to understand different types and levels of value for the consumer; have tools and frameworks for creating something interesting for the consumer and thus create new space in the market;

have a humanistic process (“humanness”), that is, to create trust within the organization in order to have commitment to change.

## 4.2 NFT

### 4.2.1 Defining and characterizing NFTs

Non-fungible Tokens or NFTs are blockchain-based tokens that securely map ownership rights to digital assets (Ante, 2021). It certifies a digital asset to be unique and therefore not interchangeable, while offering a unique digital certificate of ownership (Nadini et al., 2021). NFTs use as token standard the so called ERC721, which is a type of token that is unique and so can be distinguished from another. The record of ownership is always available, immutable, and ensures that there can only be one owner at any one time thanks to the security properties of blockchain technology (Popescu, 2021; Wang et al., 2021).

The year of 2021 marked the booming of NFTs. In the first four months of 2021, the NFT volume has exceeded 2 billion USD, ten times more than the entire NFT trading volume in 2020; sales were expected to be 12 million in December 2020, but they soared to 340 million in just two months (Nadini et al., 2021; Wang et al., 2021).

The components (see Appendix3) that created the NFTs world are: **blockchain**, that acts as a database, storing information in a digital format (Investopedia, 2022); **smart contracts**, which are virtual contracts that are created automatically when present terms and conditions are met and maintained on a blockchain (IBM, n.d.); blockchain **address and transaction** is a one-of-a-kind id for sending and receiving assets (Wang et al., 2021); **encoding**, which is the ability to transfer data from one to another (Wang et al., 2021).

NFTs are tradable via Ethereum which is more than just a payment system; it is a marketplace for financial services, games, art, and others that can't steal your information or restrict you (Ethereum Foundation, n.d.).

The seller of an NFT can receive royalties for each successful trade on any NFT market or through peer-to-peer trading (Wang et al., 2021), meaning that a royalty system can be built into the sale and divert a percentage of the earnings or sales fees to the original creator. Therefore, when a sale is made to a new owner who has this ability, the royalties should be properly divided (Popescu, 2021).

There are some characteristics of NFTs that are important to know such as: **scarcity** that makes possible an NFT to be unique; **decentralized and secure** that makes everything transferable and guarantees ownership rights; **environmental impact** given that the required energy leads to an increase in the carbon footprint; **non-interoperable** making any item unique; **indivisible** because an NFT is a complete item; **verifiable** since all transactions are historically stored (Ethereum Foundation, n.d.; Popescu, 2021). (see Appendix4)

NFTs are distinct from purchasing through the internet, in online brands sites. Through an NFT we acquire a unique good, while over the internet we acquire a copy of something, like a copy of a song; while each NFT has an verifiable owner, on the Internet the records are controlled by institutions; everything acquired through NFTs is compatible with Ethereum, while what is acquired over the internet only works if there is a system in place for it, like a ticket from Ticketline only works in their platform; Ethereum creates a single global market, while purchases made over the internet can fall victim to legal and geographic restriction; through NFTs the creators of content have full control over royalties, while over the internet they have to pay a fraction of their profits to those who make their content available to the public (Ethereum Foundation, n.d.).

## 4.2.2 NFT as an investment opportunity

Given that the introduction of Premium Port in the NFTs would be primarily aimed at attracting investors, this subchapter focuses on understanding what advantages and disadvantages it has for investors.

NFTs, in theory, can be exchanged on blockchain-based platforms just like any other financial asset. In NFTs' markets there are no central bodies, such as the Central Bank, which makes both parties interact directly. Participants - owners and collectors - can contract for a mutually beneficial price, if both own an Ethereum wallet. Also, anyone can access an NFT's transaction history and even information about the parties involved in those (Kong & Lin, 2021).

Moreover, the price of an NFT is greatly influenced by the token's scarcity, as well as, with economic conditions, regulation policies, and in an early stage, with public speculation. Furthermore, it works through the law of supply and demand: when demand of NFTs increases, the price responds with the same strength (Kong & Lin, 2021).

The risk-return characteristics of NFTs are linked to those of the native cryptocurrency exchange rate (i.e. ETH/USD) and stock market index, meaning that when overall wealth increases, a higher investment in NFTs is likely. In addition, NFTs generally outperform all other asset classes (such as gold and bonds) in terms of investment returns, making them a higher risk investment (Kong & Lin, 2021).

It is also important to note that investing in wine is now increasingly popular and can be done in a variety of ways. Wine's NFTs ensure that there is also a space for the market value in this category. NFTs enable wine trading on existing platforms, democratizing wine investment, and moving it away from the existing wine trading venues, many of which are exclusively open to industry professionals (Forbes, 2021).

Another important aspect is the creation of platforms that focus on providing wine through NFTs, such as WiVA's home. These platforms make it possible to transform physical assets into Financial Instruments, which significantly increases the investment possibilities for these assets (WiV, n.d.).

### 4.2.3 Opportunities of NFTs

Since NFTs are almost like a new market, and a very recent one since their boom occurred in 2021, there are some new opportunities that can be explored.

"Protecting Digital Collectibles" offers some opportunities. Trading wines, digital photos, films, jewels, and other real/intellectual goods are all examples of digital collectibles, which are unique copies of virtual items. With NFTs, content producers are not required to give up ownership or content to agents. In fact, NFTs can be designed to pay specified royalty charges every time a digital property is traded in the market (Wang et al., 2021).

In addition, the COVID-19 pandemic has accelerated the digital revolution, making the digital one of the most important ways of adopting goods. It is an environment that continues to amaze, breaking new ground at an extreme speed in every industry (Popescu 2021). Specifically, the returns on NFTs rose from 6.10% in the pre-COVID-19 period to 44.11% in the post-COVID-19 period (Kong & Lin, 2021).

### 4.2.4 Challenges of NFTs

NFTs also face some market challenges such as **usability**, because like most crypto technology, the difficult behind NFTs is associated with its inaccessibility to the general public, especially for new users, who need interaction with a number of complicated cryptocurrency exchanges and wallet providers. Another challenge is **security and privacy issues** because Ethereum platform only offers semi and not complete anonymity, which means that users can hide their

identities only to some extent if the public is unaware of the links between their real identities and associated addresses. The key to overcome this challenge is the implementation of some privacy-preserving solutions like a ring signature<sup>1</sup> (Wang et al., 2021). The **legal and policy** challenge is still to consider since, and according to the lawyer Susana Estevão Gonçalves, in general, the income generated by the sale or exchange of virtual currency, when obtained by individuals and outside a business or professional activity, is not taxed under IRS. However, when the sale of cryptomoney constitutes a business or professional activity of the taxpayer, there is IRS taxation under category B (CMS, 2022).

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<sup>1</sup>Ring Signature is a type of Digital Signature, which is an authentication of digital messages or documents

# Chapter 5- Case Study

## 5.1 The purpose

Inspired by the Yellow Tail phenomenon (see Appendix5), and with the help of Sogrape's Port Wine team, I started the process of creating a Blue Ocean for the company's Premium Port Wine. This work focused on creating a Blue Ocean for the Porto Ferreira's Premium Ports, that is, the company's main business, the sale of regular Port Wines in supermarkets and wine stores will continue within a Red Ocean.

As a kickoff, this work focuses on a strategy to increase the consumption of Porto Ferreira's Premium wines, since this was the brand I worked with during my internship. Thus, later, the company will have the possibility of using the strategy presented in other Premium Port wines and Premium wines of its own to continue this business and not just use it as a one-time differentiation approach.

With the decrease in worldwide Port commercialization from over €73 million in 2017 to less than €47 million in 2020 (IVDP, 2017, 2020) presenting itself as a threat to this category, and with, on the other hand, the growing use of the internet for purchases and investments, an opportunity appears here for the company to reinvent itself and strategically seek to increase the consumption of its wine.

The proposal of this work focuses on the entry of the Porto Ferreira brand in the NFT market with its Premium vintages. The company holds wines of this brand that are still from the time of Dona Antónia, such as a rare wine from 1830 with a capacity of 75cL. Allied to the rarity and complexity of the wines is the high price that is inherent to them, which makes the buyer someone who is aware that is buying a product of extreme value, with a reference PVP of up to 7 thousand euros.

According to the definition of Kim & Mauborgne (2005b) to create a Blue Ocean it is necessary to meet three major requirements (see 4.1.1 point).

(1) **Differentiation** is the first to be addressed and it would be accomplished through the possibility of acquiring a bottle of Porto Ferreira Premium through NFT, that is, acquiring digital ownership of that good. It is differentiation because it is a method that has not yet been used by direct competitors, which would make Sogrape the first company in the Port industry to take a step in this technological revolution. The focus is on the digital property that is granted to the buyer, however, complemented by the guarantee, on the company's part, of the Port delivery to the buyer if she/he wants to have it in person.

Therefore, differentiation is achieved not only because the purchase channel used is different – NFTs - but also because the company is looking here for a new type of consumer, that is, someone capable of using this technology and of seeing it as a way to increase the investment portfolio.

(2) **Low cost is the other factor to be addressed.** The possibility of placing Sogrape wine on NFT platforms does not mean that the company must acquire new technologies and have more costs, on the contrary. The company's main activity is wine making, so the company already has all the technology needed in place; and in the case of the Porto Ferreira Vintages, the company already has the wine produced in its possession and that is stored in its cellars.

Another aspect that makes it low cost is the fact that there is no need to invest money in mass marketing, such as campaigns with influencers, television advertising and posters, which are very expensive. Given that the focus is on capturing the right investor, Sogrape can use its Public Relations (PR) team, which can focus its strengths on reaching the target audience intended for the sale of those Premium Ports, without the need of outsourcing people. Also, one way introduced by Kim & Mauborgne (2017) to achieve a cost challenging goal, is to create partnerships. So, the company can make use of Co-Marketing - a

marketing technique where two companies cooperate to promote an offer – with a renowned and specialized wine magazine. It may then achieve a win-win strategy since there can be an associated exclusivity, and therefore the magazine also becomes a part interested in the business - the cost associated with this strategic advertising would be lower for the company rather than using massive marketing tactics.

(3) The last point is **creating and capturing uncontested market space**, which will be possible by taking the step out of the red ocean of competing only for the consumer in supermarkets and wine cellars and get into the world of NFTs establishing a new market space. The target audience will be different because we will be looking for investors with interest and knowledge to interact with this technology, rather than a regular wine consumer; the acquisition method is innovative because we will set aside the traditional methods of acquiring goods; the competition has not yet dared to take this evolutionary step in its portfolio. In this way we open space in the market for investors, who are looking to increase their portfolio, this time through rare and premium wines.

Besides, to turn into a business, it needs continuity, and although the focus of my project is on Porto Ferreira Premium Port, the wine cellar of these vintages is not infinite. Thus, I also propose to Sogrape to give continuity to the business taking it further. So, the beginning of the company in the world of NFTs would just be the fresh start of a new generation of Port consumption, and thus increase its sales and reverse the decline in consumption.

The starting point of the company's presence in digital property could be done through rare Port Wines with over 100 years old including Porto Ferreira's from 1830 till 1952, among others, all in 75cl bottles and with enough stock making it possible for this brand to be used as a kick-off for the company in this context, which gives room to start the creation of a new business and not an isolated act (Internal Information, 2021). Already well placed in NFTs' the company can then

use this method for other Premiums that are part of its portfolio, not only Port Wines, but also wines such as Barca Velha. In addition, it can create a unique wine in which its acquisition is possible only through NFTs, i.e., make a unique vintage from a single harvest destined only to these investors. In this way it will be possible for the company to continue the business by selling its Premium wines through NFT.

Also, to highlight the company in this business, it will also be possible to partner with artists who will create a unique box associated with each bottle, which will make this an even more valuable asset for the investor. Bringing wine and art together creates more interest and value for the wines (see Appendix 6).

This whole business model will make the competition irrelevant because of this new method of purchasing a Premium Port, a digital property and even considering the possibility of competitors following in Sogrape's footsteps, the company will be recognized as a pioneer in this project. This makes the company enter the world of cryptocurrencies and look for a consumer that is totally different from the usual, thus creating and capturing new demand.

Simply put, users own the physical top-range wine bottle, which Sogrape stores for them meeting the best conditions, and the digital version acts as proof of validity, ownership verification, and the right to have the physical bottle delivered.

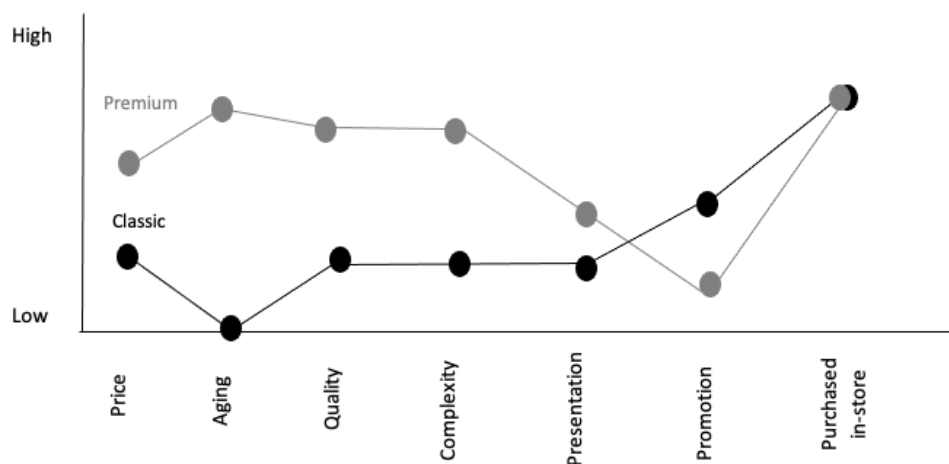
## 5.2 Strategy Canvas

As mentioned in the literature review, the Strategy Canvas is a starting point to have a broad vision of the market where we intend to act, to understand where the competition is currently investing, the factors on which the industry competes, and what customer gets from the competitive market offerings.

The characteristics chosen for the Strategy Canvas (**Figure 5**) were thought over with Sogrape Port Wine team to find the ones that have the most influence

in distinguishing the wines. The distinction chosen between Classic and Premium is simple: there are those two categories of Port, and within each category we include the different wines known in the market, and thus arise the two lines of the strategy canvas value curve - the grey one, related to Premium Port and the black one, related to Classic Port.

Regarding the axis, on the horizontal, the factors of competition of the market we are competing on are presented, and on the vertical axis the level of offering that the buyer can have of each of the chosen features.



**Figure 5-** Strategy Canvas Classic vs Premium Port wine  
Source: Author

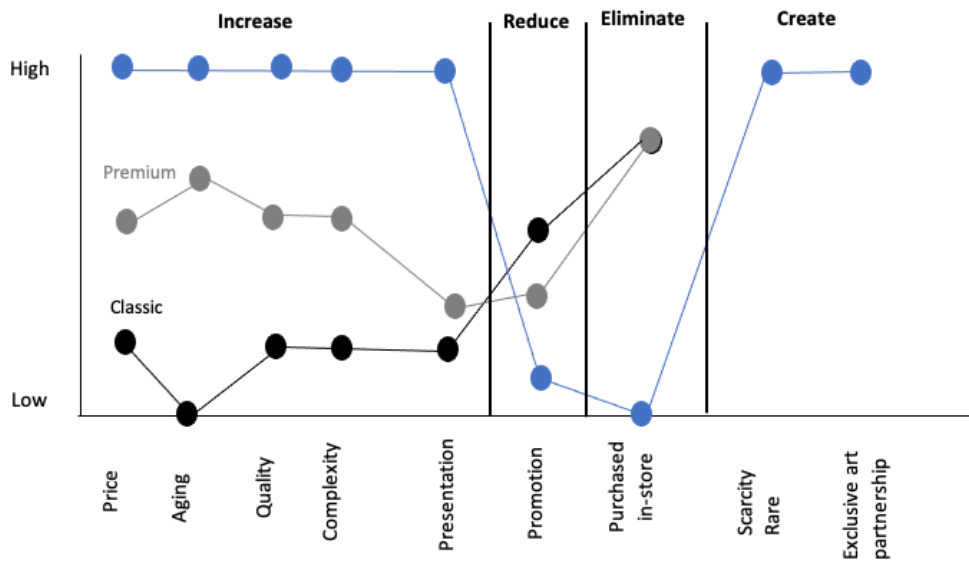
In the Strategy Canvas of Classic vs Premium (**Figure 5**), the Classic Port **price** is lower than a Premium given the fact that it is a wine that presents only the "basic types" known as Tawny, Ruby, White and Rosé, that are of lower quality, aspect also represented in the framework. The **aging** is explained by the fact that, associated with a Classic there is no age, while in a Premium we have both a port wine of 10, 20, 30, 40 years as well as a Vintage from a single harvest. The **complexity and quality** of the wine are related, that is, a wine whose creation is a blend of different vintages from different years is always more complex than a simple tawny.

The **presentation** of the wine is related to the bottle and IGB used; in a Classic, the bottle's moulds, glass colours and label are never very exuberant, while in a Premium there is always a greater bet on these aspects by the need to enhance that wine.

The Marketing-Mix is based on four aspects, which form the basis of any marketing strategy: Price, Product, Placement and Promotion. **Promotion**, the aspect addressed in this Strategy Canvas, is related to the communication strategies developed to make this service or channel known to its target audience. In that sense, promotion is high since a Classic Port seeks to have a stronger advertising (Digital Marketing, Traditional Marketing, Outbound Marketing, Invisible Marketing, among others) to be better known and thus reach a larger number of customers to purchase the product. On the other hand, a Premium Port, and because they are Ports of a higher quality and therefore are not available to the customer in a supermarket, but rather in specialized spaces, such as wine stores, they do not seek to be as advertised in that massive way.

The last factor to take into consideration is "**Purchased in-store**" and refers to points of sale: a Classic is available in supermarkets, while some Premium Port are available in wine stores. This does not preclude supermarkets and wine stores from having an online sales channel, but the main channel is the physical store, and this is the critical point considered.

The introduction of the new curve (**Figure 6**) was thought with the focus on vintage and rare wines that are not even normally sold.



**Figure 6-** The introduction of a new curve in the Strategy Canvas  
Source: Author

Given the rarity of these Port Vintages, their price is extremely high, the aging is also high given the year the wine was produced, sometimes over 100 years. The quality and complexity are, as mentioned above, related with in the definition of the price, i.e., a Port of Dona Antónia is a very complex wine, with a very good conservation capacity, which is reflected in its quality and therefore, price.

Regarding presentation, these Ports are bottled in bottles of that time, that were hand-made and blown, which gave each bottle unique characteristics.

The aspects presented are factors to be **Raised** well above the industry's standard. To reconstruct value for the consumer it is necessary to change the factors of the strategy canvas to draw a new value curve, always with focus to clearly show the company strategy profile and making it in a divergent way, which means, to differentiate the company from the industry's average profile (Kim & Mauborgne, 2005b).

The new creation would **Reduce** Promotion. One of the characteristics of a Blue Ocean is the value innovation, where cost savings are made by removing and reducing the factors in which an industry competes (Kim & Mauborgne,

2005b). In this sense and given that the goal behind this new business would not be to reach the current, everyday consumer, but to look for a consumer who can also see that spending on wine can be an investment, the company can direct the advertising of the product to find the intended audience.

In that sense, the type of advertising used would be exclusive, through a PR team who would contact only potential customers in a selective way. This means that the focus will be on getting investors, through personal knowledge and research from auction investors from various countries in the world.

In addition, Co-Marketing is a strategy that allows the intervening companies to reach a new market and more specialized areas, which can lead them to open new doors and reach a new audience in a strategic way. Sogrape can use this type of marketing and make a partnership with a renowned and specialized wine magazine to have exclusivity in the launches of wines purchased through NFTs from Sogrape.

A factor to be **Eliminated** is the "Purchased in-store". The acquisition of these wines will only be done through NFT marketplaces, and the digital property associated with each wine will then be acquired.

OpenSea (n.d.-a), the marketplace I suggest to Sogrape, is characterized as the largest NFT marketplace in the world, with the most diverse product categories, for the most diverse customers. It has more than 600,000 users, more than 80 million of NFTs and has made more than 10 billion dollars in volume. Furthermore, it supports several blockchains, for example WiVA, a platform dedicated to selling wine NFTs, which made an partnership with OpenSea to open a new door for the wine industry by bringing wine to a new generation of collectors who want to be able to transact their assets in a safety and efficiently way (OpenSea, n.d.-b).

Two new critical success factors are **Created**:

(1) The fact that it is a rare and scarce wine has to do with the fact that it is a Port with many years, some even from the time of Dona Antónia, when there was no perception that the maturity of a wine gave it greater quality, so it was not common at that time to keep wines to be consumed after years. These wines are not sold to the common customer, they are preserved in the company's cellars to have a special treatment to maintain the necessary quality, which makes them even more unique. Thus, these wines do not exist in blends, as they were not intended to be vintages of this extraordinary category at their creation.

(2) The other factor added is the unique and exclusive art partnership, this means, given the wine in question it would be interesting and relevant to join the art of harvesting with the art of creation, and thus produce a unique packaging with the collaboration of an artist to make something unique in the market. This art piece could be the bottle or the box in which it is kept. Each bottle of Porto Ferreira Vintages, for example, is unique since the glass was still blown when the wine was bottled, making each bottle distinct. In this instance, and to avoid losing this uniqueness, a collaboration may be formed so that the box in which the wine is conveyed is a work of art. In a more contemporary case of wine, given that all these processes are now automated, each bottle might be one-of-a-kind and designed by an artist.

### 5.3 Six Path Framework

As mentioned in the literature review, this framework is used to understand how to recreate market realities. It is important to note that is not supposed to change all the elements that the framework refers to, but only the ones that are important for that industry in order to change the competition (Kim & Mauborgne, 2005b).

In the case of the present work, this creation will focus on a new Buyer Group across the industry (**Table 4**). Port is a wine that, due to its diversity can reach a wide range of consumers. In this case, the buyers will have quite unique characteristics, because they see wine not only as a consumer good, but as an investment opportunity. Furthermore, these consumers seek to do so by purchasing NFTs, and therefore acquire the digital property associated with the wine purchased, which means that they must trust in this technology, as well as being a cryptocurrency user.

Besides the search for a Premium Port, they have a passion for art, and want to combine those two types of investments into one digital property.

Furthermore, the creation will also focus on the scope of Product or Service Offering. Because it looks across to complementary product and service offerings, through delivering to the customer a totally different experience. Complementing the Port with art through a package and a different service through NFT deliver experience, that is, grant digital ownership of wine.

Moreover, and according to the authors, the main strategic points of a Blue Ocean arise from the ability of companies to participate in the creation of external trends over time that have impact in their industry. In this case, by entering the world of digital property with its Port wines, Sogrape will be a participant as a company in this worldwide trend. NFTs started to have their growth during 2021, and by entering this world, Sogrape is actively participating in the creation of this trend and not adapting to it.

	Head-to-head Competition	Blue Ocean Creation	The proposal
Buyer Group	Focuses on better serving the buyer group	Redefines the industry buyer group	Consumers seeking to acquire the Port through NFTs and therefore acquire digital ownership of the good
Scope of Product or Service Offering	Focuses on maximizing the value of product and service offerings within the bounds of its industry	Looks across to complementary product and service offerings	Complementing the Porto with art through a package and a different service through NFTs deliver experience
Time	Focuses on adapting to external trends as they occur	Participates in shaping external trends over time	The company is participating and not adapting to the NFTs trend as it has started its growth during 2021

**Table 4-** Six Path Framework

Source: Author, based on Kim & Mauborgne, 2005

## 5.4 Three tiers of noncustomers

In a perspective of reaching beyond existing demand, there are three types of noncustomers: the "soon-to-be", consumers who are close to our market but about to jump out of it; the "refusers" who consciously decide not to choose our market; the "unexplored" who are in markets far away from ours (Kim & Mauborgne, 2005b).

Sogrape's current customer is someone who looks for wines in supermarkets and wine stores for consumption. In this case, we are trying to reach a new public, to attract another range of clients, investors looking to increase their portfolio.

So, this client, besides being an investor, must be someone who says yes to technology, who is willing to participate in the blockchain world and increase his investment portfolio through NFTs, which will guarantee the digital ownership of his fixed assets. It is a client that belongs to the third tier, the "unexplored", people who have never been considered as possible customers since their requirements and accompanying business prospects have always been regarded to be the domain of other sectors (Kim & Mauborgne, 2017).

## 5.5 Opportunities and Risks for Sogrape

After this analysis, I summarize, from my own point of view, what opportunities and risks Sogrape's entry into this world can bring to the company.

By entering the world of NFTs the company will acquire new customers who are those investors and users of new technologies; it can play in the company's favour because it can use its list of new users to create a group of premium customers who by purchasing the NFT have access to launches and private parties of the brand, becoming loyal investors in the brand.

The company's entry into the NFT will be important to increase its notoriety internationally since the world of cryptocurrencies is constantly growing and is a very current and relevant topic on the world stage. In addition, it would be a way for the company to avoid physical intermediaries. By just using the marketplaces for selling NFTs, the company does not need third party responses and acceptance, it just needs to complete all the steps and in a matter of minutes the product is available worldwide. The last aspect to point out and that makes this trend a great opportunity is the growing wave of NFT users, since in December 2017 there were 191.851 users and in December 2021 it increased to 363.692.

On the other hand, cryptocurrencies have, in general and like any other form of investment, the risk of price volatility associated with them. Another risk is the possibility of not reaching the target audience and these rare wines start to circulate to audiences other than investors with capital, who see value in investing in wine and that technology is not a barrier. In addition, Sogrape prides itself on being a company focused on sustainability and for now, the technologies used in blockchain are degrading the environment, given the fact that the way Ethereum keeps its funds and assets safe is energy intensive and it is deteriorating carbon footprint. Finally, another cost associated with transactions made on Ethereum is called "Gas Fee", a payment provided to miners for entering

or completing transactions into the blockchain and which varies according to demand and supply. The company may confront another major risk which is that acquisition through NFTs is just a fad of the digital and cryptocurrency world and users might lose interest.

# Chapter 6- Conclusion

The objective of this Master's Thesis is to answer the following research question: "How to reverse the declining trend in Porto Ferreira's Port Wine consumption through NFTs?".

Considering the analysis presented for the case study of Sogrape, the company might have a good opportunity to stand out in the market through this new form of product ownership, thus increasing its notoriety in the market, acquiring more and different buyers and creating a new path for the increase of Port Wine consumption.

The decrease in the consumption of Port Wine has been evident, a signal that consumers are changing their consumption habits due to globalization, and the impact it has had on their lifestyles, and to the fact that the supply is plenty, which gives consumers the opportunity to meet their needs with different types of products at different prices (Almeida, 2017; Carolina & Mendes, 2016). Moreover, technology is another factor with an impact on the type of consumption carried out and that was evidenced during the COVID-19 pandemic: during the year 2020, eCommerce grew 20% (eCommerce Market Portugal, n.d.).

Thus, the need for creating a strategy to reverse this decline in Port consumption was identified, given the current needs of the market and the technological development.

The proposed strategy involves the creation of a Blue Ocean, that has value innovation as its main focus, creating a leap in value for consumers and organization, thereby creating new and uncontested market space, thus making the competition irrelevant (Kim & Mauborgne, 2005b). The goal behind this strategy is to attract non-consumers instead of focusing on those who are already

current consumers, in order to create new demand and industry growth (Kim & Mauborgne, 2017). Through tools and frameworks, it was possible to position Sogrape in the current market, considering its critical points to find strategies to attract new consumers.

After the analysis made using the “Four Actions Framework” and the “Strategy Canvas” to have a broad vision of the market where we intend to act, it was considered pertinent to insert Porto Ferreira's Premium wines in the NFTs market to attract consumers who are looking for different ways to invest their money. The main strategic points of a Blue Ocean arise from the ability of companies to be involved in the creation of external trends over time that have an impact on their industry. Thus, the relevance and pertinence of this study finds an answer here, since, by entering the world of digital property, Sogrape takes a step in the construction of a global trend that, at this moment, presents a gap in the Port Wine market.

Furthermore, and to give continuity to this business, it is also suggested this to be the company's first step in the digital property market. The company can use this business model for other Premium wines in its portfolio and even create an exclusive wine for this market, creating the possibility for the company's top Premium to migrate to the world of digital property.

Considering the risks and opportunities mentioned, and although the opportunities presented are more than the risks, there is always a possibility that the strategy is not suitable to the capabilities and values of the company. It should also be noted that "The fact that a trend is having a major impact on other industries or society does not mean that it is necessarily relevant to yours" (Kim & Mauborgne, 2017), which shows that there is always the possibility of a strategy not being the most suitable for a company and its industry.

Given that the objective of this work is related to the need to increase the consumption of Port Wine, specifically Porto Ferreira's Premium, and being aware

that the NFTs' trend may not have expression in this industry, as aforementioned, there is the possibility of this business model not being suitable and therefore a Blue Ocean not being achievable, which makes Sogrape's entry into the world of NFTs with its Premium, nothing more than an ephemeral bet on differentiation.

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# Appendix1 – What is Port Wine

It was in 1670 that the first references to "Port Wine" appeared, and in 1756 the "Companhia Geral da Agricultura das Vinhas do Alto Douro" was created. One of its attributions was to proceed with the Demarcation of the Douro Region which would become the first wine producing region demarcated and regulated in the world. Exports began to increase, and Port began to earn its fame.

The Douro Demarcated Region is in Northeast Portugal and extends over an area of 250,000 hectares, with about 44,000 hectares of vineyard area planted.

In the Douro, schist, disintegrated rock, and stony soils predominate, allowing water and root infiltration, essential for the survival of the plant in very dry or very hot periods, and forming a protective layer that retains heat at the surface, keeping the soil cool for the plant.

The amount of Port Wine produced annually is regulated and established by the Interprofessional Council and released by the IVDP's 'Comunicado de Vindima' before each harvest.

After the harvests that take place between September and October, the grapes go to the wineries where the vinification process takes place (Sogrape, 2021a).

## Appendix2 – The Port Wine brands that are part of Sogrape's portfolio

**Porto Ferreira** was established in the Douro in 1751, by a family of Portuguese wine growers and merchants, and was the first Portuguese Port Wine company established. In the following century, in 1987, Ferreira joined Sogrape, a step which insured continuity of the family orientation with focus on quality, both in Port and table wines. Today its target audiences are adults who favour the traditional consumption habits of Porto.

**Offley** was established in London in 1737 by William Offley as trade merchant. Offley set up a branch in Porto and shipped its Port Wines, laying the basis for a solid future that granted a worldwide recognition in the business. In 1996 the company was acquired by Sogrape Vinhos and today is a leading brand present in more than 50 countries with a target audience of young adults looking for excellent value for money.

**Sandeman** was founded in 1790 in London by George Sandeman and is one of the oldest registered trademarks in the world. Furthermore, it is a pioneer brand in wine advertising, having started using this marketing tactic in 1900, and being worldwide known by the mysterious human figure in a black cape that represents it, The Sandeman Don. In 2002, it started its journey as part of Sogrape family, and today is a worldwide known brand, distributed in more than 75 markets with a target audience of adults looking for the *ex-libris*, the luxury (Sogrape, 2021b).

## Appendix3 – Components that created the NFTs world

This appendix is intended to expand on the explanation of each component that builds digital property.

- **Blockchain** that acts as a database, storing information in a digital format. Furthermore, it plays a critical role in cryptocurrency systems, where they keep a secure and decentralized record of transactions (Investopedia, 2022). Ethereum is the most widely utilized blockchain platform in NFT schemes, as it provides a safe environment for smart contract execution (Wang et al., 2021)
- **Smart contracts** are virtual contracts that are created automatically when present terms and conditions are met and maintained on a blockchain. It bring benefits to transactions such as Speed and Efficiency given that is an automated process, so, once a condition is met, the contract is executed; Trust and Transparency, because there is no third party involvement and transaction data can be shared among participants; Security given the fact that the records of blockchain transactions are encrypted; Saving in time and fees because there is no need for intermediates (IBM, n.d.).
- Blockchain **address and transaction** is a one-of-a-kind id for sending and receiving assets. To exchange NFTs, the holder must demonstrate that has the authentication information and send the assets to another address using a valid digital signature (Wang et al., 2021).

- The ability to transfer data from one to another is known as **encoding** which is made through hexadecimal values that are used to encode transaction elements. If someone claims ownership of NFT-based intellectual property, they are essentially claiming ownership of the creator's original chunk of hexadecimal values (Wang et al., 2021).

## Appendix4 – Characteristics of NFTs

This appendix is intended to expand on the explanation of each characteristic of NFTs.

Regarding the **Scarcity** of a token is decided by its owner who can plan to make the NFT fully unique to promote scarcity, or they may have good cause to make thousands of copies (Ethereum Foundation, n.d.).

The entire NFT ecosystem functions because **Ethereum is Decentralized and Decure**, making it possible to digitally own unique products and receive a fair price for content. When saying decentralized is because everyone can check what others own and that everything is transferable; secure means that no one can copy, paste, or steal an NFT (Ethereum Foundation, n.d.).

However, there is also a big discussion around the **Environmental Impact** caused by these NFTs, specially because the required security is the cause of a great deal of energy expenditure, increasing the carbon footprint which is associated with the creation of blocks by mining<sup>2</sup>. In fact, the way Ethereum keeps its funds and assets safe is energy intensive at present which indirectly makes the NFTs also the target of criticism due to the energy expenditure inherent to the use of this digital payment technology.

Ethereum Foundation (n.d.) Vision wants a green future through an upgrade to Eth2 that will replace mining with staking<sup>3</sup>, which means that the cost of running a home computer multiplied by the number of nodes in the network will be the energy cost of Ethereum, which will make the carbon footprint 99.95% better.

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<sup>2</sup> Coin mining is the process by which new coins, are entered into circulation; it is also the way that new transactions are confirmed by the network and a critical component of the maintenance and development of the blockchain ledger.

<sup>3</sup> Is the process of keeping funds in a crypto wallet to maintain a blockchain network's functioning and holders are compensated in exchange for their contribution.

Another key property identified in the ecology of NFTs, according to Popescu (2021), is the fact that any item can be identified as a distinct entity inside its own ecosystem (**Non-interoperable**), this means that it cannot have the same representation in a similar situation. It is also **Indivisible** because an NFT is a complete item that can't be split down into smaller pieces. NFTs are also **Indestructible** as all data saved on the blockchain via contracts can't be copied, removed, or destroyed, granting ownership rights to the wallet or peer that holds it. The last property identified is the fact that all transactions are historically stored and preserved within the data blocks, which means that is **Verifiable**, so every NFT can be traced back to its creator, eliminating the need for third-party authentication.

## Appendix5 – The case of Yellow Tail

To start this work of differentiating a wine brand from the competition to increase its consumption, I looked at the famous Blue Ocean case of the Yellow Tail wine brand, where understanding the market failures and above all the consumer needs, was fundamental for the brand to be able to dive into the blue ocean and create a disruptive business and thus create a business with a future and profitable.

Between the late 1990s and the beginning of the year 2000, the United States was the world's third largest wine-consuming country, with a market worth an estimated \$20 billion. Furthermore, over 6500 companies were fiercely competing to survive and establish awareness in the minds of consumers.

Furthermore, a lot of companies were fiercely competing to survive and establish awareness in the minds of consumers. Domestic and imported wines from countries like Italy, as well as new world wines from places like Australia, were featured. The US wine industry was overcrowded, with its vast distribution network, several types and choices for customers, and millions of dollars spent on above-the-line marketing channels. Moreover, many distributors and merchants were consolidating to improve their power to negotiate with winemakers on profits. As a result of rising price pressure, a stagnating market, and fierce competition, smaller businesses were struggling to stay afloat.

Price, packaging with complicated enologist words, above-the-line marketing, age quality, vineyard legacy, complex flavor, and variety of wines were all elements to consider while studying the market.

Casella wines, an Australian family-owned wine company discovered that most American adults considered wine to be more of a turn-off than a source of

enjoyment, because it was frightening to them, requiring a highly judgmental palate, and understanding of the various terminologies associated with it.

They were ready to rethink their strategy and develop a product that would break through the red ocean with these new insights. They sought to rethink the wine industry's problem and figure out how to develop a fun, non-traditional wine that everybody could enjoy. Understanding that promoting the lineage and history of vineyards was not actually benefiting the buyer, and that the various sorts of wines in wine stores with diverse names and flavors seemed confusing, such factors should be reduced; moreover, they discovered that the usage of enological terminology and the requirement for aging resulted in a complicated taste, as well as that the above marketing line was ineffective in a market where competitors were competing on the same traditional parameters, thus those factors should be removed; also, Casella set their own profitable pricing rather than trying to undercut competitors, thus increasing the price of its wines, compared to the price of budget wines offered by the competition; lastly, they discovered that they needed to make a wine that was gentle in taste, had an easy-to-pronounce fruit flavor, and could be enjoyed by everybody, so they create it.

This is how Yellow Tail appeared. They began with two flavors: Chardonnay, a white wine, and Shiraz, a red wine. The bottles featured a kangaroo and brilliant colors on a black background. During launch, they focused on promotion at the point of sale and to stimulate impulse buying, they designed colorful end cap displays to distinguish themselves from the competition.

In 2001 the Yellow Tail was launched and in 2005 the brand sold more than 1 million cases in the US thanks to its ease of drinking, selection, and fun, as well as its higher price and elimination of and reduction of everything else (Rao B, 2009; SHERMAN, 2013).

## Appendix6 – Art as an investment opportunity in NFTs

The investment market is very broad. It covers both options and futures, cryptocurrencies as well as the so-called traditional auctions, among others. In this appendix the focus is on using art as investment through "traditional" auctions and NFTs since it is suggested that Porto Ferreira's premium wines are associated with boxes that are unique pieces of art.

Nowadays art finds much strength of expression in the NFT market, however, its presence in the traditional auction market has existed for many years and is highly sought after by those who like to collect and invest. So, it is possible to have a vision, using the experience of art in the NFT world, how premium wine – in this case, Port wine – can thrive in NFTs. Also, maybe art should be considered as a competition in the investment digital market of NFTs.

Acquiring art as an investment is very common and in the world of NFTs it has been remarkable. According to Statista Research Department (2021a), global NFT sales volume in the art sector reached in the first quarter of 2020 over 637 thousand NFTs sold on Ethereum, and in the second quarter of 2021 around 609 thousand NFTs sold.

In 2021, there were over 11 million art sales, where 1.538 million took place between October and November alone (Fortunly, 2022).

With the arrival of Non-Fungible Tokens (NFTs), the Content Creators and Art business is undergoing a paradigm shift, as a huge number of artists seek to capitalize on the creativity and distribution potential that blockchain technology provides (Popescu, 2021).

A "digital collage" by artist Beeple called "Everydays: The First 5000 Days" was sold in March 2021 through NFTs for \$69.4 million (€58.4

million), a record value for non-physical works. According to auction house Christie's, 22 million people watched the end of the bidding, in which buyers from 11 countries participated (BBC News, 2021).

But acquiring art through traditional auction houses has always been in great demand. And according to a report by Deloitte and Art Tactic investors allocate between 6 and 18% of their portfolio to art and collectibles (Antunes, 2018).

As the interest in art as a financial asset has evolved and grown over the years with the creation of vehicles for investing in art (Antunes, 2018), it gained expression in the NFT world and reached very high sales values, which led prestigious auction houses such as Christie's and Sotheby's to make the leap into this business (Investopedia, 2021).