

Entrepreneurial Business in the Wine Sector: A Business Model Proposal for the Setúbal Peninsula

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Abstract: The frequency and severity of crises and disasters in recent years has highlighted the need and urgency of studying ways to mitigate the impact of these phenomena. These have been overwhelming for businesses with very large impacts on the economies of the countries. It is a complex phenomenon, widely confirmed in the literature, where a variety of studies point to strategic capacity and business model design as key factors for business resilience. The ability to design products or services and deliver them competitively in the market requires a clear strategic definition, as well as the design, implementation, and management of new business models. The wine sector also suffered major impacts during the pandemic crisis, especially in 2020, however its recovery shows the resilience of this entrepreneurial sector. During this crisis, many business models proved to be obsolete, but others have shown great resilience, proving that it is possible to resist and even thrive in a crisis context. On the other hand, in a globalized market, intense competition in the wine sector leads to critical management issues for wine producers. Due to the unique characteristics of the product, entrepreneurs, and managers, in this sector, need to critically review their business models, establish strategies, and measure their performance. Considering the crisis on business wine sector caused by pandemic situation, this study aims to answer the questions “What strategies have been implemented in the wine sector of Setúbal Peninsula that have contributed to the survival and prosperity of the sector?”; “Is there an ideal business model for this sector on the Setúbal Peninsula?” The aim of this study is to identify successful strategies of wine sector in a context of crisis as well as propose a robust business model for wine sector in Setúbal Peninsula. Both quantitative (questionnaires) and qualitative methods (focus group) were used. As result of the research, we highlight the identification of some competitive behaviors that may contribute to suggest possible critical success factors in the business models of the Portuguese wine sector.

Keywords: crisis, business resilience, business plan, wine sector

1. Literature review

1.1 Crisis, disasters and management models

Crisis is described as one or a sort of events that disrupt the operation and threaten the capability of an organization, industry, nation, or society (Novelli et al., 2018). According with Prideaux et al. (2003) there is a difference between crises from disasters according with their root causes. Generally, crisis is caused by human errors and internal management failures. Based on this idea Reddy et al. (2020) refers that crisis can be predictable and minimized. As some examples of crises Prideaux et al. (2003) point out, financial meltdown, terrorism and political unrest, and an oil). On the other hand, disaster is described by Faulkner (2001) as unexpected and not predictable catastrophic change caused by an external environment.

Huang et al. (2008) identified eleven crisis and disaster management models in literature and them organized into four approaches: 1) life cycle approach, this approach divides crisis/disaster management into phases, for example, three phases (pre-event, emergency, post-event) or six phases (pre-event, prodromal, emergency, intermediate, long-term, and resolution); 2) strategic management model (describes generic steps of managing and recovering from a crisis or disaster); 3) action-oriented approach (list crisis management activities under the

four Rs: reduction, readiness, response, and recovery); 4) integrated approach (divides crisis management activities into two types: proactive and reactive responses). These four approaches are not mutually exclusive, and they are often integrated in a comprehensive model.

In recent times, several studies related to COVID-19 have emerged, particularly in the hospitality and tourism sector, however few studies are specific to the wine sector (Section 3 provides a review on wine sector business). On the other hand, these studies focus mainly on prescriptive and generic models and few of them refer to specific strategies, such as cost reduction, revenue increase and market communication, marketing, etc. (Mair et al., 2016).

To fill the research gap, this study focuses on the response and recovery efforts of economic agents, of wine and vineyard sector, during and after the COVID-19 pandemic.

2. Business resilience

Literature on resilience in the wine sector is scarce, but there are many studies on resilience in small businesses and family businesses. In these various studies, there are several references to factors that promote company or organizational resilience during and after the crisis, namely, social capital, education and training, adaptability, creativity, knowledge, receptivity, and flexibility (Ahmed et al., 2004). For Slocum and Kline (2014) resilience is a positive adaptive response to adversity, where factors such as natural, human, cultural, social, financial, built and political capital can be relevant and generators of positive changes. Also, Seville, et al. (2015) identify seven principles of a resilient organization, including adaptive capacity, charismatic leaders, learning organizations, capital, operational excellence, resilience as a team sport, and seeing opportunities. The increase of problems complexity in business environment stresses the adaptation of systems theory. Several authors refers that the organization's ability to absorb, adapt to changing environments, survive and strengthen itself in times of crisis, as well as to anticipate, avoid and adjust to disruptions and changes are important issues related to organizational resilience (ISO, 2017; Gonçalves et al., 2019; Ortiz - de - Mandojana e Bansal, 2016). Resilience combines the organization's ability to rebuild effectiveness after a disruption in response capability development. (Burnard e Bhamra, 2011). Several studies indicate that resilience requires the organization's ability to manage the environmental requirements that are changing, implies the ability to change and learn and use new knowledge. (Gallopín, 2006; McDonald, 2006; Staber & Sydow, 2002). Over the past two decades, a great deal of effort has been made by several academics to understand and address resilience in an organizational context. Figure 1 presents a systematization of the different approaches.

| | | | | |
|--|--|---|---|---|
| <p>Alesch et al. (2001) Stresses the importance of management techniques employed to reduce both exposure and vulnerability through smart business practices</p> | <p>Sutcliffe and Vogus (2003) Focus on understanding and overcoming barriers to organisational adaptability under challenging conditions</p> | <p>Christopher and Peck (2004) Focus on supply-chain resilience through: (1) a system in advance of disruption (i.e., re-engineering), (2) collaboration to identify and manage risks, (3) agility and (4) a culture of risk</p> | <p>Sheffi and Rice (2005) Focus on the importance of improving flexibility instead of redundancy in a supply-chain. (the supplier, conversion process, distribution channels, control systems and</p> | <p>Pettit et al. (2010) Refer that a portfolio of balanced resilience depends on developing capabilities and reducing vulnerabilities</p> |
| <p>Gibson and Tarrant (2010) Refer that some characteristics help create organisational resilience: acuity; ambiguity tolerance; creativity and agility, stress coping; learnability</p> | <p>Vargo and Seville (2011) Refer that organisational resilience needs: (1) leaders able to inspire people, (2) organisational culture that values disciplined planning, (3) plan and make decisions carefully and structured effectively and (4) teams able to recognise patterns and integrate information</p> | <p>Pettit et al. (2013) Following Pettit et al. (2010)'s conceptual foundations, proposes a measurement instrument that helps managers implement the Supply Chain Resilience Framework. The balance between vulnerabilities and capabilities must be measured to assess the current level of resilience</p> | | <p>Filimonau and Coteau (2019) Consider that the disaster management principles should be integrated into the destination management plans to enhance tourist destinations' resilience to natural disasters. The success of such integration depends on the extent of tourism stakeholder collaboration</p> |

Source: Burnard et al. (2018), adapted and updated by Costa et al. (2021)

Figure 1: Approaches to resilience

3. Business wine sector

E-commerce has rapidly transformed the business environment, and the very customer-oriented environment has increasingly taken precedence over the product-oriented environment. This transformation was due to the development of Web 2.0 technologies and social media, along with the introduction of wikis, blogs, communities and social networks (Petracca, 2019).

With a specific dynamic the wine sector has been a relatively slow adopter of marketing strategies on social networks, although the transition to the digital market has also had an impact on this sector (Kolb & Thach, 2016); Pucci et al., 2019). In fact, issues such as the different state laws that govern wine shipments, age verification and the significant heterogeneity of the wine industry are some of the constraints inherent to online shopping (Santos, 2012).

Despite these constraints, the consumption of wine in the world, after a few years of slight increases, is relatively stable. In 2018, 24.6 billion liters were consumed worldwide. Regarding consumption by country, the ranking of the five largest consumers is made up of the United States of America (3.3 billion liters), France (2.7 billion liters), Italy (2.2 billion liters), Germany (2 billion liters) and China (1.8 billion liters).

According to the OIV - International Organization of Vine and Wine, the world's largest wine producer in 2018 was Italy (5.5 billion liters), followed by France (4.9 billion liters) and Spain (4.4 billion liters). Portugal came in 10th place with 610 million liters, placing it as one of the higher per capita consumers internationally.

Looking at international trade, it appears that global wine exports increased by 23% between 2014 and 2018, reaching 31 billion euros in the last year of that period. The biggest exporters are Spain, Italy and France. In turn, the biggest importers are the USA, the United Kingdom and Germany.

Portugal, according to the GPP – Office of Planning and Policies, exported around 296 million liters of wine, with a total value corresponding to 803 million euros. The main destinations for Portuguese wines in 2019 were France (42 thousand hectoliters, corresponding to 114 million euros), the United States (23 thousand hectoliters, corresponding to 89.5 million euros) and the United Kingdom (22 thousand hectoliters, corresponding to 78 million euros).

The demand for quality wines has increased, which seems to reflect very relevant perspectives for this sector. If we consider the growing popularity of Portuguese wines, we see that there is an interesting opportunity to explore.

According to AICEP - Agency for Investment and Foreign Trade of Portugal, the commitment of Portuguese producers to innovation, along with the modernization of production methods, has led to the creation of high-quality wines proven by increasing prizes in international competitions.

The wide variety of grape varieties (about 250 autochthonous) allows the production of a variety of wines, marked by unique characteristics, which enhances its competitiveness in niche markets.

As a small country with small farms, Portugal is already the 11th world producer and the 8th largest exporter, increasingly asserting itself as a producer of “different wines”, but of great quality.

At the national level, there has been a growth in production over the last few years. As an illustration, a table is presented below with the annual values of production on the mainland and in the Portuguese wine regions.

Table 1: Evolution of total production by wine region (hectoliters)

| Wine Region | 2020/21 | % | 2019/20 | % | 2018/19 | % | 2017/18 | % | 2016/17 |
|-----------------|-----------|----|-----------|----|-----------|----|-----------|----|-----------|
| Minho | 848 311 | 13 | 816 396 | 13 | 759 757 | 13 | 967 067 | 14 | 736 430 |
| T. Montes | 94 425 | 1 | 118 014 | 2 | 50 670 | 1 | 85 430 | 1 | 76 549 |
| Douro | 1 264 349 | 20 | 1 692 188 | 26 | 1 259 683 | 21 | 1 448 874 | 22 | 1 337 201 |
| Atlantic Border | 174 391 | 3 | 159 063 | 2 | 177 782 | 3 | 260 668 | 4 | 195 534 |

| Wine Region | 2020/21 | % | 2019/20 | % | 2018/19 | % | 2017/18 | % | 2016/17 |
|--------------------|-----------|-----|-----------|-----|-----------|-----|-----------|-----|-----------|
| Dão Lands | 189 197 | 3 | 257 481 | 4 | 178 409 | 3 | 312 462 | 5 | 237 186 |
| Beira Lands | 219 298 | 3 | 255 658 | 4 | 162 032 | 3 | 190 394 | 3 | 255 818 |
| Cisterman Lands | 37 744 | 1 | 59 417 | 1 | 37 307 | 1 | 54 052 | 1 | 69 560 |
| Tagus | 644 153 | 10 | 615 736 | 9 | 635 514 | 10 | 648 441 | 10 | 551 300 |
| Lisbon | 1 253 303 | 20 | 987 009 | 15 | 1 170 068 | 19 | 1 225 840 | 18 | 998 804 |
| Fr. Setúbal | 475 135 | 7 | 503 579 | 8 | 472 197 | 8 | 525 049 | 8 | 463 035 |
| Alentejo | 1 159 067 | 18 | 996 290 | 15 | 1 092 617 | 18 | 954 910 | 14 | 1 050 439 |
| Algarve | 13 043 | 0,2 | 13 926 | 0,2 | 17 042 | 0,3 | 15 777 | 0,2 | 10 419 |
| Sub-total mainland | 6 372 416 | 99 | 6 474 757 | 99 | 6 013 078 | 99 | 6 661 245 | 99 | 5 982 274 |

Source: IVV (2022)

Although, with some oscillations in the different periods, it appears that in the last year analyzed the production value exceeds the existing in 2016/17, both on the country (mainland without the islands of Azores and Madeira) and on the Setúbal Peninsula, which is the target of this study. In addition, it appears that the Setúbal Peninsula is in sixth place nationally in terms of annual production.

Regarding the evolution of sales in the national market and considering still wine (non-carbonated) and the type of marketing channels, it appears that distribution has been compensating the drop of revenues in restaurants.

Table 2: Evolution of sales of still wines by types of distribution channels (liters)

| TYPES OF CHANNELS | 2016 | | 2017 | | 2018 | | 2019 | | 2020 | | 2021 | |
|-------------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|
| Restaurants | 73 589 | | | | 81 369 | | | | 49 337 | | 41 798 | |
| | 682 | 29% | 80 208 943 | 30% | 316 | 31% | 89 195 523 | 32% | 607 | 20% | 829 | 17% |
| Distribution | 183 310 | | 187 186 | | 182 724 | | 189 094 | | 201 390 | | 206 843 | |
| | 795 | 71% | 441 | 70% | 896 | 69% | 393 | 68% | 507 | 80% | 716 | 83% |
| Total | 256 900 | 100% | 267 395 | 100% | 264 094 | 100% | 278 289 | 100% | 250 728 | 100% | 248 642 | 100% |
| | 477 | | 384 | | 212 | | 916 | | 114 | | 545 | |

In terms of sales of still wines in the national market by region, the Setúbal Peninsula is in second position, only surpassed by the Alentejo region.

This highlights the importance of studying the business model of companies in this region, given that, it is increasingly as a reference in the Portuguese wine sector.

Table 3: Evolution of sales of still wines by regions (liters)

| REGIONS | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|-----------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Total Certified Wines | 109 737 188 | 112 363 732 | 115 103 876 | 124 599 625 | 112 002 071 | 115 420 759 |
| Minho | 18 625 525 | 19 983 662 | 20 334 191 | 21 469 566 | 19 721 313 | 19 828 643 |
| Behind the Mountains | 539 211 | 687 664 | 429 621 | 392 807 | 274 448 | 283 167 |
| Douro | 11 753 648 | 13 623 943 | 13 143 932 | 12 900 583 | 12 304 512 | 13 632 325 |
| Biscuits | 108 515 | 88 963 | 259 060 | 298 131 | 93 359 | 126 421 |
| Cisterland Lands | 33 870 | 27 242 | 23 820 | 29 584 | 54 417 | 31 020 |
| Beira Atlântico | 1 062 653 | 762 668 | 1 066 136 | 883 932 | 522 329 | 376 644 |
| Dão Lands | 6 243 657 | 5 984 241 | 6 482 985 | 6 587 279 | 5 490 780 | 5 300 953 |
| Interior Border | 372 565 | 415 358 | 770 569 | 903 668 | 848 363 | 969 075 |
| Lisbon | 3 895 621 | 4 806 982 | 5 482 162 | 5 289 946 | 4 587 955 | 5 044 984 |
| Tagus | 4 845 416 | 5 201 550 | 5 167 240 | 10 234 310 | 8 944 478 | 8 605 083 |
| Setúbal Peninsula | 14 042 265 | 14 810 295 | 17 624 800 | 20 081 558 | 20 605 445 | 21 792 324 |
| Alentejo | 47 928 070 | 45 576 684 | 43 835 850 | 45 113 270 | 38 329 383 | 39 213 524 |

| REGIONS | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Algarve | 286 172 | 394 480 | 483 510 | 414 991 | 225 289 | 216 596 |
| Total Not Certified Wines | 147 163 289 | 155 031 652 | 148 990 336 | 153 690 291 | 138 726 043 | 133 221 786 |
| Imported | 3 046 159 | 3 186 089 | 4 597 781 | 8 165 902 | 8 380 755 | 9 317 916 |
| National | 144 117 130 | 151 845 563 | 144 392 555 | 145 524 389 | 130 345 288 | 123 903 870 |
| Total Wine | 256 900 477 | 267 395 384 | 264 094 212 | 278 289 916 | 250 728 114 | 248 642 545 |

Regarding exports, there has also been a positive evolution in recent years, especially in certified wines and in countries outside the European Union.

Table 4: Exports by type of products

| Intra + Extra UE | HL - hectoliters | | | | | 2020 /2019 |
|--|------------------|-----------|-----------|-----------|-----------|---------------|
| | jan-dec | | | | | |
| | 2016 | 2017 | 2018 | 2019 | 2020 | |
| Certified wine | 981 167 | 1 105 731 | 1 118 730 | 1 155 086 | 1 351 796 | 17,0% |
| Wine with origin designation | 550 863 | 596 491 | 618 225 | 606 058 | 688 890 | 13,7% |
| Wine with geographical identification | 430 304 | 509 241 | 500 505 | 549 028 | 662 906 | 20,7% |
| Table wines | 1 070 522 | 1 154 685 | 1 138 946 | 1 102 411 | 1 089 173 | -1,2% |
| Wine | 1 031 731 | 1 121 370 | 1 067 887 | 1 044 513 | 1 028 243 | -1,6% |
| Wine with caste identification | 38 792 | 33 315 | 71 059 | 57 898 | 60 931 | 5,2% |
| Liqueur wine with protected designation of origin / protected geographical identification | 678 884 | 677 690 | 646 923 | 657 908 | 657 029 | -0,1% |
| Harbor | 651 340 | 640 027 | 607 327 | 617 049 | 611 902 | -0,8% |
| Wood | 21 521 | 28 246 | 28 135 | 27 052 | 23 827 | -11,9% |
| Others | 6 023 | 9 417 | 11 461 | 13 807 | 21 300 | 54,3% |
| Liqueur wine without protected designation of origin / protected geographical identification | 9 487 | 3 120 | 3 471 | 3 011 | 2 603 | -13,6% |
| Sparkling and sparkling wines | 17 557 | 13 948 | 22 361 | 17 577 | 20 965 | 19,3% |
| Other wines | 21 889 | 26 395 | 27 768 | 27 217 | 29 819 | 9,6% |
| Total | 2 779 505 | 2 981 569 | 2 958 198 | 2 963 210 | 3 151 384 | 6,4% |

Source: IVV (2022)

4. Business models

The business model is a complex adaptive resilient system (ARS). Both concepts, business models and ARS are anchored in systems theory: interconnectivity and dependence between system elements and holism (the whole, or a set of elements, is more than the sum of its parts) should therefore be considered in its conceptualization.

Several approaches have been designed to identify sets of elements, blocks, areas, or components that any business model must consider. Johnson, Christensen and Kagermann (2008) define a set of four blocks. Teece (2010) defines six essential elements to build a business model. Wikström et al. (2010), address five sets of elements. Osterwalder and Pigneur (2010) develop a model based on 4 blocks and 9 components.

This study analysis the business model for the wine sector of Setúbal Peninsula according Osterwalder and Pigneur model. According with these authors this tool allows the description, visualization, evaluation and alteration of existing business models or the creation of new models under a common and easily understandable

language. The model is composed of nine basic components divided into four blocks: customers (value proposition), value offering (customer segment, channels, and relationships), infrastructure (key resources, key activities and main partnerships) and financial viability (cost structure and revenue sources). Table 3 presents in greater detail the nine components of this model.

Table 5: The nine components of the CANVAS business model (Osterwalder and Pigneur, 2010)

| Blocks/macro areas | Components | Synthetic Description |
|---------------------------------|----------------------------|---|
| Offer (what?) | Value Proposition (VP) | Describes the set of products and services that create value for a specific customer segment. |
| Client (who?) | Customer segments (CS) | Various groups of people or organizations that a company aims to reach. |
| | Channels (CN) | Describes how a company communicates and tries to influence its customer segments to deliver a value proposition. |
| | Customer relationship (RC) | Describes the types of relationships a company establishes with specific customer segments. |
| Infrastructure (how?) | Key Resources (KR) | Describes the most important assets for the functioning of the business model. |
| | Key Activities (KA) | Describes the most important things a company must do to make its business model work. |
| | Key Partnerships (KP) | Describes the network of suppliers and partners that make the business model work. |
| Financial Viability (how much?) | Cost Structure (CS) | It describes all the resources involved in operating a business model, as well as their cost. |
| | Income flow (IF) | Represents the money that a company generates from each customer segment |

Source: adapted from Osterwalder e Pigneur (2010).

In fact, in what concern wine sector, there is a need of a particular attention to the company’s business models of the sector, that means, the logic of organization of the sector and their capability to sustainable create value. According with Mastroberardino et al. (2022) the large retail giants, despite not being specialists in the wine business, were able to quickly add an online sales channel, thus managing to exploit the competitive advantages of a wide range of wines, as well as their commercial and logistical skills. On the other hand, various of 2.0 distributors specializing in wine and spirits were born from a base of high digital and communication skills.

Finally, third-party platforms have been created, mainly dedicated to satisfying the enormous demand for information from millions of wine lovers worldwide. These platforms are rapidly changing their business model from information brokers to wine distributors.

5. Research methodology

The present study is based on mixed research methods. Firstly, a quantitative approach, in the form of a questionnaire applied to group of wine producers from the Setúbal Peninsula, following a non-probability sampling method. Additionally, the opinions of a panel of experts in the wine sector were collected.

The questionnaire has two main sections. The first section refers to the sector characterization and consists of only two open-ended questions (Q1, Q2). The second part of the questionnaire, mainly composed of closed questions, refers to the characterization of producers/companies and was divided into four sections. The first one (Q3 – Q8) refers to the characterization of the company's situation in pre-pandemic (year 2019) and during the pandemic (January 2020 - October 2021). The second section (Q9 – Q14) was dedicated to the characterization of the immediate consequences in the business. The third one (Q15 – Q46) refers to the identification of mitigation actions developed during the pandemic and in the post-pandemic phases, finally in the last one (Q47 – Q61) we may find the company characterization.

The questionnaire was based on the literature, but the final version was specially designed for this study. Three producers were used for testing reasons, and afterwards, the questionnaire was fully approved.

Data collection took place between November 2021 and March 2022. The decision to use email for data collection was due to a set of advantages enumerated by Aaker (2007), namely the possibility of resending the questionnaire the number of times deemed necessary, greater ease and speed in sending and later receiving responses and the possibility that the interviewees have to respond according to his convenience.

After the data collection, the statistical treatment was performed using the IBM SPSS 27.0 software. Statistical techniques of exploratory analysis were used to characterize the collected sample, to describe the company's situation in pre-pandemic and during the pandemic, the immediate consequences in the business and the mitigation actions developed during and after the pandemic.

6. Results and discussion

6.1 Descriptive analyses supported in questionnaires to producers

The study has collected a sample of 12 answers. According to the legal regime, eight (67%) of the companies are Private Limited Companies, there is a sole proprietorship and a limited liability company, the remaining two are cooperatives. It should be noted that the members of the two cooperatives are around 400 winegrowers. The “turnover” of wines with Denomination of Origin (“Palmela” and “Setúbal”) and/or Geographical Indication (Regional Wines from the “Setúbal Peninsula”) of this group of 12 respondents will be close to 50% of the total of producers of this region.

Four companies are more than 50 years old, another four are more than 30 years old and the remaining four started their activity in the 21st century and have between 4 and 13 years of activity. More than 80% of the companies have a manager aged between 42 and 65 years. Close to 60% of the companies are a partnership, 25% have a male individual as the main shareholder/partner of the company and the remaining 17% a female individual. The main manager of 92% of the companies is a male individual. In terms of the national business model, 33% of the companies said they do their own distribution, 17% use national distributors and 50% use both types of models. Only one company says its distributors are exclusive. In terms of the international business model, 25% of the companies stated that they had their own exploration team, only one resorted exclusively to trading’s, agents, or brokers and 67% indicated that they use both types of models.

The manager was asked to choose from among five sentences the one that best applied to the way in which the management of his company faced the impact of COVID19 on the sector and on the company (Figure 2).

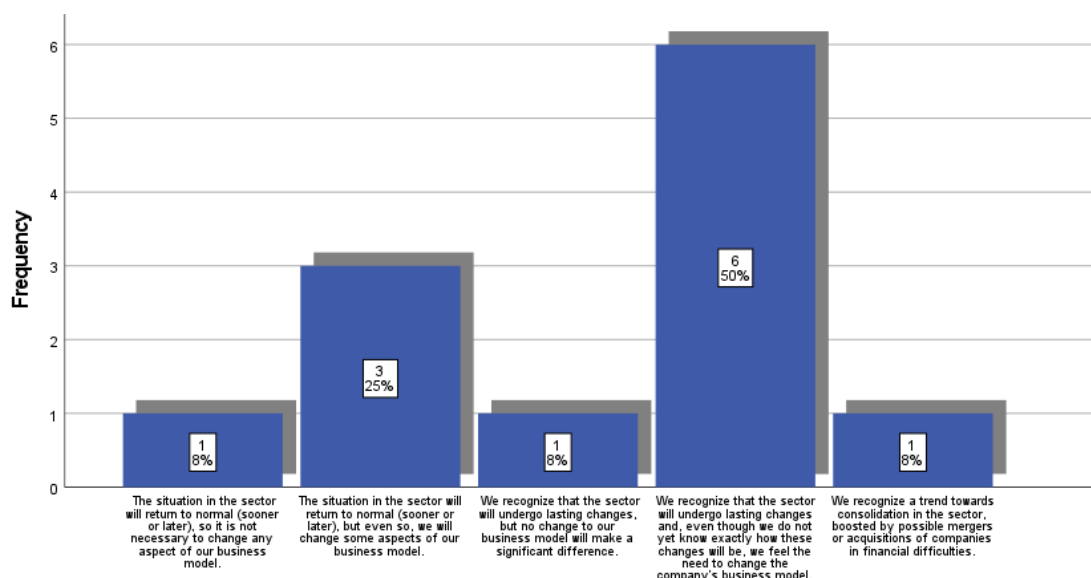


Figure 2: Which of the following phrases best applies to how your company's management views the impact of COVID19 on your industry and company?

The analysis of figure 2 shows that 50% of the companies surveyed recognize that the sector will undergo lasting changes and, even though it is not yet known exactly how these changes will be, they feel the need to change the company's business model. In addition, 25% agree that the situation in the sector will return to normal, but even so, they will change some aspects of the business model.

It was also asked if the company was part of networks (formal or informal) of partners (public or private) that helped each other in the development of their activities, 67% of the companies (8) surveyed answered no.

The analysis of the data obtained on the characterization of the situation of companies in pre-pandemic (Year 2019) showed that about 80% of companies indicated the national market as the market that most weighed on their revenues. It was also found that 75% of companies stated that the revenue generated by the business was sufficient to cover total costs and more than 80% stated that they were able to meet their commitments to financiers.

The analysis of the results regarding the situation of companies during the pandemic (January 2020 - October 2021) revealed that, regarding to the national market being the market with the greatest weight in the company's revenues, the result obtained during the pandemic was identical to the result before the pandemic. 67% of companies stated that the revenues generated by the business were sufficient to cover the total costs. Comparing with the value before the pandemic, there was a decrease of almost 10%. Also in the pandemic phase, the percentage of companies that managed to fulfill their commitments to their guarantors exceeded 80%, an identical value was obtained before the pandemic.

Finally, the company was asked in which areas it will implement or has already implemented changes in order to recover the business. We can find the results in Figure 3.

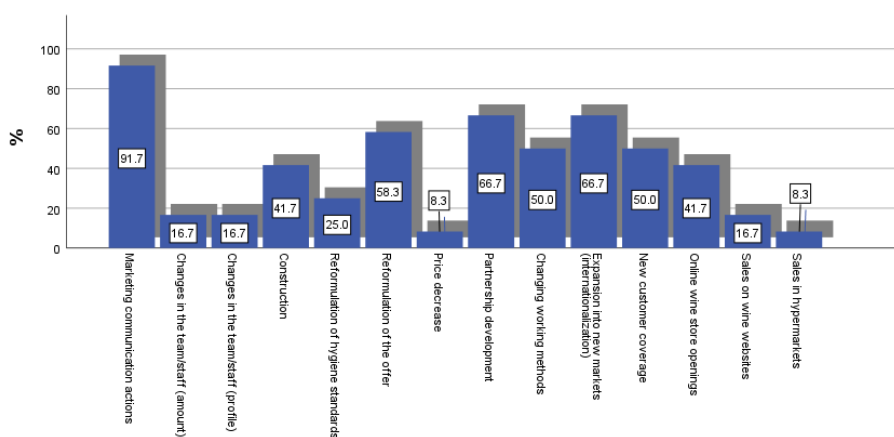


Figure 3: In which area(s) will you implement/have you already implemented changes to recover the business?

The analysis of figure 3 shows that approximately 92% of the companies surveyed, with the objective of recovering the business, implemented communication and marketing actions, strategies suggested by Mair et al., 2016, 67% developed partnerships and the same percentage expanded to new markets, 58% reformulated the offer, 50% changed working methods and the same percentage approached new customers, 42% opened online wine stores and the same percentage carried out works.

6.2 Panel of experts: entrepreneurs of wine companies from the Setúbal Peninsula in Portugal

The opinions collected through the panel of experts show a tendency towards concentration with the emergence of producers with scale and notoriety at a national level.

As a result of the greater boosting of their activity, they have sought out large international markets with purchasing power and which value quality products. This trend is confirmed by the statistics available on the

Instituto da Vinha e do Vinho website, where is possible to verify that the region is one of the 3 with the lowest number of producers.

Thus, regarding the business model, in general terms, the companies' value propositions have sought competitive positions that capitalize the uniqueness of national varieties and traditional production processes and that contribute to the offer of high-quality products at competitive prices in the global market (consequent of cheaper production factors in relation to the main international competitors and of increasingly efficient logistical processes).

In terms of customer segments, the product and market strategy has sought to diversify into new markets and penetrate segments with greater purchasing power where uniqueness is valued, and customers are not so price sensitive. There is, therefore, a tendency to expand the supply matrix to new markets based on competitive advantages focused on product differentiation.

To reach new markets, companies have been looking for marketing channels (traders and commercial representatives) that allow access to premium segments (in the most unique wines) and mass consumption, such as large distribution retailers, for less noble wines. Such channels are also fundamental for the development of relations with the market, through the presentation of the offer of national companies, through communication materials or the organization of tasting events that contribute to the visibility and notoriety of the offer. At the same time, there has also been a strong commitment by companies in the region to participate in the main sector fairs and international competitions, despite the interruption during the period of the pandemic, as a way of reaching direct contact with end customers and developing closer relationships tailored to market needs.

Thus, revenues come mainly from higher margins, resulting from higher prices associated with the uniqueness of the products, but also from the larger scale of operations that allows reaching larger markets.

As for their internal infrastructure, the companies have tried to incorporate, over time, into their work processes, production, vine treatment and harvesting equipment that are innovative and in accordance with the best operational practices of the main international competitors, combining the tradition and innovation. Furthermore, these material resources were accompanied by the continuous hiring of qualified human resources with extensive experience in the sector. This pooling of resources contributes to companies in the region being a reference in the Portuguese wine industry. In terms of key business activities, the stage relating to the treatment and maintenance processes of the vineyard stands out, which contributes to increasing its longevity and productivity, allowing for an increase in periodic production capacity and mitigating the impact of the smaller size of the national properties compared to the capacity of competitors from other larger markets. Finally, in terms of partnerships, we highlight the relationships with associations of regional producers that allow the integration of the offer of different producers in the logistics operations associated with international markets, contributing to a lower cost per bottle exported and to more competitive sales prices. relative to external competitors.

Below is a summary table with the business model adopted by most successful companies in the Setúbal Peninsula.

Table 6: Summary of the business model implemented in the companies from the Setúbal Peninsula

| Blocks/macro areas | Components | Companies from the Setúbal Peninsula |
|---------------------------|----------------------------|--|
| Offer (what?) | Value Proposition (VP) | Unique and high-quality wines with competitive prices |
| Client (who?) | Customer segments (CS) | Individuals - end consumers with purchasing power and large retailers. |
| | Channels (CN) | Commercial representants and traders in the international markets. |
| | Customer relationship (RC) | Events of wine tasting, fairs and international concourses |

| Blocks/macro areas | Components | Companies from the Setúbal Peninsula |
|---------------------------------|-----------------------|---|
| Infrastructure (how?) | Key Resources (KR) | Large extension of vineyards, Innovative equipment's, and qualified human resources. |
| | Key Activities (KA) | innovation and brand portfolio, processes for harvesting and treating and maintaining vineyards to increase productivity. |
| | Key Partnerships (KP) | Industry associations to share the costs of communication and of logistic in the international markets. |
| Financial viability (how much?) | Cost Structure (CS) | Vine treatment equipment and Human resources. |
| | Income flow (IF) | Scale of the operations and high margins based on higher selling prices related with the unique quality of the wine |

7. Discussion and conclusion

The results of this research, based on the questionnaire to wine producers in the Setúbal Peninsula, revealed convergence and divergence concerning some aspect. This can be related with the profile of companies and managers of the sample. As it was referred more than 80% of the companies have a manager aged between 42 and 65 years, the main manager of 92% of the companies is a male individual. In fact, as is referred in literature review, historically the wine sector is a very traditional one, and according with Kolb and Thach (2016), at least for the more traditional companies the adoption of new strategies options can be slow.

Another important factor is the uncertainty of the moment, due to Pandemic crisis. This uncertainty is present in several results. For example, 50% of the companies surveyed recognize that the sector will experience permanent changes and, even though it is not yet known exactly how these changes will be, they feel the need to change the company's business model. The results also showed that, before the pandemic crisis, about 80% of companies indicated the national market as the market that most weighed on their revenues, 75% stated that the revenue generated by the business was sufficient to cover total costs and more than 80% stated that they were able to meet their commitments to financiers. The results observed during the pandemic period did not show significant differences.

However, in general, the companies (approximately 92% of the companies), revealed resilience, and to recover their business, they implemented communication and marketing actions, strategies suggested by Mair et al., 2016, 67% developed partnerships, expanded to new markets, reformulated the offer, changed working methods and the same percentage approached new customers and opened online wine stores and the same percentage carried out works.

These results corroborate the studies that refer that resilience requires the organization's ability to manage the environmental requirements that are changing, implies the ability to change and learn and use new knowledge. (Gallopín, 2006; McDonald, 2006; Staber & Sydow, 2002).

Also, the panel of experts confirm the resilience of, at least some producers. The concentration of producers with scale and notoriety, the internationalization, and the quality strategy supported in the uniqueness of national varieties as well as in the traditional production processes added to the competitive prices in the global market, due to the cheaper production factors and increasingly efficient logistical processes, reveals a dynamic, where a new generation of human resources are important players. In fact, as show the results of the panel experts, the material resources, the continuous hiring of qualified human resources with extensive experience, a collaborative governance with different stakeholders, including associations of regional producers and other public institutions, contributes to companies in the region being a reference in the Portuguese wine industry.

In conclusion we may say that this study allowed the identification of a competitive wine sector in Peninsula de Setúbal and the identification of successful business model adopted by the most innovative and competitive companies in the Setúbal Peninsula.

Although this research work focuses on the case study of companies in the wine sector of the Setúbal Peninsula, taking into account the growing importance of the region at the national level (for example, it is in second

position in sales in the national market), it can be suggest that, in general, successful business models in the country, have in reference the articulation of competitive advantages based on differentiation, with excellent quality products, with cost efficiency, based on logistic and comparatively cheaper production factors.

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