



MASTER THESIS

THE WINE MUSEUM CONCEPT IN WINE TOURISM: STUDY CASE OF CÁLEM CELLAR

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ABSTRACT

Thanks to the professional internship, knowledge, and skills learned during the International Master of Wine Tourism Innovation (WINTOUR) Program, the research was made possible on the concept of wine museum in wine tourism. As hubs of wine tourism storytelling, the versatility of museums' role is noted in the development of regional economy, social life, preservation, and innovation in culture. Hence, the hypothesis is that the wine museum concept completes, diversifies, and adds value in the whole enotouristic experience. Whether being part of the cellar tour or being a separate wine museum, they add value to the cellar experience or destination's enotouristic image accordingly. To properly funnel the direct observations and critical appraisal, an empirical research has been conducted with didactic approach. Correspondingly, the paper studies the interactive museum's role at Cálem cellar, Vila Nova de Gaia, Portugal. In line with constant innovation and focus on enhancing visitor experience, the interactive museum ensures a comprehensive engagement with proper information and entertainment. Furthermore, the user-generated content analysis reveals the vast appreciation of museum as part of the whole cellar experience. The findings of reviews and survey reveal that the wine museum visitors demonstrate controversial perceptions about experience design.

Firstly, the paper presents the general understanding around museum, its role, and trends among the academic setting. Consequently, the internal and external analyses are presented for the wine tourism offer at Cálem cellar, including its museum. Also, the impact of COVID-19 on current developments is discussed regarding museum digital experiences, particularly with the outbreak of virtual tours, as well as Cálem cellar's adaptation scenario. And finally, the outcomes of online survey on the perception of wine museums among travelers are analyzed and compared to the findings of Tripadvisor user-generated content.

Keywords: wine museum, wine tourism, Cálem cellar, Tripadvisor user-generated content, virtual tour, COVID-19

List of abbreviations:

ICOM: International Council of Museums

COVID-19: Coronavirus disease

UNWTO: United Nations World Tourism Organization

GDP: Gross Domestic Product

OECD: Organization for Economic Co-operation and Development

EU: European Union

GDPR: General Data Protection Regulation

UGC: User Generated Content

1. INTRODUCTION

1.1. Description of the company

To meet the thesis goal of studying the wine museum concept in wine tourism, the internship was accomplished at Calem cellar, Sogevinus Fine Wines S.A. (Société anonyme /corporation), Portugal.

In 1859, a Portuguese entrepreneur and adventurer, António Alves Calem established Calem cellar by aiming to cross the Atlantic and export wine to Brazil, while Port wine was typically shipped to the British Isles and other European markets at that time. In 1965, his son António Alves Calem Junior made the iconic caravel (15-17th cc. Portuguese sailing ship) as the logo to reflect the fearlessness and grit that made Port wine its way to the world. Now, the brand is over 150 years old, and from the very beginning it was dedicated to crafting, aging, and trade of Port wines and DOC Douro wines of superior quality. It is well-known for the famous spectrum of Velhotes Ports, which is the leading brand in the Portuguese market.

Since 1998, Calem has been the property of the Sogevinus Group, a group that agglomerates 5 centuries of history. The annual production scale of the group comprises 1,2 million bottles of DOC Douro wines and 7,1 million bottles of Port wines with 60% export (Sogevinus website, 2020). In the oldest demarcated wine region - Douro Valley, the Sogevinus Group owns 3 Quintas (estates) and a vinification center: Quinta do Bairro, Quinta de S. Luiz, Quinta do Arnozelo and the Vinification Center of S. Martinho de Anta. Calem together with the variety of Ports and brands, namely Barros, Burmester, Gilberts and Kopke (the oldest port wine house founded in 1638) compose the brand portfolio of Sogevinus Group. Also, the Group has multi-brand shops - Sogevinus Shop in Gaia and Sogevinus Flores Shop in Porto. The Sogevinus Group's total annual turnover is €40 million out of which 20% share accounts for tourism. Last year, all visitor centers and shops welcomed 456 thousand visitors. At Sogevinus, the tourism department has 41 employees from which 29 employees in three visitor centers supervised by the Visitor Center Manager. The rest work at the group's street shops. Particularly, Calem has 14 tour guides which may reach 20 when the workflow is sophisticated.

Calem is also considered as a reference in the scope of enotourism mainly because of its legendary cellar located in the waterfront of Gaia which welcomes thousands of visitors making it the most visited Port wine cellar. Particularly, the cellar welcomed 170,000 visitors in 2017, 235,000 - in 2018 and 313,000 - in 2019. Consequently, the cellar welcomed on average around 800 visitors per day only in 2019. Calem Port wines may be found in more than 50 countries. Thanks to its reputation, Calem is a reference for Port wine amidst many generations (Calem cellar website, 2020). Its visitors' geography spans over 15 countries

where the local travelers from Portugal are dominant. In 2019, the country profile covered Portugal (33%), France (12%), Spain (11%) and UK (9.5%) (for the full list, see Appendix 3).

It is obvious that with the unique and innovative enotouristic offer, Cálem operates with a carefully developed and multifaceted layout (See Appendix 2). The whole experience is composed of guest reception, self-guided tour in the interactive museum, 5D cinema room, guided tour in the cellar, wine tasting, experience room, store, wine bar and terrace.

1.2. Duties during the internship

1.2.1. Public attendance

To properly study the role, organization and operation of wine museum, the internship was implemented with direct involvement in daily enotouristic activities at Cálem cellar. The internship aimed at the accomplishment of temporary work in a professional environment for gaining professional skills and practicing the knowledge obtained during the International Master of Wine Tourism Innovation (WINTOUR) Program.

The responsibility framework along with the schedule of the training program was developed and confirmed accordingly prior to the onset of the internship. The internship commenced on February 10, 2020, with the period planned to be lasted up to May 31, 2020. To prevent any risks caused by the worldwide pandemic and abide by the regulations announced by the Portuguese government, the internship has been suspended on March 13, 2020. Therefore, the continuation of completing necessary workload was conducted on online mode. The training program was properly intensive and covered the real-time performance of the following duties:

- welcoming of tourists.
- selling tickets and promoting services.
- running guided tours in different languages.
- aiding with the preparation of tastings and conducting them.
- promoting and selling Port wines.
- assisting tourists in answering to their questions and doubts.

To ensure the appropriate training of the intern, the internship started with the on-site introduction to Sogevinus brands by visiting its facilities. The essential part of the successful integration and training was following the tours of other tour guides by gradually integrating into the cellar's routine. The internship was organized in rotation so that the intern was able to participate in various parts of the cellar experience. As part of enotouristic activities, Cálem implements also Fado show experience, and the intern was assigned to assist on this matter as well.

For being able to present the wines appropriately, the internship supervisor organized and conducted the tasting of Sogevinus brands. Moreover, the intern participated in

Sogevinus vertical tasting of Vintage Port wines, as well as a visit was organized to Quinta S. Luiz (estate in the Douro Valley). The intern also had the opportunity to do guided tours and tastings at Burmester cellar. Hence, this guaranteed the proper engagement to brand awareness and better communication of wines to the visitors.

1.2.2. Proposal to be developed

As part of the International Master on Wine Tourism Innovation (WINTOUR) program, the visits to wine museums were organized while visiting wine tourism destinations in Spain, France, and Portugal. These visits contributed vastly to this research development.

The wine museum concept is quintessential in wine tourism development for the wine tourism destination. This is because the wine museums are adding value to the overall enotouristic experiences. They help to diversify the enotouristic offer and prolong the stay of visitors by increasing the number of activities that the visitors can experience at the wine tourism destinations. Furthermore, they are the venues that enable the direct communication of the wine tourism destination brand and create images amidst the visitors. The wine museums may be the first step in building awareness about the destination, or they may be the completing cornerstone throughout the wine tourism experience. Evidence showed that the wine museums build connections between the past and present, they are the perfect venues of enotouristic storytelling. Given the nature of wine tourism experiences, a wine museum storytelling should also be carefully designed and presented by the well-trained and authentically performed tour guides, well-documented exhibitions, well-designed displays, and audio-guides.

Meanwhile, the wine museums need to expose the flexibility in adopting modern technological solutions together with communicating the historical and cultural heritage. They need to keep apart the image of being boring, old, content-heavy, and not interactive. It is noteworthy that the common expressions such as “nobody is visiting the museums nowadays”, “the museums are boring”, “the wine museum is not interesting so that it is not included in the wine tourism offer”, are leading to find out what the perceptions of visitors are about the wine museums: Are they really boring? What role do they play? What is their potential and how to use them? What do we need to change? What if they can be so much beneficial unless professionally designed and communicated? Towards that end, taking into consideration the above-mentioned statements, questions and ideas developed after visiting wine museums, the research paper was developed and completed.

Given the research framework, the main objective of this paper is to study the wine museum concept in wine tourism by studying the case of an interactive wine museum at Cálem cellar. For this, the following objectives were set and met:

- exploration of the overall understanding of museum concept and trends,

- studying the role of digital experiences through virtual museum tours,
- familiarization with Cálem cellar's interactive museum concept,
- exploration of visitor-generated content on Cálem cellar's interactive museum,
- development of recommendations.

1.2.3. Bibliographic survey

1.2.3.1. Museum concept: definition

Featuring in the museum sector, the definition of “museum” and its relevant operational framework are aligned to the core components of advocacy of the International Council of Museums (ICOM) founded in 1946. As a backbone of ICOM, the current definition dates to 2007 and states that “A museum is a non-profit, permanent institution in the service of society and its development, open to the public, which acquires, conserves, researches, communicates and exhibits the tangible and intangible heritage of humanity and its environment for the purposes of education, study and enjoyment” (Sandahl, 2019, p. 2). Additionally, as a result of the ICOM's global dialogue with its around 40,000 members from 140 countries a new alternative definition (selected, yet not in force) has been proposed, which delineates that:

Museums are democratizing, inclusive and polyphonic spaces for critical dialogue about the pasts and the futures. Acknowledging and addressing the conflicts and challenges of the present, they hold artefacts and specimens in trust for society, safeguard diverse memories for future generations and guarantee equal rights and equal access to heritage for all people. Museums are not for profit. They are participatory and transparent, and work in active partnership with and for diverse communities to collect, preserve, research, interpret, exhibit, and enhance understandings of the world, aiming to contribute to human dignity and social justice, global equality and planetary wellbeing (ICOM, 2019).

1.2.3.2. The versatile role of museums

In line with their nature and mission, the museums play a crucial role in their setting. The versatility of museums' role is noted in the development of regional economy, social life, preservation, and innovation in culture. Regarding the economic role, the museums substantially contribute to the progress of communities, and are seen as “economic engines”, “drivers of development”, “agents of social and economic change”, “social capital creators”, “places for interaction and dialogue”, “hubs of knowledge” (OECD/ICOM, 2019). In other words, they create jobs, attract visitors by diversifying regional touristic offer along with

boosting cultural tourism development, generation of new revenues, gross domestic product, and taxes. For instance, the American Alliance of Museums found out that as of 2017 the annual economic impact of American museum comprises USD 50 billion in GDP and USD 12 billion in taxes with contributing to 726 200 jobs (OECD/ICOM, 2019).

Upon their social impact, the museums help to ensure settings for education, well-being, creativity, engagement and reveal of modern issues. The museums are massive communicators for the past, present, and future by safeguarding the legacy of generations. Moreover, the museums are practicing their role in enhancing human rights as part of the Universal Declaration of Human Rights, and comprehensively contribute to the sustainable development (UNESCO, 2015). Stressing the significance of educational role for the community, Valente (2017) presents the successful educational policies in museums developed by the local community and museum's educational team in the Douro Museum.

Given the scope of museum values and purposes, the museums are not considered as institutions having the nature of detachment, sovereignty, and being unfettered. Meanwhile, the museums are profoundly rooted in shaping the national identities. In line with their role in regional and municipal revitalization, regeneration, urban renewal, the museums significantly influence the tourism market (Sandahl, 2019).

The integration of museums in the state strategy for tourism development helps to bridge the private sector and the museums, as well as ensure mutual benefits. For instance, France, Germany and Switzerland united their frontiers enabling the visit of 320 museums via the Salzburg Card (OECD/ICOM, 2019).

1.2.3.3. Museum typology

Among the diversity of museums, ICOM (2018) reports that there is no data on the precise number of museums worldwide. Nevertheless, ICOM considers the presence of more than 55,000 museums in 202 countries. Yet, UNESCO (2019) considers that the exponential growth of cultural tourism contributed to the rise of museums from 22,000 (1975) to 95,000 (2019). With this vast number and diversity, the museums gather virtually to celebrate International Museum Day annually on May 18.

Given the classification criteria, the museums vary and are divided into various groups. Correspondingly, Goode (1896) discusses that the museums are classified with 2 criteria – the contents' character and purpose. The UNESCO classifies the museums and museum collections based on content (Contemporary Art, Archaeological, *et cetera*) and type of ownership (public, private, mixed) (Ministry of Education, Culture and Sport of Spain, 2016). While, general, natural history and natural science, science and technology, history, and art comprise the five main categories defined by Geoffrey (2019) who gives the virtual museums a solo group. In this sense, Giannikopoulos (2019) discusses the metamorphosis of

museums into a virtual model. Meanwhile, Sandahl (2019) suggests that there are new museums, specialist museums, and museum-like initiatives. Also, Passebois-Ducros (2018) indicates the notion of “hybrid museums” (neither museum, nor amusement park) by exposing the dual outcomes to possibly increase or decrease the satisfaction levels.

Upon organization criterium, the museums can be stationary and traveling. While stationary museum has a constant location with a specific exhibition, the traveling museum periodically alters its address by moving from country to country. Correspondingly, the latter case can be substitutional in the absence of a stationary museum, or complementary to increase awareness and boost promotion (Velikova and Bouzdine-Chameeva, 2019). In this sense, the organization can also refer to tour, particularly by having museums with free-flow layouts and museums with specific layout.

The wine museums as theme museums cover various organizational models. There are wine museums based on private, public, or mixed collections; with exhibitions through presenting the historical legacy via artefacts or exhibitions on total technological displays; with separate building model or within a wine cellar.

1.2.3.4. Trends: wine museums

The museums communicate massive information to visitors. With this, it was not until the end of the 20th century that the altering reality amidst the museums was noted. By transcending the boundaries of museums, the shift was expressed in ensuring dialogues and proactive engagement (Sandahl, 2019). And in the scope of communication technics, the massive focus shifts to the entertainment via tour guides with multiple backgrounds and adventurous storytelling to avoid “gallery fatigue” (Gray, 2015). Furthermore, Simon (2010) brings forward the concept of “participatory museum” which starts with project design and extends into implementation based on “Me-to-We” model (see Appendix 1).

As stated hitherto, the museums are intended for change and innovation. Many modern museums showcase the well-set trend on transforming the traditional concept of museums into extremely creative and engaging venues for visitors. In such, they are becoming the symbols of destinations helping not only to connect the past with the present but also introduce the future and refresh the brand of tourism destinations. This can be seen also within the wine museum concept. For instance, one of the most famous wine museums nowadays is Bordeaux’s museum - La Cité du Vin (The City of Wine). As one of the icons of Bordeaux and “Wine Louvre” (Cusin & Passebois-Ducros, 2015), this project underwent a long way (over 20 years) by benefiting from its political leader’s persistence, benchmarking, and innovative team. Based on a world-famous wine region and connected to highly reputative wines, La Cité du Vin takes the wine museum notion to the new era of interactive experiences and is a strategic step for the rebranding of a wine tourism destination. This

view is supported also with another study by Cusin & Passebois-Ducros (2016), where La Cité du Vin is believed to be the praiseworthy museum to the prestigious, international, and worldwide status of the “world’s wine capital” – Bordeaux, and as a “Guggenheim of wine” and a “Wine Eiffel Tower”.

On the other hand, success is not guaranteed with a sole initiative, yet it can be ensured due to manifold efforts and chains of actions. As with Bordeaux’s case, the city is recognized as UNESCO world heritage site (2007), the community is engaged, it is the milestone of the wine tourism strategy. Hence, the cultural center of new generation became a “masterpiece in city branding”, “a place to experience, taste and smell wine, have fun and dream” (Cusin & Passebois-Ducros, 2016) with 90% satisfaction and a 93% recommendation rate amidst visitors of 180 nationalities and already around 1.5 million visitors (30% of annual Bordeaux tourists) (La Cité du Vin, 2018, 2019&2020).

Together with huge tangible and intangible heritage, the wine museums concept is confronted with the idea of experiential design. Specifically, it is not enough to be just classical nowadays so that it takes to the experiential level which is discussed by Bouzdine-Chameeva, Ponsignon, Durrieu, and Pesme (2019). In this sense, ranked as one of the best museums in the world by National Geographic in 2017, La Cité du Vin again proves to be the role model on a multi-sensory adventure that effectively solved the design ideas, technological innovations, and interactive tools for wine tourism.

The findings of interviews claim that with La Cité du Vin case initially the project was a surprise for the Bordeaux wine industry for the choice of presenting wines from around the world (albeit the existing private museum for Bordeaux wine and trade) as the stakeholders expected the city to be a tool for promoting Bordeaux wines. However, the strategic decision has been made as Bordeaux is known for being “World’s Wine Capital”.

Hence, for the overall museum image, the historical wine museums (regional or local history museums) are found to be boring unless engaging wine tasting and other events. In this sense, other than having some educational programs for the local community, these museums are mainly focused on providing experiences to tourists who usually never return.

On the note about the challenges, the wine museums are fragile in their operations and subject to carrying adverse impact from threats. For instance, La Cité du Vin faced the consequences caused by the “yellow vests” movement in France, the risks linked to the attacks in public places, and the current situation related to the worldwide pandemic. Located in Napa (California, USA), Copia: The American Center for Wine, Food and the Arts (now known as CIA Copia under the aegis of the Culinary Institute of America (CIA)) confronted challenges mostly related to the blue-collar community. Fortunately, the community helped vastly with the fundraising, and in turn, the museum ensured numerous economic assets. Other challenges also include terrorist attacks in New York, and a large

flood control project. As non-profit museum-style center, CIA Copia had a mission to link and look at culture from the perspective of vita-Culture (wine), agri-Culture (food) and material-Culture (the arts). Its advantageous location and relationship with wine facilitated to the center's content development and fundraising activities.

Another trend is discussed by Ponsignon, Durrieu, Bouzdine-Chameeva (2017) regarding the importance of experience design (content and mechanism) in the communication of culture. The study showcases the correlation amongst "intended or planned experience" designed by the hosting institution and "realized or actual experience" consumed by the visitors. In other words, the passive-active or "do and see" phases need to be balanced to mitigate the fluctuations of high and low expectations, to ensure an appropriate level of personalization and intervention, as well as the entertainment.

Upon the insights on value co-creation and value co-destruction through interactive technology in tourism, Kirova (2020) brings forward the dilemma of immersive solutions. Particularly, the study grounds that the input of technology has both benefits and drawbacks in providing customer experiences. In wine tourism, as the core product is the wine with its tangible and intangible allures extending through millennia, the technology might impress, yet leave artificial perception by diminishing the created value and lacking in communicating the authenticity of wine. Therefore, the transformation of contemporary museums into visitor centers or "experience-centric providers" has shaped the current movement of the museum concept.

1.2.3.5. Digital experiences: museum virtual tours & COVID-19

The availability and advancement in digital technology offer manifold prospects for entering the virtual world. In addition to it, the groups of consumers are diverse and expose various needs by stretching from digital immigrants to digital natives in the world of Artificial Intelligence and the Internet of Things. Furthermore, the digital engagement levels are quite vast and time-consuming, but there is and always will be the demand for live experiences for gastronomy and wine tourism (Winepleasures, 2020).

Interestingly, the 3-dimensional (3D) platform exists for creating dynamic exhibitions and personalizing the virtual museum space (Kiourt, Koutsoudis & Pavlidis, 2016). Furthermore, Martins *et al.* (2017) suggest an e-tourism model based on virtual reality and virtual environment for a multisensory and holistic virtual-reality wine tourism experiences with the help of information and communication technologies (ICT) to enhance the delivery and engage all senses regardless of the physical location.

Many museums have been using an online platform before the worldwide pandemic in 2020 caused by Coronavirus disease (COVID-19), yet the coverage and use of digital experiences are extending vastly as the museums contribute positively to mental health and

well-being. With no report in the past, the 100% of destinations worldwide have announced relevant travel restrictions as of April 28, 2020 (UNWTO, 2020). Hence, with the impact of lockdown, many museums and wine tourism businesses initiated and started to adapt to the current situation by offering digital entertainment. For instance, Louvre museum offers virtual visits, a 360-degree virtual tours are available in Museum Jacquemart-André, Chateau Montelena Winery, La Cité du Vin, as well as Amsterdam's Rijksmuseum museum offers multimedia tours via a free mobile application to explore its collection with enabling to tailor users' own routes. Since May 2020, some countries (Switzerland, Portugal, etc.) have already allowed museums to re-open with risk prevention guidelines on hygiene measures, tickets with limited time to control the visitation rates, physical distancing and carrying personal protective equipment (Euronews, 2020).

However, there are many precautions and factors to consider before going for virtual tours. The interviews with the owners of tour businesses (Quinby, 2020), particularly with the co-founder at Get Your Guide - Tao, reveal that the virtual tours are not a replacement for in-person tours because the travelers need experiences when they can touch and feel their environment. The virtual tour is a remarkably effective marketing tool to ensure brand communication. Nevertheless, the digital world is already full of various offers so that the tourism entrepreneurs enter the competition with giant entertainment players, namely Disney, Play Station, E-sport, Netflix, and many more. According to another interview with the owner of Taste of Toulouse food tours - Jessica Hammer (Whaley, 2020), the evaluation of resources needs to be carried out. If a company has enough resources, time, and capability of giving proper services, then, the digital experience can be offered. In line with this, the company needs to set up goals, measure the audience, be different, offer by-products, check government aid options. Yet, the virtual tour might also not be beneficial for a company so that the allocation of existing means to this offer might cause an adverse impact. In the latter case, initiatives such as improving digital marketing (social media appearance, search engine optimization, content development) are instead recommended as crucial basics before going virtual and are part of long-term benefits.

Furthermore, as mentions (Carvao, 2020) Marketing and Wine Tourism Specialist Paul Wagner, the stress should be put on the way of using the technology by creating human connections, as well as carefully choosing the people who deliver this experience. Also, the virtual reality can decline the level of personality and authenticity amidst the information surplus noted by the Chief Destineer, Destinate Mariëtte Du Toit-Helmbold. Yet, as a platform it facilitates to the broader coverage and provision of visual evidence of experiences.

2. METHODOLOGICAL APPROACH

With the adoption of critical appraisal, an empirical research has been conducted to study the role of wine museum concept in wine tourism. This have been possible due to direct observation. Hence, a single case study approach is presented to support the hypothesis that the wine museum notion completes, diversifies, and adds value in the whole enotouristic experience. To the best of knowledge of this master thesis's author, still, there is no similar study. Meantime, the literature review only revealed a range of scientific articles about various perspectives on using some wine museums as a case study, yet, not particularly focusing on the wine museum concept.

2.1. Data analysis

To meet the study goal, the qualitative and quantitative analytical technics are practiced for data analysis. For building the arguments, the traditional evaluation technics such as observation, surveys and interviews are used. Correspondingly, the direct observations are exposed in comparison to the user-generated content (UGC) at an online platform, and the constructive proposals are presented for further development. To explore the existence of wine museum studies and provide a documentary evidence on overall museum notion, the didactic analytical approach is adopted and conducted with the literature review to frame the current scientific views.

To better understand the wine museum planning and research framework, the online interviews as qualitative technic were conducted with the President of International Museum Planning Consultants - Peggy Loar (the founding director and former president of Copia: The American Center for Wine, Food and the Arts in Napa (California) from 1997 to 2005), with the Lecturer of Master 1 Marketing & Communication at IAE Bordeaux - Prof. Juliette Passebois Ducros, and with the Professor at KEDGE Business School of Bordeaux - Prof. Tatiana Bouzdine-Chameeva. Furthermore, to assure the data accuracy and credibility, the interview has been conducted also with the internship professional supervisor and Sogevinus Group's Visitor centers manager Andreia Almeida. On the quantitative note, the online survey of 10 questions has been developed and disseminated to present the general understanding in respect to the research question. Hence, the primary data is collected without nominative information. Additionally, the secondary data presenting a total of 244 reviews have been selected and subjected to in-depth analysis to address the paper's goal.

Considering the current worldwide pandemic caused by COVID-19, the major challenge has been caused by the suspension of internship so that the direct observations have been ceased. Although, fortunately the training program was sufficiently intensive to enable the necessary explorations. On the one hand, the research is focused on a single case study as part of the cellar's overall experience, while, on the other hand, it would have been insightful

to study a wine museum model on its own. Another challenge is linked to the survey audience as the data has been collected based on online reviews. This does not cover the representative sample of the cellar's visitors as not all of them leave feedback on online media. Therefore, this research paper enables new paths for further studies.

3. RESULTS & DISCUSSION

3.1. Cálem cellar's interactive museum: internal and external analyses

3.1.1. Wine tourism experience

With substantial progress and experience in wine tourism, the Sogevinus Group is open for visitors at Burmester and Cálem cellars, and Kopke house located in Vila Nova de Gaia, as well as at Quinta S. Luiz in the Douro Valley, Portugal. As reported to The Portugal News Online (2019), the Group is planning an investment of €30 million for building a 150-room five-star wine hotel along the Douro river, Vila Nova de Gaia. This project represents another transformation of a former warehouse for wine tourism (the other one is Cálem cellar's visitor center). Overall, the tourism share accounts for 20% of €40 million total annual turnover of the Sogevinus Group. All these initiatives represent the Group's dedication to the tourism development.

Being the most visited cellar in the world (Cálem website, 2020), Cálem cellar is located at the heart of Vila Nova de Gaia offering a multi-sensorial experience of Douro and Port wines. At first, when the cellar was open for wine tourism, the tour covered only the visit to the aging facility without a museum. Along with the increasing demand, the space for the cellar tour was enlarged to welcome more visitors by giving enhanced experiences. Consequently, the two tracks were developed, and the museums were opened to provide personal engagement and more learning resources on Port wine. With the transformation of the cellar into a visitor-friendly space, Cálem co-functions as a Port wine aging cellar as well.

Remarkably, with versatile and well-operated enotouristic projects, Cálem cellar was awarded a myriad of accolades. The Great Wine Capitals awarded the Best of Wine Tourism Awards of Excellence for Architecture (2006), for Wine Tourism Services (2008) and as the regional winner for the Innovative Wine Tourism Experience due to the interactive museum (2018). In 2019, the cellar was recognized a nominee of Europe's leading tourist attraction by the World Travel Awards.

For the cellar experience, the current offers are: Guided tour and classic tasting of two Port wines (Fine White and Special Reserve Tawny) - €14; Guided tour and Premium tasting of three Port wines (White & Dry, LBV and 10-year-old Tawny) - €16; Guided tour, exclusive tasting of two Port wines (Vintage 2015 and 10-year-old Tawny) and 5D cinema - €19; and Fado in Porto experience: with a guided tour, Fado show and tasting of two Port wines - €21. The Fado experience has become available since 2011 with the aim of combining the two

main Portuguese ambassadors in the world – Port Wine and Fado. For this experience, the statistics are kept separately and have had an increase of interest. The cellar has wheelchair accessibility and free wireless network.

The booking of tours can be done via Cálem's website or by walk-in upon the availability of relevant tour time and language. Along with the cellar tour, the guests have a 10% discount (only if premium/exclusive tasting purchased) on wine purchase at Cálem store (the share of store sales compared to the visits is around 50%), which offers the shipment of purchase (the list of countries is limited and specified at the cellar). The tours for children under or of 5 years are free of charge and for youngsters of six to seventeen years old cost €7. In partnership with local tour companies, Cálem cellar offers combination tickets, particularly, with the Yellow bus hop-on & hop-off tours and Douro river cruise tours.

As far as languages are concerned, the tours are available in Portuguese, English, French, and Spanish. In partnership with Hands to Discover, the sign language tours are also available upon reservation. In the same manner, the cellar collaborates with local tour guides and travel agencies to welcome the groups with languages that are not specified on usual offer. Upon reservation, the cellar hosts Chinese tours, Russian tours, tours with their own guide and tours with Cálem's guide and the simultaneous translation by individual group guide. Additionally, Cálem offers tours after 6pm, Port wine bottle opening with the use of fire, tastings, and pairings with local produce: chocolate, cheese and charcuterie.

The cellar operates from 23 to 40 tours daily depending on the seasonal flow. The visit is designed to last from 60 to 90 minutes: 15 minutes at the interactive museum, 30 minutes for guided tours with a maximum number of 45 visitors, 15 minutes in the tasting room (however, the visitors can enjoy the tasting part at their own pace). The current duration has been modified according to the visitors' feedback throughout the years and differs due to the consequences of COVID-19 (see Chapter 3.5). Particularly, since 2017 the tours have been organized for groups with 40 people in each but with longer time (20 minutes) in the museum. So, simultaneously 3 tours were conducted inside the cellar causing difficulty in hearing the guide. Thus, the time for museum and guided tour was reduced, and consequently the groups were enlarged.

The cellar welcomes its visitors all year round without offseason with the exemption of specified holidays (December 25 and January 1). The seasonal operations are divided into high and low seasons on the announced schedule. From April to October (high season) the cellar is open for the visits from 10 am to 7 pm, while from November to March (low season) – from 10 am to 6 pm. At the beginning the doors were open for wine tourism just during the high season including weekends. Once the first renovation works were completed, the cellar has been working all year long. The latter enables welcoming more visitors by ensuring the proper workload for the staff completely dedicated to tourism. Following its social and

corporate responsibility, the company adopted this operation model to ensure consistent workload for its tour guides instead of having seasonal workers. In line with this principle, the company does not have audio guides. On the other hand, some of the challenges appeared with the low season (40/50 visitors per day) when there was insufficient number of visitors to keep all the workers busy.

The cellar is also open for hosting corporate events and meetings, providing a catering at the aging cellar and auditorium (capacity of around 120 attendees), experience room for tastings and gastronomic events (capacity of around 80 attendees), *et cetera*.

3.1.2. Digital marketing strategy

With modern and well-designed digital campaign, Sogevinus reports (Sogevinus website, 2019) to be the best digital marketing wine company in Portugal. The “2019 Wine Digital Engagement Index” assessment on the ten key indicators (personalization, social networking, customer response time, user experience, mobile device optimization, page loading speed, data security) was carried out by a communication agency - LEWIS Portugal. The digital presence is well-thought and organized, yet clear and attractive.

Regarding the promotion of tours, the company has relevant activities in social media (Facebook, Instagram, Twitter) along with the official website and its direct booking platform. The experiences can be booked also via their partners: Tripadvisor, hotels, museums, and other platforms. Furthermore, the company participates in the international tourism fairs and markets along with advertisements in the websites, and wine magazines. Another quintessential role plays their visitors in terms of the word-of-mouth publicity. Their target covers the visitors of nationalities that visit them the most and who are physically near the cellars.

The analysis of Cálem cellars’ social media presence reveals that they are active in Facebook, Instagram, and Twitter. In Facebook, they have 8,226 people that like their page, 8,417 followers and 6,830 people who checked in there. The Facebook page was created in February 2017, and now has a rating of 4.9 out of 5 based on the recommendations and reviews of 151 people. Regarding Instagram, Cálem has 2,911 followers and 211 posts. The page has been active since June 2017. In terms of Twitter, the communication is conducted via Sogevinus account for all brands of the group, including Cálem cellar. In terms of frequency of publicity, the posts are regular, engaging, and diverse. For Google search, Porto Cálem has a total of 1,682 reviews with 4.3 out of 5.0 rating.

3.1.3. Tourism department

At Sogevinus group, the tourism department is responsible for touristic projects, including wine tourism. The department deals with the promotion of visits to the cellars in Vila Nova de

Gaia and to the estate in the Douro Valley focusing on promoting their core products – still and fortified wines. Their goal is to give the visitors memorable experiences by creating the desire to return. The tourism department has 41 employees. In three visitor centers, there are 29 employees, and the rest is connected to the group's street shops. At Cálem, there are 14 tour guides. This number may reach 20 when the workflow is sophisticated.

To ensure consistent quality on delivering tours, the supervision staff makes regular checks by asking feedback from the visitors, having mystery clients and by following *in situ*. Furthermore, the management organizes group meetings with the tour guides to discuss the difficulties, doubts, and successful cases if it is of general interest, and separately if it has to do with a specific case or guide. Also, they organize field trips and tastings to the Quinta for meeting with the winemakers to clarify their doubts.

3.1.4. Statistical appraisal

As far as the number of visitors is concerned, the Group welcomed 456 thousand visitors last year (all visitor centers and shops). For Cálem specifically, the figures are 170,000 visitors in 2017, 235,000 - in 2018 and 313,000 - in 2019. Consequently, the cellar welcomed on average around 800 visitors per day only in 2019. With this data, Cálem cellar claims to be the most visited cellar in the world (Cálem cellar website, 2020). The statement is based on the data provided by a private non-profit institution - Association of Port Wine Companies (AEVP) founded in 1975 and based in Vila Nova de Gaia (to which all cellars report).

The months of the highest number of visitors are usually April (Easter), August, September, and October, yet the current flow pattern is more divided throughout the year. Before there was the concentration of visits during the high season. In relation to the repeated visits, the cellar receives the visitors that are coming back. The visitors often mention it either during the tour, in the shops, or in social media. Evidence on the visitors' country of origin showed that the cellar welcomes tourists from all over the world, though a higher percentage from Spain, France, the USA, and Brazil. The geography pattern changes depending on the season so that more Europeans are coming in summer, yet, in general, more Brazilians, Australians and Asians - in winter. Regarding national travel, the visitors from Portugal account for 35% which is increasing annually. In 2019, the visitor geography was dominated by Portugal (33%), France (12%), Spain (11%) and UK (9.5%) (for the full list, see Appendix 3). It is important to mention that since May 2018 the data collection is subject to limitations and restrictions (the EU regulation on GDPR, 2016/679). Consequently, the cellar has relevant limitations on creating the customer-based database.

3.1.5. Cálem's museum layout

Previously, being the storage room, the interactive museum now stands for the first part of cellar visit and has been open since 2017 with its current planning and design. It is a self-guided experience allowing to explore and learn about the Douro Valley and Port wine production as of the visitors' own pace. Here, the visitors have around 15 minutes to explore, yet, if more time is required, they can return after the guided tour and tasting. The museum represents the history and legacy of Port wine production via modern technology and multi-sensory activities. At the museum, the displays are available in Portuguese, English, French and Spanish. The layout (see Appendix 2) of the interactive museum experience is comprised of the following displays:

- The Douro Valley map – brief introduction about the wine region's terroir,
- From grape to wine – infographics and a short video clip about Port wine production,
- The soil of the Douro Valley – demonstration of the typical schist rocks,
- The grape varieties of the Douro Valley – presentation of widely used varieties,
- The aromas of Port Wine – presentation of typical aromas to smell and guess,
- The Port Wine typology – presentation of the Port wine styles with relevant links,
- Cálem in pictures – throwback to historical development and events,
- The colors of Port Wine – display of the color palette with real wine samples,
- Cooperage barrel-making video clip – brief showcase of the construction process,
- Cálem historical bottles – showcase of the iconic samples,
- 5D cinema room – multi-sensorial experience via traveling to the Douro Valley,
- Discover your port wine (the displays are temporarily off (the EU regulation on GDPR, 2016/679), as well as a misuse and unprecedented impact by one of the visitors),
- Waiting area – designed for the expectance of guided tour.

Besides the self-guided, another museum for group tours is available which has been the initial project. The entrance is through the reception separately so that the tours do not overlap with the other museum flow. This museum that is now set for group tours, initially had a map of Douro Valley, some viticulture tools used in the estate, a chart for historical development highlights and Vintage bottles (See Appendix 6). Nowadays, the group-tour museum is relatively small and compared to the other one lacks some exhibitions such as aroma table, Port wine typology, yet, designed to ensure the interactive concept and is more enriched with technology. It is worth to mention that the cellar is equipped to ensure welcoming of various groups and meet high demand levels during the high season through the two tracks to organize the tour flows.

3.1.6. Competitive analysis

In Vila Nova de Gaia, many Port wine cellars are open for wine tourism. They also offer part of their spaces dedicated to the museum experience with the representation of history and culture of their houses, Port wine and Douro Valley. Correspondingly, some cellars do it via ancient artefacts, while others use some interactive displays as well. There are Port wine lodges that use the concept of museum as a waiting room/reception area.

The outcome of the competitive analysis reveals that there are 10 cellars (See Appendix 4 & 5) that specify about their museum offers. These museums differ in size, design, displays, and story, yet, they all have a common mission to give an opportunity to learn about the history, culture, and trends of Port wine and Douro Valley. Hence, each one can be suitable for various tastes and preferences so that the visitors can select and explore whichever style they want. With the co-existence of many offers, Cálem cellar managed to be the most visited by taking full advantage of its location, capacity to welcome a high and consistent number of visitors, and thanks to its innovative and interactive approach appreciated and recommended by its myriad of guests.

As the operation of many years proved the cellar's position, it is worth noting about the future impact of external new projects. For this instance, the World of Wine (WOW) project is planned to be opened in summer 2020 which is going to be suitable for hosting a high number of visitors. This attraction will offer 5 museum experiences, 9 restaurants and bars, wine school, exhibitions and events spaces, shops. If compared, the two concepts are quite distinct and the influence in total visitation rate will be available to evaluate after the opening. The WOW is meant to be a combination of museum, wine and food. Meanwhile, Cálem is a cellar with a small museum. The latter focuses on a more private and face-to-face communication about the Port wine. In line with this, they keep having the tour guides to do the tours instead of audio-guides. The benefit of having a tour guide is that if a visitor has any doubt or question, their guide can respond immediately. The findings showed that, there is a space for both concepts to coexist, though being completely different projects.

3.1.7. User-generated content analysis: Tripadvisor

With 859 million reviews and opinions, 463 million monthly average unique visitors and 8.6 million accommodations, airlines, cruises, experiences, and restaurants, the Tripadvisor is the world's biggest travel platform (Tripadvisor LLC official website, 2017). In line with its policy and mission, the Tripadvisor has a myriad of initiatives to ensure the review transparency and generation, thus, keeping apart biased and fake reviews, as well as guarantee the trustworthy nature of its user-generated content (UGC). The satisfaction barometer of the Tripadvisor is embodied in the form of Bubble ranking, particularly via a

numerical scale from 1 to 5, where 5 bubbles are equivalent for excellent, 4 - very good, 3 – average, 2 - poor and 1 - terrible.

According to the Tripadvisor's Global Report (2019), one in every two (almost half of) the Tripadvisor users or 49% of travelers reported that the Tripadvisor inspired them to visit a new destination. Regarding the travel mentality, almost two in three travelers prefer history and culture (63%), whereas, two in five (43%) – excitement and fun. Considering the urban nature of Cálem cellar's experience, it is essential to understand the profile of city travelers using the Tripadvisor platform.

With the Certificate of Excellence granted by the Tripadvisor, the review analysis for Porto Cálem shows that it is ranked #20 of 76 things to do and #16 of 28 Food & Drink in Vila Nova de Gaia within the "Wineries & Vineyards" category (Porto Cálem page, Tripadvisor, 2020). All the reviews are the subjective opinion of Tripadvisor members. The site is recommended with other most popular tours and activities involving separate experiences such as Porto Calém Cellars Admission, Fado Show in Porto Cálem Wine Cellars Including Wine Tasting and Visit and Fado in Porto - Caves Cálem.

The search on "wine museum" in Porto results in Porto Cálem at the 4th position for the popularity ranking with 1950 reviews (Note: the positioning is based on user reviews (quality, quantity, recency) and reflects experience/company's standing against other businesses within geographical location rather than on the total amount of reviews). The reviews are available in 18 languages: English (618), Portuguese (366), French (336), Spanish (268), Italian (152), Dutch (57), German (54), Russian (35), Polish (14), Japanese (13), Korean (12), Danish (10), Chinese (Sim.) (9), Chinese (Trad.) (9), Turkish (4), Swedish (3), Hungarian (2) and Hebrew (2) (See Appendix 7). Regarding the Tripadvisor Bubble ranking, Cálem scores at an average rating of 4.0 out of five.

Concerning the traveler rating with all 1950 reviews, it received 868 (44.5%) "excellent", 690 (35.4%) "very good", 275 (14.1%) "average", 74 (3.8%) "poor" and 43 (2.2%) "terrible" reviews. As the cellar doors are open throughout the whole year (with specific holiday day-offs), the reviews cover all months so that travelers can priorly check upon the feedback recorded at a specific time of the year. The feedback is up-to-date and is frequently posted. The first review is recorded in October 2011 spanning to March 20, 2020.

With overall specification on "museum", there are 244 (12.5%) reviews: in English (90), French (49), Spanish (34), Portuguese (28), Italian (22), Dutch (6), German (3), Danish (3), Chinese - simplified & traditional (3), Russian (2), Polish (2), and Korean (2). The travelers specified that they mostly traveled as couple (61%), less with friends (20%), with family (13%), as solo (5%) and there are only two mentions about traveling on business. Alas, some groups did not specify their traveling type (See Appendix 8).

As the current organization of tours and interactive museum has been available since 2017, the reviews vary about the duration and price of the experience. The analysis of dates showcases how the organization changed and improved along with the feedback of visitors. The overview of the reviews also demonstrates that a correlation can be noticed between the opening of interactive museum and the higher ratings together with leaving reviews/higher review activity with notes also about the museum. With the current design, excellent reviews dominate: 110 or 45% out of 244 total reviews on museum, (very good 84 or 35%), (average 38 or 15%), (poor 8 or 3%), (terrible 4 or 2%) (See Appendix 11).

To understand the seasonal activity of the Tripadvisor UGC and whether it has any correlation with its Bubble ranking, the seasonal breakdown analysis of the reviews on museum at Cálem cellar is conducted (See Appendix 9). For this, the year is divided into four seasons: from December to February, March to May, June to August and September to November, consequently, corresponding to one axis. The opposite axis represents the bubble ranking with its categories - excellent, very good, average, poor and terrible. The outcomes reveal that there is a seasonal correlation on ranking activity. While looking at the seasonal activity, it is seen that the highest grading activity is received in autumn - from September to November. This is followed by summer – June to August, spring – March to May, and winter – December to February. The latter presents the lowest activity which is down by 1/3 of autumn period. The activity during autumn, spring and summer demonstrates relatively similar nature.

The seasonal breakdown of ranking also shows that there is difference within each ranking category depending on season. The analysis of categories shows that the autumn months - September to November have the highest number in “excellent” (37) category and the second highest in “very good” (26) and “average” (12) categories followed by 2 gradings in “poor” and 1 – “terrible”. The period of summer - June to August received the highest ranking in “very good” (27) and in “average” (17) categories, and is the second lowest in “excellent” (21) followed by 3 gradings in “poor” and 2 – “terrible” representing the highest numbers in the low (“poor”, “terrible”) categories. The period of spring - March to May has the second highest ranking in “excellent” (32) category, the second lowest in “very good” (22) and in “average” (8) categories, followed by 2 gradings in “poor” and 1 – “terrible”. And the period of winter - December to February received the lowest rating in all categories: “excellent” (20), “very good” (9), “average” (1), “poor” (1) and “terrible” (0). The latter is the only season with the absence of “terrible” review.

The breakdown into high and low seasons according to 2-season operation of Cálem cellar experiences represents variances between them (See Appendix 10). The high season refers to the period from April to October, and the low season – from November to March. Studying together with the bubble ranking, the results show that the reviewers are more

active during high season (172) rather than during the low season (72). Meanwhile, the high season also received the highest scores for all categories of bubble ranking compared to the low season. While the high season is reviewed with 4 “terrible” scores, the low season has no score on that category. In cumulative summary, both seasons have received more scores on positive rating - the high season has 70 “excellent” and 63 “very good” scores, and the low season - 40 “excellent” and 21 “very good” scores.

The summary of all reviews on museum at Cálem cellar results in the dominance of positive feedback and high ratings. Within all languages, the experience received mostly excellent and very good scores. The museum is widely appreciated to be interesting, beautiful, informative, interactive, small yet enabling to learn a lot and be ready for upcoming information while the guided tour and tasting. The reviewers recall and usually name the things they saw, learnt, and played. It is commonly seen as an additional asset. Some frequently state the role of museum as a waiting room by looking at it both unsympathetically and favorably. There is also noted a controversial feedback about the allocated timing on self-guided experience at the museum: for some it requires just 10 minutes, while for the others even the designed time is not enough so that they come back after the whole tour and tasting to complete looking around all displays at the museum. In this sense, it is noted that the majority of low scores refer to the previous longer time allocated for the museum part which now has become shorter. Another controversial feedback was on the level of information available at the museum: for some it was scarce and not informative, while for many others, it was quite informative, brief, and detailed (See Appendix 12).

3.2. Observations

The direct involvement into the cellar’s enotouristic routine ensured real-time observation of visitor experiences, feedback, and organization of activities. The personal experience and training facilitated the internal research in the period of February 10 to March 13, 2020. Correspondingly, the on-site observations enabled the studying of staff training and work structure dedicated to wine tourism, as well as the role of interactive museum.

Regarding the guided visits, the tour guides have opportunity to adapt the script as to their own way of presentation. Consequently, some tours are straightforward, easy, fun, and short, while others are focused on details and enriching the visitors’ knowledge. In this sense, the preference of group size varies - some enjoy presenting for big groups, while others – for small groups or both.

Upon the management of tourism personnel responsibilities, the tour guides are divided into various parts of the cellar and rotate their role besides doing the tours so that they can be assisting the tasting room staff or facilitate visitors entry at the self-guided part, at the shop or at the reception. The cellar has team members that have already been doing the

tours for over 2 years. With the onset of wine tourism activities at Quinta S. Luiz, the tour guides are assigned to one-month service in the Douro Valley so that the diversity of works and venue keeps away the fatigue of work routine. Furthermore, the tour guides are having regular meetings with the winemakers to clarify their technical doubts so that they are ready to reply to the visitors' queries properly.

In terms of interactive museum, the experience was self-guided so that the visitors were able to explore around by themselves before the guided tour. Amidst the immersive displays, the visitors enjoy guessing wine aromas, specifically this is exciting for families with kids, as well as the Douro valley interactive map. With the museum, the guided tours are shorter, the waiting room is favorable, and it prepares for the information to be given while the visit. With the museum information, the visitors are keener on listening to the details for Port wine production and styles during the explanations while guided visit. At the end of the tour, while recalling the parts seen at the museum, the visitors gave affirmative replies on liking their experience as it was very informative and interesting, family friendly, trendy, and vivid visualization is highly appreciated. As a feedback, the visitors commonly commented on exciting entertainment and modern presentation via the visual effects. Having chance to return after the guided tour and tasting, some visitors did come back to explore the museum more.

Overall, the museum and experience map available on the website and at the receptions allows to frame the visitor expectations. The whole model is based on learning and entertainment. Moreover, the communication is eased via multi-lingual displays and presentations according to the tour languages. However, some limitations were noted as well concerning the high number of visitors and small size of museum, the frequent presentation of tickets, and the elevated likelihood to have wrong amount of tastings communicated with the tasting room staff via radio speakers.

3.3. Online survey: wine museum perception

To structure the understanding of wine museum concept in wine tourism, an online questionnaire with 10 questions was developed and disseminated via online social media (Facebook, LinkedIn), Gmail and personal network. The survey went live on February 12th, 2020 and was closed to new responses on May 28th, 2020. The outreach received a total of 150 responses. Some questions were marked "required" so that the respondents could not proceed further on, while for others, there was an option to skip the question as some were linked to the previous ones. Featuring the question styles, 3 questions were of polar or closed type (also known as yes/no question); 3 – multiple choice with option of Check-all-that-apply (CATA); 1 – opinion scale with ranking from 0 to 5; 1 – dropdown to type or select an option; 2 - open-ended with short and long text options. The selection of specific wine

museums on the list was based on the author's experience and results from online search on "the most famous wine museums in the world", yet the option "Other" was available for participants to add their options as well. Hence, the results are analyzed further down.

All closed-type questions reached a 100% respondent rate meaning that all 150 participants answered to those inquiries. With this, the findings indicate that 84% (126 answers) of respondents are interested in visiting a wine museum when travelling to a wine tourism destination. Whereas, the remained 16% (24 answers) selected "no" as a reply (See Appendix 13). Out of all contributors 69.3% (104 responses) visited a wine museum earlier, while the remained 30.7% (46 responses) said "no" (See Appendix 14). Furthermore, the expectation on tasting wines at a wine museum comprises 93.3% or 140 participants with only 6.7% or 10 adverse reply (See Appendix 21).

The evaluation of multiple-choice questions' total replies varies so that one received 104 answers (69%), while the other two - full respondent rate (150 answers or 100%). This is because that question required prior visitation to a wine museum. The Cálem cellar was included in the list to further the comparison with the Tripadvisor UGC. The gamut of visited wine museums is dominated by La Cité du Vin (Bordeaux, France) with 55.8% or 58 responses; and followed by Vivanco Museum (La Rioja, Spain) – 35.6% or 37; Douro Museum (Peso da Régua, Portugal) – 30.8% or 32; and Cálem cellar (Vila Nova de Gaia, Portugal) - 23.1% or 24. The less share was represented by Museo del Vino de Bullas (Murcia, Spain) - 4.8% or 5 responses; WIMU: The Barolo Wine Museum (Italy) 3.8% - 4 responses and World Heritage Wine Museum, Bormúzeum (Tokaj, Hungary) - 2.9% or 3 responses (See Appendix 15). The rest 25% or 26 responses account for "Other" (See Appendix 16). It is noteworthy to mention that a few respondents replied to this question by writing that they have not visited any wine museum under "Other" option, though there was an explanation and availability to skip this question. However, this share is not so large to influence the total picture of outcomes.

The next multiple-choice question was about the favorite part at a wine museum which received 100% respondent rate. Correspondingly, the most preferred areas are "Guessing wine aromas" (56% or 84 responses), "Participating in workshops/masterclasses" (48% or 72 responses), "Visiting wine bar/restaurant shop" (46% or 69 responses), "Exploring the history and museum library" (36% or 54 responses), "Playing wine quiz" (34.7% or 52 responses), "Watching short videos & exploring photos" (31.3% or 47 responses), "Reading short texts" (14.7% or 22 responses), and for "Other" with 0.7% or 1 response specifying the dislike about visiting wine museums (See Appendix 19).

The last multiple-choice question was asking the preference on having audio-guides or tour-guides which also received full participation by the respondents (See Chart 22). Hence, around half of the participants gave their preference to "Tour-guide" (50.7% or 76 responses)

which is followed by “Both” option (33.3% or 50 responses). Meanwhile, the “Audio-guide” received only 14% or 21 responses, and the rest was selected as “Other” (2% or 3 responses) mentioning “no guide plz”; “self-guided, read only”; “tour guide only of the group is small. otherwise audio”.

Again, with full respondent rate, the drop-down question asked the participants to vote for their preference on a wine museum to be with an interactive or traditional exhibition by historical facts. This part also specified the explanation for interactive museum. Along with the majority of answers the preference was given to “Interactive” (68.7% or 103 responses) model; followed by “Traditional” (23.3% or 35 responses). Also, 5.3% or 8 people selected “I prefer taking a virtual tour for wine museums” option and 2.7% or 4 people – “I don’t like visiting wine museums” (See Appendix 18).

Receiving the 70% respondent rate (106 answers), one of the open-ended questions had a short-text style and was about the displeasing features about wine museums. The summative appraisal of feedback indicates that there are both positive and adverse comments. The unfavorable characteristics cover the large size of groups, long duration of explanations, excessive amount of information with wordy, content-heavy nature, and lack of relevance. On one hand, the contestants mentioned about less interactions and dull experience, traditional approach in design and presentation, lack of personal touch and human interaction with a tour guide, lack of professionalism of tour guides and long content of audio guides. On the other hand, the disliking is expressed regarding the available games, quizzes, and videos. Also, the similarity in repetitive setting and information amidst wine museums, lack of focus on local history and culture, language barrier regarding the presence of mono-lingual texts, as well as commercial force and costly tickets are among the answers. Meanwhile, the respondents mentioned about the lack of wine museums, their desire to learn more and have chance to be part of tailored tours for wine professionals. With this, there were also comments on not specifying anything displeasing, and expressing their sympathy about wine museums (See Appendix 20).

The last question was aimed to find out any remarks or memorable experiences that participants had experienced in the wine museums. In this case, the respondent rate is 58% (87 out of 150 answered). Overall, the impressions are linked to having opportunity to travel back through history via exhibits and stories, to see how barrels are produced, to take part in wine-making process and in workshops for wine tasting and food pairing, as well as to write a name on a barrel, to learn about local traditions and wines, to enjoy the view to landscape and vineyard. Especially, the impact of a tour guide is noticed to have a vast impact on the whole experience, particularly, remembering the way of presentation, storytelling, entertainment, and interactions. The participants valued that their expectations were met and

stressed the special moments on having chance to taste unique wines, be part of a personalized tour, as well as experience a multi-sensory adventure (See Appendix 23).

In line with this, the commenters recalled their experience linked to specific wine museums. For instance, the most mentioned wine museum is La Cité du Vin for its variety of offer, interactive displays, gamut of insights about the world of wine, combination of knowledge and entertainment, music room and aroma table, workshops on wine tasting and pairings, though need of complementing with visits to chateaux. Another memorable experience relates to Napa Valley's museum (Yountville) due to historical exhibits, tasting room with art gallery and vineyards. In this sense, the respondents also mention about the interesting exploration on the wine origins around Greece, the whole experience at wine museum in Paris, the vineyards in Vivanco museum (La Rioja, Spain), perfect and detailed tour through audio-guides at Taylor's Port wine house, as well as moving freely in garden and having original, nice, quiet and inspiring visit at a rum museum in Martinique.

In summary, the pleasing visit of wine museums is suggested to have option on tasting local wines, organize a variety of events, and entertain with various projects for local community and tourists.

3.4. Comparison: online survey outcomes & Tripadvisor UGC

To reveal the feedback of travelers a comparative analysis is carried out between Tripadvisor UGC about Cálem Port wine cellar experience, (see Appendix 7) and the online survey results regarding the overall perception of wine museums (see Appendix 13-23).

Marked without expecting a mandatory response, the question asked whether the respondent visited Cálem cellar in Vila Nova de Gaia (Portugal), and how much they liked the interactive museum. Additionally, the option to skip and proceed for the next questions was explained and available. However, some respondents did answer to this question and graded their experience *alas* prior visit to the cellar. Consequently, the results were subjected in-depth analysis to work only with the answers that had previous mention about visitation to Cálem. Following data filtration, around 32 out of 52 answers were removed to ensure the proper image of the outcomes. Hence, the question received 13% respondent rate with 20 out of 150 specification on having experience in visiting Cálem (see Appendix 17).

From the 20 respondents, the equal number (6 answers or 30% each) of grades were given to "neither dislike/like" and "extremely like" categories the same as scores 2&3 and 5 accordingly. The remained 8 participants or 40% selected "tend to like" equivalent to score 4. Furthermore, no respondent selected "dislike" nor "tend to dislike" categories.

On the note of comparison, the average rating scores at 3.9 out of 5.0 according to the rating of online survey, whereas the Tripadvisor's Bubble ranking is 4.0 out of 5.0. Therefore,

the feedback generated almost the same results showing that the experience is being provided at stable, proper levels, and the visitors like their experience at Cálem, though the difference in the number of respondents varies vastly within the two platforms.

3.5. Co-functioning scenario with COVID-19

As a result of COVID-19 outbreak, the worldwide lockdown and travel restrictions caused the temporary cease of operations in wine tourism facilities as well. Likewise, Cálem cellar closed its visitor centers since March 14, 2020 to comply with the state regulations and avoid the potential threat. After around 3-month lockdown, the cellar announced the resumption of welcoming visitors starting on June 10, 2020. The reopening is possible thanks to the “Clean&Safe” initiative developed by the national tourist board - Turismo de Portugal. As the latter reports (Turismo de Portugal, 2020), the “Clean&Safe” is a guarantee seal available for tourism entities to ensure all required measures defined in collaboration with the Directorate-General for Health (DGS) for safe restart and operation. Once the approval stamp is granted, the competent entities will execute regular audits. Hence, the defined governmental actions will ease the proper adaptation to the post-emergency situation to mitigate its impact and ensure further operations.

In line with the protocol, Cálem cellar fulfilled all requirements and is already certified as “Clean&Safe”, thus, it will recommence its functioning with the trained staff according to the following scenario: the number of visitors is reduced to 12 per tour; the different entrances are designed for pre-booked groups and for walk-ins; there will be a mandatory use of mask and gloves for workers and masks for visitors; frequent cleaning of contact surfaces; serving the wine tastings in front of the visitors; no self-guided option at the interactive museum; the whole tour is guided; closure of 5D cinema experience; protection glass both at the front desk and shop; control of body temperature; installation of hand rub dispensers; social distancing of 2 meters; prohibiting any entry before the start of the guided tour; preference of payments via cards; decrease in allowance of the number of people in the shop and in the tasting area; *et cetera*.

3.6. Proposals

Featuring the wine tourism fundamentals, Cálem cellar’s experience is comprehensive, unique, diverse, and properly organized. The critical appraisal revealed that the activities are implemented with daily control by the management and are flexible to adapt to the modern trends to ensure the best experiences amidst their visitors. Furthermore, the interactive museum is a flagship for overall enotouristic offer and entertains the visitors vastly. As the “Discover Your Port Wine” tablet experience is temporarily shut down, hence, the relevant

proposals on possible re-functioning are presented in a table (see Appendix 24), as well as some remarks are written furtherly.

One of the recommendations covers the delivery of guided tours. Particularly, it is suggested to use speakers for tour-guides so that the relevant distancing can be practiced, although the current reduced number of visitors per group waves this necessity. Meantime, audio-guides could be an option to transform the visits, however, the company's corporate responsibility prefers prioritizing the human interactions by ensuring clarification of any doubts asked by the guests.

The next recommendation is about launching a combined tour offer for visiting Cálem cellar and Quinta de S.Luiz. Though the staff recommends their customers to visit each space since the stories complement each other, it would be worth to have a ready-made offer and do promotion accordingly. At this point, the offer is under development and will be available soon. Also, in terms of communication, it is recommended to update the tour scripts and change the means of interaction between the tasting room staff and personnel at self-guided area, for instance, via text messaging. And to enhance the ticket scanning and necessity to show it frequently, colorful ribbons can be given which will also be easy for the guide to check the correspondence of each seated tasting. This will ensure more accurate counts of tastings and will keep apart the radio communication errors.

As the Tripadvisor suggests, the popularity ranking is working based on an algorithm so that the understanding and use of suggested features will enhance the scores and ensure better exposition. The Tripadvisor Insights, an essential hospitality marketing resource, states that for the popularity ranking there are 4 basic factors - the quality, recency, quantity, and consistency of reviews generated by the users (TripAdvisor, 2020). The quality is expressed through the bubble ranking by assessing the quality of experiences. The higher bubble rating, the higher the business position. Though all ratings are available on review history, the most reliable and checked reviews are the most recent ones. Thus, either good or bad, the recent reviews reflect the current experience. Regarding the quantity, the more reviews, the better confidence on comparison and insight on potential experience, but not higher ranking as the users usually check a range of opinions to make a final decision. Hence, this is a crucial indicator on balanced feedback. Consequently, the reviews with higher quality, quantity, and recency for a longer period to ensure the consistency of each experience or business.

With new museum design and organization of tours, Cálem cellar experience already has the fourth position with the Tripadvisor results on "wine museum" and is scored at an average of 4.0 out of 5.0 on Bubble ranking. This is relatively higher position with the dominance of positive feedback and a myriad of recommendations. As the popularity ranking works for an experience in relation to other experiences available in the area and this is not

a steady position so that a movement of one experience impacts the others, the company needs to always ensure high satisfaction of visitor expectations via high quality of its offer. On quantity note, the reminders can be sent in form of emails or Tripadvisor stickers at the reception desks for encouraging the visitors to express their feedback. The consistency of ensuring high quality services and satisfaction rates will enable the consistency of updated ratings. Thus, this will enhance the popularity ranking of the company.

4. CONCLUSION

To summarize, the initial plan and accomplishment of professional internship ensured to reach the master thesis research goals appropriately. The practical training was very well designed and intensive in that it allowed to gain the necessary knowledge and skills with proper competencies for future. Particularly, the intern learnt the organization of workload for highly demanded tours, the proper manner to welcome visitors, to conduct tours for individual and large groups of visitors, to speak and present information clearly, to ensure entertaining and enjoyable experience, as well as guide wine tastings, clarify any doubt for visitors, assist in selling tickets and promoting services, promote Port wine sales, and provide advice for visitors at the wine store. Moreover, the running guided tours in different languages provided multi-lingual experience for the intern to practice and learn foreign language skills. Hence, the training covered the versatile training on direct-to-consumer communication in wine tourism.

Furthermore, the direct involvement in the daily workload enhanced the understanding and observance of visitor behavior at the interactive museum. The latter provided an explicit and proper contribution in meeting the master thesis goals. Due to the consistent supervision and initiatives, the professional team at Sogevinus Group facilitated the acquaintance and integration to daily routine and smooth service for visitors.

In summary, thanks to the proper planning and implementation of professional guidance by the internship supervisor, the intern received intensive training and gained skills to successfully handle daily tasks and make necessary observations for the thesis research and development. Especially, working at the self-guided part and museum enabled observing the visitors' behavior and use of the museum displays, as well as conducting the tours and tastings which gave an opportunity to hear the feedback of visitors about their experience in real-time. Consequently, direct involvement facilitated the study and organization of the research paper, as well as supported the hypothesis that the wine museum notion completes, diversifies, and adds value in the whole enotouristic experience. Also, with all findings this research paper enables new paths for further studies.

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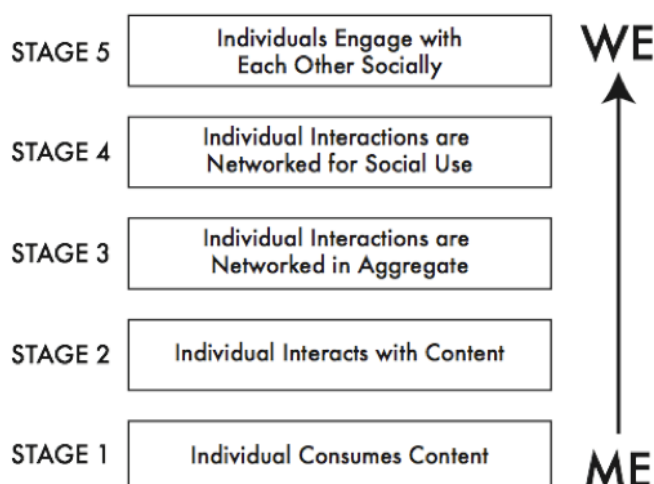
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A1. The participatory museum concept: Me-to-We model (Simon, 2010)

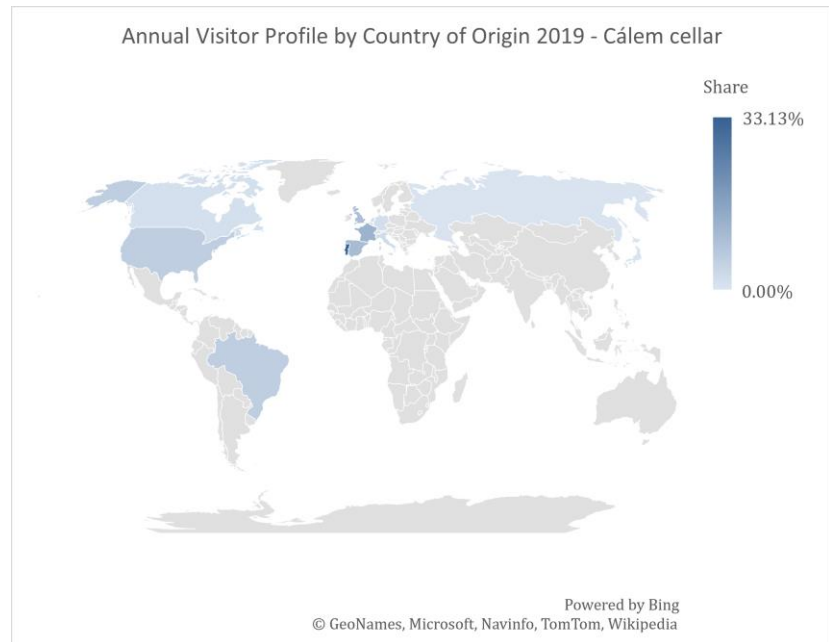


A2. The wine tourism experience layout at Cálem cellar (Cálem official website, 2020)



A3. Annual Visitor Profile by Country of Origin 2019 - Cálem cellar

COUNTRIES	SHARE
Portugal	33.13%
France	12.42%
UK	9.55%
Spain	10.49%
Italy	2.43%
Germany	1.84%
Belgium	0.68%
the Netherlands	1.58%
Brazil	5.92%
USA	5.75%
Canada	1.58%
Japan	0.54%
Nordic countries	0.00%
Russia	0.56%
East	0.90%
Others	12.58%



A4. The screenshot of Google search results on wine museums in Vila Nova de Gaia

Google search results for "wine museum in vila nova de gaia".

Results include:

- The World of Wine** (3.3 stars, 7 reviews) - Museum, Rua do Choupelo. Temporarily closed.
- Kopke Wine House** (4.5 stars, 273 reviews) - Museum, 4430 999, Av. de Diogo Leite 312. Temporarily closed.
- Burmester** (4.4 stars, 385 reviews) - Winery, Largo Dom Luis I - Near Luis I Bridge. Temporarily closed.
- Museu da 1ª Demarcação - Real Companhia Velha** (4.9 stars, 10 reviews) - Museum, Alameda da R. de Serpa Pinto 44B.

The map shows the location of these museums in Vila Nova de Gaia, near the Douro River and the city center.

A5. The list of Port wine museums in Vila Nova de Gaia

COMPANY	MUSEUM NAME	MUSEUM DESCRIPTION
-	Extensão Douro	Local history museum about the Port wine located in the 18 th century warehouse, Porto
AEVP - Association of Port Wine Companies	Multimedia Centre of AEVP	An interactive center presenting the history and culture of Port Wine and Douro Region
Gran Cruz, La Martiniquaise	Porto Cruz Place	An informative, expositive and leisure place with My Porto Cruz, Wine Journey 360°, Douro Room (exhibition space for contemporary art)
Ramos Pinto	Museum space	The showcase of Port wine legacy and historical setting of the office space of the house
Real Companhia Velha	17•56 Museum of the Oldest Appellation in the World	Exhibition to demonstrate the documents and collection regarding the history and culture of Port wine, the Douro region, and the company
Sogrape Vinhos, S.A.	Ferreira Cellars Museum	"Dona Antónia Belongings Room" and the Museum with the showcase of Port wine production artefacts
Sogrape Vinhos, S.A.	The Sandeman Hall	An informative space with the showcase of the cellar's history, artefacts, and antique bottle collection. Interactive displays are available
The Fladgate Partnership	The World of Wine* (planned to open in summer 2020)	Attraction with 5 museum experiences, 9 restaurants & bars, wine school, exhibitions & events spaces, shops with the focus on wines of Portugal
The Fladgate Partnership	Taylor's Port	A 300-year old cellar with modern and innovative museum via audio-guided tour available in 12 languages telling about the Port wine, the Douro Valley, and the house of Taylor's
The Symington Family Estates	The Graham's Lodge Museum	A lodge built in 1890 with the artefacts outlining the history of Port wine, the Graham and Symington families' legacy
The Symington Family Estates	Cockburn's Port Wine Lodge	A reception-museum model with the informative artefacts on Port wine and the history of the lodge

A6. Before & After: transformation of museum at Cálem cellar

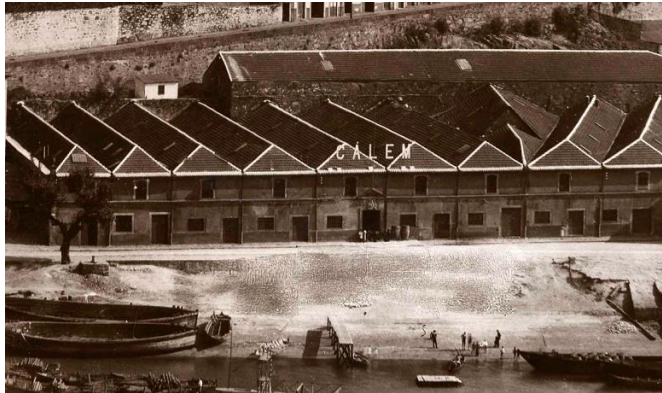


Photo credit: Cálem cellar



Photo credit: E.Marques, Google reviews



Photo credit: P.Pinheiro, Tripadvisor

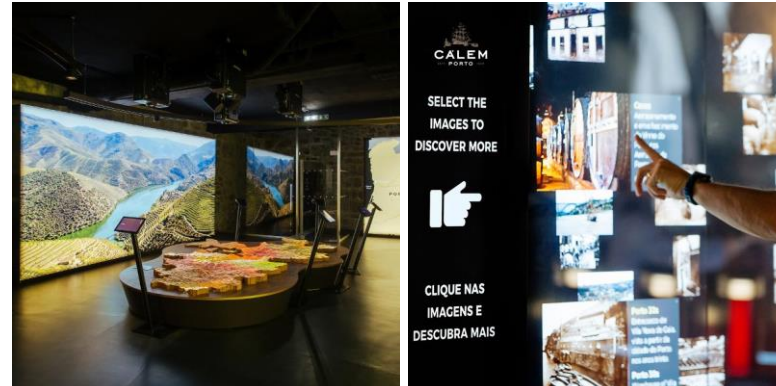
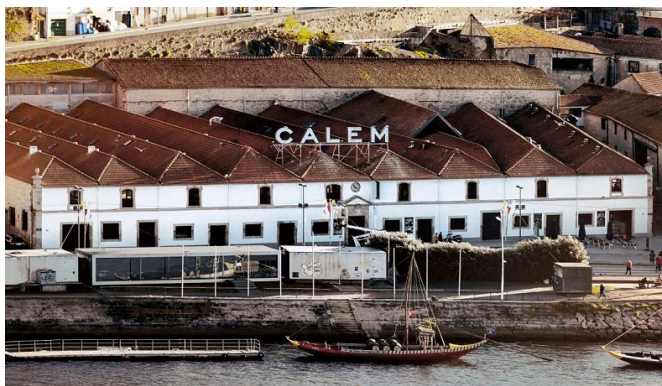


Photo credit: Cálem cellar



A7. Tripadvisor UGC on “museum” at Cálem cellar

Experience ranking	Experience/ review date	Experience description	Experience description specifying “museum”
Reviews in English			
EXCELLENT	Jan-20	Lots of information about [the] port	...A museum with explanations helps pass the time as you wait for your tour. I like the different odor station. A very professional organization.
	Sep-19	Learning all about Port Wine	...Before the start we had time to explore the museum, which was nice...
	May-19	Educational and entertaining tour	...After an informational museum we got a tour of the cellar...
	Mar-19	Great Port Tour	Very interesting museum to start with...
	Feb-19	Great experience	...and Cálem is a great choice! It has a museum and...
	Dec-18	Cálem Port Tour	Very interesting Port museum, tour and tasting afterwards...
	Nov-18	Great museum, tour, and wine!	...The museum and tour were the perfect amount of information, presenting in a compelling manner...
	Sep-18	Great Port Cellar visit	The place is very modern with cool gamification activities in the museum...
	Sep-18	Great/entertaining tour	...Before we started the tour we could have a look at the small museum...
	Sep-18	Excellent	...The interactive museum at the start is very interesting.
	Aug-18	Nice and informative	...the museum without a guide, lots of information and an interactive exhibition...
	Jun-18	Excellent tour	...a cool museum area where you can kill some time before your tour starts.
	Jun-18	Nice tour	...At the beginning of the tour you can enjoy a small museum, smell different aroma and learn about Cálem Cave and its history...
	May-18	Fun, tasty and informative	We visited this cellar and museum with our 11-year-old daughter. It was fun for all of us. She enjoyed the interactive museum.
	May-18	Fabulous port [wine] tasting	The interactive museum is also really good...
	May-18	Wine tasting in Porto	...First you will get to see the museum... idea about how Port wine is produced...
	May-18	Loved it!	The wine museum and tasting experience was really great. Your first walk through the museum area... Not too overwhelming (with hours of reading)...
	May-18	Great Introduction to Port Wines	I even liked their multi-media Interactive Museum of Port that forms the waiting area for the tour.
	Apr-18	Yummy Port Wine	...The first part of the tour allows you to walk through the museum...
	Mar-18	Great tour and tasting	Great interactive museum.
	Mar-18	One of the best interactive museums I have ever visited	The interactive museum is only a year old, but it is really done very well. From an electric map of the Valley, to presentations of the different wines, to an area where one can test your “nose” in identifying different smells, it was really nice.
	Mar-18	Great Place	...We looked round the museum first before joining the tour...
	Mar-18	This was wonderful	...we arrived early got to look around the museum which was very interesting...

	Feb-18	Great tour!	...Before the tour, you can explore the little museum. We liked the 'test your smell buds' test the most (that was useful in wine tasting after!).
	Feb-18	Great Port wine tour	The tour and museum here were great! Very informative...
	Feb-18	Extremely interesting and well-constructed tour	... and you have 30 minutes in a fairly small, but interactive and highly informative museum before the tour starts.
	Feb-18	Wine tasting experience	Cálem museum is really good...
	Dec-17	Informative and well timed	...The museum at entry was great, ltd to see and do, an all scenery delight...
	Nov-17	Have history lesson and get tipsy	...You first spent half an hour in a mini museum which, although interesting, you can finish watching in ten minutes...
	Nov-17	Beautiful architectural adaptation	The old aging warehouse has been tastefully adapted to a Port visitors center as well as a working winery. Interactive displays in the museum.
	Oct-17	Discover Porto wine	...You can see the interactive museum a... A must do.
	Sep-17	Must do while in Porto!	We loved a brief walk through the museum...
	Sep-17	Free with yellow bus tour	...30 minutes in the interactive museum... an excellent guide who answers any questions you have from the museum which is all around the growing of the grape and transportation... It was well worth the visit.
	Sep-17	A wine cellar tour is a must-go when you're in Porto!	Very interesting experience! A nicely designed museum tour,...
	Sep-17	Very informative	...The interactive museum...was excellent and very informative.
	Sep-17	Best cellar tour yet	Not only a cellar tour but also a mini museum, this is our favorite tour yet.
	Sep-17	Interesting and surprisingly delicious	This visit gives you access to Calém's pretty cool interactive museum as well as a guided tour that was super interesting... History and entertainment...
	Aug-17	Pay to go beyond the basic package!	Half an hour going around the museum bit... You can spend five minutes doing the museum, or take your time, read the very good displays and information available... It is very well presented and clear, and nicely interactive and multi-sensory...
	Jul-17	Worth a visit	...Very interesting museum...
	Jun-17	Interesting tour with a tasting at the end	You start in the museum where you can smell all the different products and learn about the production...
	Nov-16	Very interesting tour	...The visit to the museum and explanation...was very interesting...
	Jan-15	Interesting	...Wish the "museum" section was in English. Very nice layout...
VERY GOOD	Apr-19	A great introduction to port	...We enjoyed learning about the port making process and the properties that make it unique. Arrive a little early to look through the museum... or go back after your tour.
	Apr-19	Interesting tour	The tour starts in a fascinating museum area, then...
	Apr-19	Interesting decent value education on all thing Port	...The museum allows you to gen up before the cellar tour...
	Mar-19	Tour and tasting	Small interactive and informative museum.
	Mar-19	Good choice for the "compulsory" Port tour	The tour begins in an interactive museum where you learn about the history and geology of Port... Altogether a worthwhile experience.

	Feb-19	Tasty and Informative	...the facilities were fantastic... and the museum entrance was so great!...
	Nov-18	Decent tour and tasting	...It was a very well done museum and 30 minute tour and tasting...
	Oct-18	Decent visit close to the bridge.	...and there's an interesting museum that describes the Douro valley well and some of the Port process.
	Oct-18	Heady experience	The interactive museum at the start is very interesting.
	Sep-18	Interesting Tour	...The museum bit at the start was interesting and we learnt quite a bit...
	Aug-18	Nice museum and short tour	...an interactive museum where you can learn something about port wines and Cálem .
	Aug-18	Nice tour, amazing Fado experience!	The museum ... is really interactive.
	Aug-18	Nice family visit	...The museum is very well documented with a lot of playful activities...
	Jun-18	A well set up Port wine cellar worth visiting	...Cálem caves is beautifully set up with a museum that you self-walk through, before the tour starts...
	May-18	Well priced and informative	The museum at the beginning was interact and provides multilingual information...
	Apr-18	Interesting but felt like we were on a conveyor belt	...The little museum was interesting and was a good precursor to the guided tour...
	Jan-18	Interesting to visit	The tour at the cellar was very professional. It starts off with an interactive museum.
	Jan-18	Fascinating and fun!	...The museum was informative (especially for my wife who is a non-drinker)...
	Oct-17	Good tour, beautiful cellars	...The museum and tour guide were very informative – we learned a lot...
	Oct-17	Interesting, Worthwhile Tour	Whilst the little interactive museum is interesting, it really doesn't warrant half an hour... I'd suggest you don't need longer than 15 minutes in the little museum area.
	Oct-17	Interactive museum about Port making	This was a good visit for our visit to Porto. The museum is interactive and succinctly tells the port making Story.
	Sep-17	Good museum, interesting tour, great tasting session!	Started with the interactive museum which was fine. Aroma quiz was particularly fun. Tour guide and presentation were both excellent... Can recommend this one.
	Sep-17	Good tour	...The museum was informative (and interactive)...
	Sep-17	Good, not very good	...The initial museum tour that you walk through yourself gives you a lot of info and some of it is repeated during the guided tour...
	Aug-17	Very Beautiful Facility and Good Port Wine!	You start off with about 30-40 minutes in the museum... (which can get old fast...because you can see the whole museum in probably like 10 minutes)...
	Jul-17	Very functional & efficient Tour including a Museum	No comment about museum in this part
	Jul-17	Delicious port wine	...well-presented modern museum...interesting but a bit small for...a 45-minute visit...
	Jul-17	Introduction to port wine.	Informative, fun, not too long (you'll spend half an hour in a small museum on your own... Some interesting interactive elements in the museum. Worth the money.
	Jul-17	Family-visit – perfect amount of time for short attention span	...about 30 minutes at the 'museum' which is nice and cool after being in the Porto heat. The museum has some interactive displays and kept the kids' interest for the time we were there. The museum portion also serves as a staging area for your timed entry into the guided tour of the cellars.

	Jun-17	Museum and tasting trip	...The museum didn't have a huge amount of content...
	Feb-17	A great first stop	...a small museum...The museum features were limited (and mostly in Portuguese) but the narration by our tour guide provided context to what we were seeing...
	Mar-15	The Cálem Port tour in English is flexible if you can be	...The photos in the museum were interesting although all the written words were in Portuguese...
	Sep-13	Good "taste of Portugal"	...The tour of the museum and cellar plus commentary were interesting...
AVERAGE	Jul-19	Informative tour with Port tasting	...The museum is well laid out and very informative...
	Mar-19	Not sure it's worth the money.	The museum was small but very interesting, although there was not a lot of time to see it all before the tour started...
	Sep-18	Bit of a cattle herding	...The museum other than having a few things to smell was a bit of a dud...
	Sep-18	Touristy and not informative enough	The museum is very nice and interactive and you can find out interesting things about Porto wine...
	Jul-18	Worth a visit	...The tour isn't that long and you'll be able to visit the museum yourself beforehand...
	May-18	Informative	Reasonable tour - museum worth spending half an hour in...
	Jan-18	Had big expectations...best part was the tasting	...the first part is a self-explanatory part. They call it interactive but more of an exhibition. They tell you 30min of time required, if you ask me 10min suffice – So in essence: go for the tasting, not for the museum.
	Oct-17	Amazing place, tour guide could be better	...The first part is a self-guided walk through their "museum". This is pretty cool as you get to know the region and process and it is all very well maintained...
	Sep-17	Tour once in was excellent but with the chaos to get in hey are lucky to get 3 stars!	It included a small port museum...
	Sep-17	Not the best tour but so if included with your bus ticket	We were left in the museum part for 40 minutes which seemed slightly excessive...
	Jul-17	Tour and museum	The tour is about 45 minutes, the first half hour is a museum that you walk through self-paced and doesn't actually need that much time...
	Jun-17	High priced entry fee for what you get	...a little history museum detailing how port wine is made...the museum is too small to keep you engaged...
	May-17	Cool museum, mediocre port wine	The interactive museum is pretty impressive...
P O O R	Jul-17	Lovely museum but lamentable guide	...a well-designed museum...
TERRIBLE	Oct-19	Better tours available	You enter the interactive museum 15 minutes before the scheduled start. If I am charitable, I would describe it as atmospheric; if caustic, it's Stygian. Either way it's too dark for anyone other than a 17-year-old to be able to read the English language signage. The displays are graphic and May- be informative.

Reviews in Portuguese			
EXCELLENT	May-19	(P) Recomendo o programa Fado in Porto (E) I recommend the Fado program in Porto	(P) O programa com visita ao museu... é muito interessante. No museu aprendemos bastante sobre a produção e fabrico do vinho... (E) The program with a visit to the museum...is very interesting. At the museum we learned a lot about wine production...
	May-19	(P) Excelente!! (E) Excellent!!!	(P) ...Conhecemos a história no museu do vinho... (E) ...We get to know the history at the wine museum...
	Mar-19	(P) Agradável (E) Nice	(P) ...museu do vinho, um espaço moderno que conta um pouco da região do Douro e curiosidades sobre o vinho do Porto, e há uma "Sala dos Aromas". (E) ...the wine museum, a modern space that tells a little about the Douro region and curiosities about Port wine, and there is a "Sala dos Aromas".
	Dec-18	(P) Ótima vinícola (E) Great winery	(P) Eles tem um museu muito interessante e interativo... (E) They have a very interesting and interactive museum...
	Oct-18	(P) Experiência requintada (E) Exquisite experience	(P) A cave e o museu interativo Porto Cálem é uma das referências em termos das caves do vinho do Porto... A visita a esta cave é uma experiência única... (E) The Porto Cálem cellar and interactive museum is one of the references in terms of Port wine cellars... The visit to this cave is a unique experience...
	May-18	(P) Excelente visita guiada e degustação (E) Excellent guided tour and tasting	(P)...Além de ter um museu interativo muito interessante, que conta a produção do vinho do Porto... (E)...In addition to having a very interesting interactive museum, which tells the production of Port wine ...
	Mar-18	(P) Interessante (E) Interesting	(P) ...O museu também tem apontamentos interessantes. (E) ...The museum also has interesting notes.
	Feb-18	(P) Degustação de Vinhos do Porto (E) Port Wine Tasting	(P) ...e para entender um pouco da história existe um museu virtual que apresenta as diversas etapas da produção do vinho do Porto... (E) ...and to understand a little of the history there is a virtual museum that presents the different stages of Port wine production ...
	Jan-18	(P) Muito bom (E) Very good	(P) ...aprende se muito na visita guiada começando no museu interativo Excepcional... (E) ...learn a lot on the guided tour starting at the Exceptional interactive museum ...
	Jan-18	(P) Degustação de vinhos do Porto (E) Port wine tasting	(P) Trata-se de um local interessantíssimo para saber a respeito da produção do vinho do Porto, com um museu interativo... (E) It is a very interesting place to learn about Port wine production, with an interactive museum...

	Oct-17	(P) Boa escolha (E) Good choice	(P) ...O museu é bastante interessante e a visita guiada também... (E) ...The museum is quite interesting and the guided tour too...
	May-17	(P) Excelente (E) Excellent	(P) A visita começa pelo Museu totalmente interativo... (E) The visit starts at the fully interactive Museum ...
	Nov-15	(P) Visita a não perder (E) Visit not to be missed	(P) ...Tem a vantagem de ser uma cave onde de facto está armazenado vinho do Porto e não é apenas um museu para os visitantes... (E) ...It has the advantage of being a cellar where Port wine is actually stored and is not just a museum for visitors...
	May-15	(P) Organizada e linda !! A história do vinho!!! (E) Organized and beautiful !!! The history of wine !!!	(P) ...É um museu vivo, pois os vinhos realmente maturam lá... (E) ...It is a living museum, because the wines really mature there ...
	Apr-15	(P) Muito legal (E) Very cool	(P) ...um tour de cerca de 30 minutos pelo "museu" da desta Cálem... (E) ...a 30 minute tour of the "museum" of this Cálem ...
VERY GOOD	Aug-18	(P) Interessante mas... (E) Interesting but...	(P) ...sal de espera antes da visita começar esta muito interessante... Está tudo vocacionados para as provas e vendas na loja e não para o museu propriamente dito (E) ...The waiting hall before the visit starts is very interesting... Everything is geared towards tasting and sales in the store and not to the museum itself
	Feb-18	(P) Muito boa visita às caves! (E) Very good visit to the cellars!	(P) Boa opção de visita, bem próxima à Ponte, visita guiada, bem explicativo e um museu interessante antes do tour... (E) Good visit option, very close to the Bridge, guided tour, very explanatory and an interesting museum before the tour...
	Aug-17	(P) Visita interessante (E) Interesting visit	(P) ...o museu muito bom visto antes... (E) ...the very good museum seen before ...
	Aug-17	(P) Simpatia (E) Sympathy	(P) ...O museu é interessante. (E) ...The museum is interesting.
	Jul-17	(P) Boa opção para degustação! (E) Good option for tasting!	(P) ...O museu da entrada não tem muita coisa... (E) ...The museum at the entrance doesn't have much...
	May-17	(P) Muito bom! (E) Very good!	(P) ...Tudo começa com uma visita a um museu com conteúdo interativo... (E) ...It all starts with a visit to a museum with interactive content...
	May-17	(P) Vale a visita! (E) Worth the visit!	(P) ...a um pequeno museu com alguns dispositivos interativos... (E) ...a small museum with some interactive devices...

	Nov-12	(P) Interessante (E) Interesting	(P) ...Tem um museu contando a historia do vinho do porto, bem à margem do rio... (E) ...There is a museum telling the story of port wine, right by the river ...
AVERAGE	Mar-19	(P) Visita agradável (E) Pleasant visit	(P) ...no museu interativo dá para ter uma ideia do processo... (E) ...in the interactive museum you can get an idea of the process...
	Aug-18	(P) Cave turística com museu moderno (E) Tourist cave with modern museum	(P) ...Uma mais 45stab do lugar é o museu interativo onde recebe-se informação sobre a região do Douro e introdução do vinho do Porto. (E) ...An added value of the place is the interactive museum where information about the Douro region and introduction of Port wine is received.
	Nov-18	(P) Deixou a desejar. (E) Left something to be desired ..	(P) O local é interessante, passamos por um museu... (E) The place is interesting, we passed a museum...
	Jul-18	(P) Nada que se acrescente (E) Nothing to add	(P) ...o pequeno museu... seja interessante... (E) ...the small museum...is interesting...
POOR	Sep-12	(P) É um abuso – publicidade paga (E) It's abuse – paid advertising	(P) ... No fim existe um pequeno Museu (que nem visitamos – 45staba fechado)... (E) ...At the end there is a small Museum (which we didn't even visit – it was closed)...
Reviews in French			
EXCELLENT	Sep-19	(F) Visite super intéressante (E) Super interesting visit	(F) ...Elle est super par son petit musée interactif qui permet de faire patienter avant la visite guidée... (E) ...It is great with its small interactive museum which allows you to wait before the guided tour...
	Sep-19	(F) Visite très intéressante (E) Very interesting visit	(F) ...Elle comprend une entrée dans un petit musée expliquant l'origine du Porto... (E) ... It includes an entry to a small museum explaining the origin of Porto...
	Sep-19	(F) Super (E) Great	(F) ...Musée + visite guidée + dégustation = 13€/personne. Bon rapport qualité prix. Je recommande. (E) ...Museum + guided tour + tasting = 13 € / person. Good value for money. I recommend.
	Jun-19	(F) Apprendre ce qu'est le porto (E) Learn what port is	(F) Cave Cálem possède un petit musée didactique avant la visite des caves... (E) Cave Cálem has a small educational museum before visiting the cellars ...
	Mar-19	(F) Très bonne surprise (E) Very pleasant surprise	(F) ...le petit plus de Cálem c'est le musée interactif... (E) ...the little extra of Cálem is the interactive museum...

	Jan-19	(F) Instructif et moderne (E) Informative and modern	(F) Le musée des caves est magnifique... Nous avons débuté par le musée puis la visite pour s'y rendre de nouveau après la visite... (E) The cellar museum is magnificent... We started with the museum then the visit to get there again after the visit ...
	Nov-18	(F) Fêter le marathon avec un verre de Porto (E) Celebrate the marathon with a glass of Porto	(F) ...Musée intéressant et didactique... (E) ... Interesting and educational museum ...
	Sep-18	(F) Guide Francophone très agréable (E) Very pleasant French-speaking guide	(F) ...Le musée avant la visite était très sympa avec de nombreuses traductions en Français. (E) ...The museum before the visit was very nice with many translations in French.
	Jun-18	(F) Le hasard fait bien les choses (E) Chance would have it	(F) ...Musée en français, visite en français, et Anna notre guide étaient vraiment superbe... (E) ... Museum in French, visit in French, and Anna our guide were really superb ...
	May-18	(F) Visite ludique des caves de Porto (E) Fun visit to the cellars of Porto	(F) ...Visite autonome du musée de manière ludique... (E) ...Independent visit of the museum in a fun way ...
	May-18	(F) Très belle visite (E) Very nice visit	(F) ...Le musée qui précède la visite guidée est très interactif, propre, et surtout très enrichissant... (E) ...The museum which precedes the guided tour is very interactive, clean, and above all very enriching ...
	Jan-18	(F) Excellent. (E) Excellent.	(F) ...Le parcours musée interactif un peu court quand même. Sympa l'atelier arôme du vin. À visiter absolument. (E) ... The interactive museum route a bit short anyway. The wine aroma workshop is fun. To visit absolutely.
	Jan-18	(F) Courrez y ! (E) Run there!	(F) ...Pour 10€ nous avons eu le droit de visiter le musée... (E) ... For 10 € we had the right to visit the museum...
	Nov-17	(F) Incontournable ! (E) A must!	(F) ...le musée est magnifique avec un jeu de couleur... (E) ...the museum is magnificent with a color game...
	Nov-17	(F) Super cave de Porto! (E) Super Porto cellar!	(F) Très belle cave avec un très beau musée interactif... (E) Very nice cellar with a beautiful interactive museum...

	Oct-17	(F) Porto Cálem , le meilleur ! (E) Porto Cálem , the best!	(F) ...WOW ! Musée interactif très bien monté... Donc, un incontournable a Porto. (E) ...WOW! Interactive museum very well assembled... So, a must in Porto.
	Nov-17	(F) Formule à 10 euros très bien (E) Formula at 10 euros very well	(F) ...Nous avons commencé la visite par le musée... Je recommande ! (E) ...We started the visit with the museum... I recommend !
	Oct-17	(F) Magnifique visite (E) Wonderful visit	(F) ...Un musée interactif très bien fait... (E) ...An interactive museum very well made...
	Oct-17	(F) Très sympa (E) Very nice	(F) Musée : semble plus être une salle d'attente qu'un musée... (E) Museum: seems more like a waiting room than a museum ...
	Aug-17	(F) Visite et dégustation, au top ! (E) Visit and tasting, at the top!	(F) ...après une 1/2 h dans le musée, où nous avons déjà appris beaucoup sur le porto, grâce aux panneaux et autres vidéos, nous avons pu suivre notre guide française pour une visite détaillée, et très intéressante. Même les enfants ont été attentifs. (E) ... after a 1/2 hour in the museum, where we have already learned a lot about port, thanks to the panels and other videos, we were able to follow our French guide for a detailed and very interesting visit. Even the children were attentive.
	Aug-17	(F) Visite guidée + dégustation pour 10€ (E) Guided tour + tasting for 10 €	(F) ...Le tarif comprend la visite du musée en solo... (E) ...The price includes a visit to the museum solo ...
	Jul-17	(F) Parfaite dégustation de Porto (E) Perfect Porto tasting	(F) J'ai adoré ma visite des caves de Cálem ! La visite commence par un musée interactif... (E) I loved my visit to the cellars of Cálem ! The visit begins with an interactive museum...
	Jun-16	(F) Visite musée et dégustation à faire. (E) Museum visit and tasting to do.	(F) ...Les guides expliquent parfaitement en français et ne sont pas là pour faire vendre à tout prix... (E) ...The guides explain perfectly in French and are not there to sell at all costs ...
	Nov-13	(F) Une bien belle visite (E) A very nice visit	(F) ...l'accueil qui nous a été fait qui a déterminé notre choix : beau, propre et du personnel qui parle français... Rien de mieux pour nous séduire... (E) ...the welcome given to us that determined our choice: beautiful, clean and French-speaking staff ... Nothing better to seduce us ...

VERY GOOD	Nov-19	(F) Bon moment instructif et gustatif (E) Good educational and taste moment	(F) Visite sympa dans le musée... (E) Nice visit to the museum ...
	Sep-19	(F) Visite intéressante (E) Interesting visit	(F) ...Le musée...est petit et peu intéressant... (E) ...The museum... is small and not very interesting ...
	Apr-19	(F) Bien mais (E) Good but	(F) ...Musée a visiter et ensuite visite guidée avec guide en français (E) ... Museum to visit and then guided tour with guide in French
	Apr-18	(F) a faire (E) to do	(F) ...vous pouvez visiter le musée très intéressant... (E) ...you can visit the very interesting museum ...
	Apr-18	(F) Très belle visite (E) Very nice visit	(F) Musée interactif intéressant... (E) Interesting interactive museum ...
	Mar-18	(F) Sympa (E) Friendly	(F) ...Musée inutile au début !... (E) ... Useless museum at first! ...
	Mar-18	(F) Intéressant (E) Interesting	(F) ...ATTENTION la première demi heure est prévue dans le musée et c'est beaucoup trop long. Ça ressemble vite à une salle d'attente...L'endroit est très beau... (E) ...BE CAREFUL the first half hour is planned in the museum and it is much too long. It quickly looks like a waiting room... The place is very beautiful...
	Oct-17	(F) Belle visite didactique (E) Nice educational visit	(F) Le musée interactif est très intéressant et très documenté... On apprend déjà beaucoup de choses sur la composition des sols par exemple, la zone géographique et une belle expérience olfactive vous attend avec les tests d'odeurs... (E) The interactive museum is very interesting and well documented...We are already learning a lot about soil composition, for example, the geographical area and a great olfactory experience awaits you with the odor tests...
	Sep-17	(F) Visite qui peut plaire selon les attentes (E) Visit that can please according to expectations	(F) ...au musée interactif, assez basique et pas si interactif mais qui apporte quelques bases pour ceux qui ne connaissent pas du tout le vin. La demi heure suffit largement... (E) ...the interactive museum, fairly basic and not so interactive but which provides some basics for those who do not know wine at all. Half an hour is more than enough...
	Aug-17	(F) Visite en famille (E) Family visit	(F) Très bonne visite...en famille, avec une partie musée (très intéressante)... (E) Very good visit...with the family, with a museum... (very interesting) ...
	Aug-17	(F) Visite des caves et dégustation (E) Visit of the cellars and tasting	(F) Nous avons pris part à une visite en français, trente minutes le musée puis visite des caves... (E) We took part in a visit in French, thirty minutes to the museum then visit to the cellars ...

	Aug-17	(F) Vous ne ressortirez pas fin connaisseur mais aurez bu un petit coup de Porto !! (E) You will not come out as a connoisseur but will have had a little port!	(F) Visite intéressante : la partie « musée interactif » est un peu sommaire... (E) Interesting visit: the "interactive museum" section is a bit sketchy ...
	Jul-17	(F) Très intéressant (E) Very interesting	(F) La visite d'une durée d'une heure comporte 30min de découverte de l'histoire du porto et de Calem grâce à des supports interactifs dans la partie musée... (E) The one-hour visit includes 30 minutes of discovery of the history of Port and Calem thanks to interactive supports in the museum part ...
	Jul-17	(F) Visite très agréable (E) Very pleasant visit.	(F) NB: Un petit musée moderne dès l'entrée vous permettra de connaître l'histoire du Porto... Bravo. (E) NB: A small modern museum at the entrance will allow you to learn about the history of Porto... Well done.
	Jul-17	(F) Visite sympa et petit musée moderne (E) Nice visit and small modern museum	(F)...on patiente dans la partie « musée » qui renferme des écrans interactif, des échantillons des différents Portos...en 10 minutes tout le musée est parcouru mais ce n'est pas déplaisant... (E) ...we wait in the "museum" section which contains interactive screens, samples of the different Ports...in 10 minutes the whole museum is visited but it is not unpleasant ...
AVERAGE	Mar-19	(F) A faire mais sans plus (E) To do but nothing more	(F) Beau musée tout neuf avec moyens vidéos derniers cris... (E) Beautiful brand new museum with latest video means...
	Oct-18	(F) Sympa sans plus (E) Nice no more	(F)...Musée : une salle avec pas grand chose à voir (pas de traduction en français). En 3 mn vous avez fait le tour... (E) ...Museum: a room with not much to see (no French translation). In 3 minutes you have been around ...
	Aug-18	(F) Passez votre chemin (E) Go your way	(F) ...Musée sympathique qui retrace brièvement l'histoire du vin de Porto... (E) ... Nice museum that briefly traces the history of Port wine ...
	Mar-18	(F) Visite bien expliquée (E) Well explained visit	(F) Le musée est intéressant... (E) The museum is interesting ...
	Sep-17	(F) Visite et dégustation (E) Visit and tasting	(F) ...Le musée est petit mais informatif, on en apprend un peu plus... (E) ...The museum is small but informative, we learn a little more...
	Jul-17	(F) Correct (E) Correct	(F) ...30 min de musée interactif puis visite puis dégustation... (E) ...30 min of interactive museum then visit then tasting ...

POOR	Jan-18	(F) Vraiment déçue ... (E) Really disappointed ...	(F)...Grosse déception : le début de la visite débute par le tour du « musée », qui est joli, mais peu instructif : il fait plus penser à une salle d'attente pré-visite, dans l'attente de notre guide... (E) ...Big disappointment: the beginning of the visit begins with the tour of the "museum", which is nice, but not very informative: it is more like a pre-visit waiting room, waiting for our guide. ...
	May-17	(F) Visite intéressante, organisation horrible (E) Interesting visit, horrible organization	(F) ...On doit ensuite passer 30 minutes dans le musée afin d'avoir le tour guidé dans les caves... (E) ...We must then spend 30 minutes in the museum in order to have the guided tour in the cellars ...
	Nov-16	(F) Trop cher payé (E) Too expensive paid	(F) ...Certes cette cave n'est pas le musée du Porto, mais tout de même quelques explications sur la région du Douro et ses formidables paysages forgés par l'homme étaient attendus plus que les saveurs sur les différents Porto... (E) ...Admittedly, this cellar is not the Porto museum, but all the same some explanations on the Douro region and its formidable landscapes forged by man were expected more than the flavors on the different Porto ...
TERIBLE	Aug-17	(F) Visite très décevante (E) Very disappointing visit	(F) ...Le musée est certes bien conçu mais manque cruellement de convivialité... (E) ...The museum is certainly well designed but sorely lacking in conviviality ...
Reviews in Spanish			
EXCELLENT	Nov-19	(S) Excelente lugar para aprender sobre vino de oporto (E) Excellent place to learn about port wine	(S) ...15 minutos para visitar su museo donde puedes oler los distintos aromas presentes en los vinos de oporto para entrenar la nariz (cosa destacable y súper interesante que no he visto en las otras bodegas que visite)... (E) ...15 minutes to visit its museum where you can smell the different aromas present in port wines to train your nose (something remarkable and super interesting that I have not seen in the other wineries I visit)...
	Mar-19	(S) CATA DE VINOS EXCELENTE (E) EXCELLENT WINE TASTING	(S) ...Nos recomendaron Cálem por su museo del vino...El museo está muy bien estructurado y dispone de una mesa de olores característicos en los vinos, realmente excelente... (E) ...They recommended Cálem for its wine museum... The museum is very well structured and has a table with characteristic odors in wines, really excellent ...
	Mar-19	(S) ¡Viva el vino! (E) Long live the wine!	(S) Fantástica visita a la bodega Porto Cálem . Vimos su museo... (E) Fantastic visit to the Porto Cálem winery. We saw its museum...
	Dec-18	(S) Minivaciones con mi esposa en Portugal (E) Minivacations with my wife in Portugal	(S) ...Comienza a las 12 20 , aproximadamente visitando el museo interactivo... (E) ...Starts at 12:20 pm, by visiting the interactive museum...

	Nov-18	(S) Cata de Vinos e Visita Guiada (E) Wine Tasting and Guided Tour	(S) ...Empieza en el museo que es pequeñito pero interactivo y está muy bien... (E) ...It starts in the museum which is tiny but interactive and is very good...
	May-18	(S) Excelente experiencia (E) <u>Excellent experience</u>	(S) ...al museo interactivo donde aprendes cosas muy interesantes... (E) ...the interactive museum where you learn very interesting things...
	Mar-18	(S) Cata de vino (E) <u>Wine tasting</u>	(S) Nuestra experiencia fue muy buena... museo, tour y cata de vinos... (E) Our experience was very good... museum, tour and wine tasting ...
	Feb-18	(S) Lo <u>mejor</u> de Porto (E) The best of Porto	(S) ...el museo hay que verlo... (E) ...the museum must be seen...
	Nov-17	(S) <u>Excepcional</u> (E) Exceptional	(S) ...Primero tienes media hora para ver el museo que es muy instructivo y entretenido. Tienes vídeos, cosas que oler, mapas conceptuales, <u>guías</u> de color... todoll... (E) ...First you have half an hour to see the museum which is very instructive and entertaining. You have videos, things to smell, concept maps, color guides ... everything !! ...
	Sep-17	(S) Your del vino (E) Your wine	(S) Muy buen tour del vino... un museo con la historia de esta casa vinícola (E) Very good wine tour... a museum with the history of this wine house
VERY GOOD	Feb-20	(S) La bodega Portuguesa (E) The Portuguese winery	(S) Empiezas la visita en el museo, que no es nada del otro mundo... (E) You start the visit in the museum, which is not a big deal ...
	Apr-19	(S) <u>Conocer</u> el Oporto (E) Get to know Porto	(S) ...Tienen un pequeño museo interactivo a la entrada... (E) ...They have a small interactive museum at the entrance ...
	Nov-18	(S) Buena visita!!! (E) Good <u>visit</u> !!!	(S) ...La cata está bien y el museo sí que es muy completo... (E) ...The tasting is fine and the museum is very complete ...
	Oct-18	(S) Visita a bodega emblemática, muy interesante y bien dirigida (E) Visit to emblematic winery, very interesting and well managed	(S) ...que fue lo mejor. Tanto la visita autogestionada del museo de <u>Cálem</u> , en buena parte telemática, donde explican los aspectos contextuales de los vinos de Oporto.. (E) ...it was the best. Both the self-managed visit of the Cálem museum, largely telematic, where they explain the contextual aspects of the Port wines.
	Aug-18	(S) Visita interesante (E) <u>Interesting visit</u>	(S) Era la segunda vez que visitábamos esta <u>bodega</u> esta vez con amigos... El museo previo está muy <u>interesante</u> Y la cata también muy bien... (E) It was the second time we visited this winery, this time with friends... The previous museum is very interesting and the tasting is also very good...
	Jun-18	(S) Bodega <u>Interesante</u> (E) Interesting winery	(S) ...Como interesante la zona del museo con muestras de olores y tipos de Oporto... (E) ...As interesting the museum area with samples of smells and types of Porto ...

	May-18	(S) Recomendable 100% (E) 100% recommended	(S) ...El recorrido comienza en el museo...20min para que hagas la primera toma de contacto... (E) ...The tour begins at the museum...about 20min to make the first contact ...
	May-18	(S) Corta visita, excelente guía (E) Short visit, excellent guide	(S) ...Primero pasas por el museo... (E) ... first you go through the museum ...
	Apr-18	(S) Agradable Visita (E) Pleasant Visit	(S) ...Primero tienen un museo en donde puedes ver los diferentes colores del vino de Oporto entre otras cosas... (E) ...First they have a museum where you can see the different colors of Port wine among other things ...
	Mar-18	(S) Recomendable y adaptada a carritos/sillas de rueda (E) Recommended and adapted for wheelchairs / wheelchairs	(S) ...Tienen un museo interactivo bueno (ojalá no os toque con familias q pasan de sus hijos q te impiden leer o disfrutar de él, aquí la bodega no tiene nada de culpa, si la educación q los padres damos a nuestros hijos)... (E) ...They have a good interactive museum (hopefully it won't touch you with families that pass their children that prevent you from reading or enjoying it, here the winery is not at fault, if the education that parents give to our children)...
	Nov-17	(S) Muy ameno y completo (E) Very enjoyable and complete	(S) ...Una visita autoguiada al pequeño museo el cual tenía distintos apartados, como videos explicativos, imagenes o pruebas de olor. (30min.)... (E) ...A self-guided visit to the small museum, which had different sections, such as explanatory videos, images or smell tests. (30 min.)...
	Oct-17	(S) Ven y beberás (E) Come and drink ...	(S) ...una exposición/ mini museo al inicio que hace las funciones de sala de espera... (E) ...an exhibition / mini museum at the beginning that functions as a waiting room...
	Jul-17	(S) Interesante visita (E) Interesting visit	(S) ...El museo merece la pena, así como la visita guiada. (E) ...The museum is worth it, as well as the guided tour.
	Dec-12	(S) preciosa bodega (E) beautiful cellar	(S) ...nos recomendaron Cálem y nos encantó, visita guiada al museo, la bodega y cata de dos vinos. es un viaje al pasado en toda regla... (E) ...They recommended Cálem to us and we loved it, a guided tour of the museum, the winery and tasting of two wines. it's a full-fledged trip to the past ...
AVE RGA E	Nov-18	(S) Aceptable paseo por la bodega (E) Acceptable winery tour	(S) ...La bodega tiene también un pequeño museo que no está mal. (E) ...The winery also has a small museum that is not bad.

	Sep-18	(S) La visita se asemeja más a un museo que a una bodega, didáctica, diría yo. (E) The visit is more like a museum than a cellar, didactic, I would say.	(S) Precio excesivo - 12 euros - 8 o 10 grandes toneles o barricas y unas cuantas cubas o botas de 200 lt. aprox. No es una bodega muy grande y la visita guiada, bien explicada muy didáctica... (E) Excessive price - 12 euros - 8 or 10 large barrels or barrels and a few 200 lt vats or boots. approx. It is not a very large winery and the guided tour, well explained, very educational ...
	Aug-18	(S) Esperaba más. (E) I expected more	(S) ...Tienes unos 20 minutos para ver el museo que lo más destacable es una mesa en la que puedes oler e intentar adivinar distintos olores... (E) ...You have about 20 minutes to see the museum, the most remarkable thing is a table where you can smell and try to guess different smells ...
	Aug-18	(S) Precio excesivo para lo que ves, te cuentan y catas. (E) Excessive price for what you see, they tell you and tastings.	(S) ...El museo no es sobre las bodegas, es más pasta entretenerse un rato hasta que se junta un grupo para entrar en la bodega... (E) ...The museum is not about the cellars, it is more pasta to entertain you for a while until a group gathers to enter the cellar ...
	Mar-18	(S) Conociendo el vino de Vila Nova de Gaia (que no de Porto) (E) Knowing the wine from Vila Nova de Gaia (not from Porto)	(S) La cata comienza con media hora paseando por el pequeño museo que ofrecen (muy estético y bien ambientado, pero escaso) en el que coincides con gente de diferentes pases (cada 15 minutos hay uno en un idioma diferente)... (E) The tasting begins with half an hour walking through the small museum they offer (very aesthetic and well-set-up, but scarce) where you meet people from different countries (every 15 minutes there is one in a different language) ...
	Jul-17	(S) Una visita al interior de una bodega (E) A visit inside a winery	(S) ...Al principio de la visita hay un museo interactivo que te acerca a los sentidos del olfato y la vista (el gusto lo dejamos para el final de la visita)... (E) ...At the beginning of the visit there is an interactive museum that brings you closer to the senses of smell and sight (we leave the taste for the end of the visit) ...
	Aug-17	(S) Normalito (E) Normal	(S) Si lo pillas con tour en barco no sale mal de precio. Eso si, no esperes una cata profesional, y el museo escueto. (E) If you catch it with a boat tour it does not go badly priced. That if you do not expect a professional tasting, and the museum brief.
POOR	Mar-18	(S) Un poco decepcionante (E) A little disappointing	(S) ...un pequeño museo interactivo que no esta mal)... (E) ...a small interactive museum that is not bad) ...
	Aug-17	(S) Visita Pobre (E) Poor visit	(S) ...me pareció una visita muy breve. Intentan rellenar tiempo con la visita al museo interactivo que tampoco tiene mucho que ver, es más bien una sala de espera... (E) ...I thought it was a very short visit. They try to fill time with a visit to the interactive museum, which doesn't have much to do either, it's more of a waiting room...

TE PRI BL E	Apr-19	(S) Despropósito (E) Absurdity	(S) ...Te hablan de museo y se resume a 4 pantallas... (E) ...They tell you about a museum and it is summarized on 4 screens...
Reviews in Italian			
EXCELLENT	Jul-19	(I) Cálem, numero 1 (E) Cálem number 1	(I) ...la visita del museo e delle cantine del produttore Cálem ... (E) ...a visit to the museum and cellars of the producer Cálem ...
	Apr-19	(I) Una visita guidata completa e super interessante! (E) A complete and super interesting guided tour!	(I) ...Il museo è piccolo ma davvero ben fatto, è stato fatto buon uso della tecnologia e si scoprono moltissime cose sul porto e sulla zona del Douro; è una piccola esperienza multisensoriale, grazie ai colori/aromi del vino... (E) ...The museum is small but really well made, good use has been made of technology and many things are discovered about the port and the Douro area; it's a little multisensory experience, thanks to the colors / aromas of the wine...
	May-18	(I) tour con degustazione (E) tour with tasting	(I) ...davvero molto interessante il museo all'inizio del tour... (E) ...the museum at the beginning of the tour is very interesting ...
	Sep-17	(I) degustazione di qualità (E) quality tasting	(I) ...Museo interattivo all'ingresso, guide simpaticissime e coinvolgenti ... (E) ...Interactive museum at the entrance, very nice and engaging guides ...
	Aug-17	(I) Museo e degustazione (E) Museum and tasting	(I) Il Porto è di sicuro l'attrazione principale di Oporto e la cantina di Cálem ottiene il massimo dal questo binomio: museo interattivo, visita alla cantina e degustazione... (E) The Port is certainly the main attraction of Porto and the Cálem winery gets the most out of this combination: interactive museum, visit to the winery and tasting ...
	Aug-17	(I) Il Porto di Porto (E) The Port of Porto	(I) ...Tour di un'ora così organizzato: la prima mezz'ora visita alla sala museo con attività sensoriali... (E) ...One hour tour organized as follows: the first half hour visit the museum room with sensory activities...
	Aug-17	(I) Simpatica visita (E) Nice visit	(I) La visita ti fa entrare nel mondo Cálem , nel Portogallo vinicolo, in un flavour di odori, nella storia del vino fino a condurti alla degustazione. E' un vero e proprio museo del vino ben concepito e ben gestito!... (E) The visit allows you to enter the world of Cálem , in wine-growing Portugal, in a flavor of smells, in the history of wine, to lead you to a tasting. It is a real museum of fine wine conceived and well managed! ...
	Dec-12	(I) Prima che si incontra passando per il ponte Tappa obbligata! (E) Before you meet by crossing the bridge. Obligatory stop!	(I) ...Il museo è molto interessante e Perdersi per le botti è una bella esperienza... (E) ...The museum is very interesting and getting lost in the barrels is a good experience...

VERY GOOD	Apr-19	(I) Bella visita (E) Nice visit	(I)...Per imparare qualcosa sul Porto in generale conviene soffermarsi nel piccolo ma completo museo... (E) ...To learn something about the Port in general it is better to stop in the small but complete museum ...
	Nov-18	(I) Profumo di porto (E) Port fragrance	(I) ...È molto elegante, all'inizio si può entrare in un museo... (E) ...It is very elegant, at the beginning you can enter a museum ...
	Nov-18	(I) Consiglio visita + fado (E) Council visit + fado	(I) Cantina piccola ma molto organizzata, con visite a museo e cantina... (E) Small but very organized cellar, with visits to museum and cellar ...
	Sep-18	(I) Bella esperienza! (E) Good experience!	(I) Ottima cantina, bello il museo e soprattutto la degustazione! (E) Excellent cellar, beautiful museum and especially tasting! ...
	Aug-18	(I) Bella visita (E) Nice visit	(I) ...Diciamo che con un paio d'ore scarse la visita si fa tranquillamente visitando il museo da prima... Ci siamo divertiti e la visita è stata molto piacevole. (E) ...Let's say that with a few short hours the visit is done by visiting the museum first... We had fun and the visit was very pleasant.
	Jan-18	(I) Interessante (E) Interesting	(I) Visita interessante in questa storica cantina... Mezz'ora per visitare il piccolo museo... (E) Interesting visit in this historic cellar ... Half an hour to visit the small museum...
	Dec-17	(I) Ottima cantina (E) Excellent cellar	(I) ...bello il museo con il plastico che spiega con animazioni il territorio dove si produce questo meraviglioso prodotto enologico. Ci sono in mostra tutti i tipi di porto per apprezzare le varie sfumature di colori e anche una bacheca "odori" per poter annusare i profumi che il vino può e sa sprigionare, così da preparare l'olfatto alla degustazione finale... (E) ...the museum is beautiful with the model that explains with animation the territory where this wonderful wine product is produced. There are all types of port on display to appreciate the various shades of colors, and also a "smells" bulletin board to be able to smell the scents that wine can and knows how to release, so as to prepare the sense of smell for the final tasting ...
	Sep-17	(I) Cantina + battello sul Duero (E) Cellar + boat on the Duero	(I) ...Interessante museo del vino prima della visita. Soprattutto l'interazione per riconoscere gli odori e il video sulla costruzione delle botti... (E) ...Interesting wine museum before the visit. Especially the interaction to recognize the smells and the video on the construction of the barrels...
	May-17	(I) Per gustare il vino Porto a... Porto (E) To taste Porto wine in ... Porto	(I) ...Molto simpatico ed originale il museo interattivo... (E) ...the interactive museum is very nice and original ...

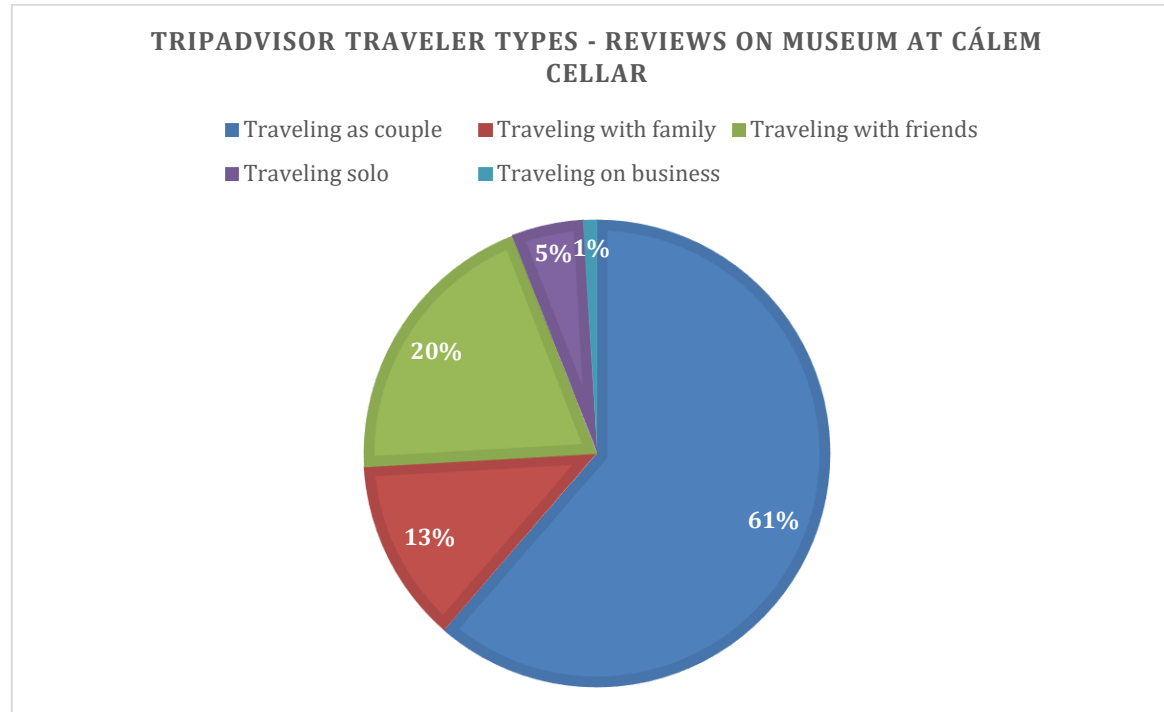
	Aug-11	(I) Ottimo Porto (E) Excellent Port	(I) Abbiamo visitato il Museo e le cantine poiché l'ingresso era abbinato al biglietto del bus turistico Yellow Bus (19 €: Yellow Bus 48 ore, visita alla Cantina Cálem , giro in barca)... (E) We visited the Museum and the cellars as the entrance was combined with the Yellow Bus tourist bus ticket (19 €: Yellow Bus 48 hours, visit to the Cálem Winery, boat ride)...
AVERAGE	Aug-18	(I) Didattico (E) didactic	(I) ...Il museo iniziale, che spiega le caratteristiche del territorio che rendono l'alto Douro una terra così vocata alla viticoltura, serve anche a intrattenere i turisti in attesa che parta il proprio tour. ...Molto bello il museo... (E) ...The initial museum, which explains the characteristics of the territory that make the upper Douro a land so suited to viticulture, also serves to entertain tourists while waiting for their tour to start. ... The museum is very beautiful ...
	Mar-18	(I) Alti e bassi (E) Ups and downs	(I) Mi è piaciuto molto il museo... (E) I loved the museum ...
	Jul-17	(I) Nella media (E) Average	(I) ...La visita inizia con un museo interattivo che non mi ha entusiasmata particolarmente: alcune componenti sono interessanti, altre banali... (E) ...The visit begins with an interactive museum that has not particularly impressed me: some components are interesting, others trivial ...
	Aug-13	(I) Mi aspettavo di più (E) I expected more	(I) ...Il museo è ben organizzato. Ma nonostante ciò, mi è sembrato tutto molto commerciale... Non puoi più di tanto soffermarti a guardare il museo, perché vedi in lontananza il gruppo prima del tuo che si avvicina. (E) ...The museum is well organized. But despite this, it all seemed very commercial... You can't spend much time looking at the museum, because you see the group in the distance before your approaching.
Reviews in Dutch			
EXCELLENT	Aug-18	(D) Leuk en interessant (E) Fun and interesting	(D) Leuke rondleiding, mooi klein museum en goede port... (E) Nice tour, nice little museum and good port ...
	Aug-17	(D) Leuke toer met fine proeverij (E) Nice tour with nice tasting	(D) ...Eerst een half uurtje in het museum om meer over port te leren, erg leuk gedaan... (E) ...First half an hour in the museum to learn more about port, very nice done ...

VERY GOOD	Aug-17	(D) Lekkere proeverij (E) Tasty tasting	(D) ...Voorafgaand aan de tour kom je in een klein museum... (E) ...Before the tour you will come to a small museum...
AVERAGE	Jun-19	(D) Niet bijzonder (E) Not special	(D) ...het interactieve "museum" was best aardig en het personeel ook prima. Maar een aanrader vonden wij het niet. (E) ...the interactive "museum" was quite nice and the staff fine too. But we did not recommend it.
	Sep-16	(D) Porthuis moet je gedaan hebben (E) You must have done port house	(D) ...Vooral marketing technisch goed gedaan. Witte en tawny port achteraf, gelikte organisatie maar een must have als je in porto bent. (E) ...Especially marketing technically well done. White and tawny port afterwards, slick organization but a must have when you are in port.
POOR	Jul-18	(D) Commerciële rondleiding, grote groepen (E) Commercial tour, large groups	(D) ...Het museum voor de rondleiding is wel aardig... (E) ...The museum for the tour is nice ...
Reviews in German			
EXCELLENT	Jun-17	(G) Geschichte und Verkostung von Portwein (E) History and tasting of port wine	(G) Die Führung durch die Portwein-Keller von Cálem sind absolut professionell organisiert... Im angeschlossene Museum gibt es viele Geruchsproben, so dass man im Vorwege schon einmal einen guten Eindruck zu den Produkten bekommt. (E) The guided tours through the port wine cellars of Cálem are organized absolutely professionally... There are many smell samples in the attached museum, so that you can get a good impression of the products in advance.
VERY GOOD	Jul-18	(G) Sehr kommerziell aber interessant und lecker (E) Very commercial but interesting and tasty	(G) ...Ein interessant aufgemachtes Museum, eine nette Führerin... (E) ...An interesting open museum, a nice guide ...
	Oct-17	(G) Sehr informativ (E) Very informative	(G) Sehr interessant. Erst hat man etwas Aufenthalt im Museum... (E) Very interesting. First you have some time in the museum...
Reviews in Russian			
EXCELLENT	May-18	(R) Экскурсия на склады порто (E) Port Warehouse Tour	(R) ...Экскурсия с самостоятельным рассматриванием музея и дегустацией длится около полутора часов... Достаточно познавательно! (E) ...An excursion with an independent examination of the museum and tasting lasts about an hour and a half ... Cognitively enough!

	Oct-17	(R) обязательно посетить аутентичный погреб портвейна (E) be sure to visit the authentic port wine cellar	(R) ...Начните с Cálem, здесь хороший музей, все интерактивно и понятно... (E) ...Start with Cálem, here is a good museum, everything is interactive and understandable...
Reviews in Polish			
EXCELLENT	Aug-19	(P) Historia wina porto, degustacja i fado. (E) History of port wine, tasting and fado.	(P) Wycieczka obejmuje zwiedzanie muzeum pokazujące jak produkuje się wino Porto, cała droga od zbiorów aż do leżakowania wina w piwnicach Villa Nova Gaia... (E) The tour includes a museum tour showing how Porto wine is produced, the entire way from harvesting to wine aging in the Villa Nova Gaia cellars ...
	May-18	(P) Miejsce, które musisz zobaczyć (E) A place you must see	(P) Winnica i muzeum w jednym. Ciekawie opowiedziany proces produkcji. Pyszne wino do degustacji. Miejsce robi wrażenie. Polecam (E) Vineyard and museum in one. Interestingly told production process. Delicious tasting wine. The place is impressive. Recommend
Reviews in Korean			
VERY GOOD	Jan-19	(K) 파두와 함께 와인러리 투어 (E) Winery Tour with Fado	(K) 21 유로짜리 파두 공연과 함께하는 투어에 참여했어요. 당일 예약하였고요, 박물관을 따로 둘러볼 수 있는지 안내해주지 않아 몰랐네요... (E) Participated in a tour with a 21 Euro show. I made a reservation on the day. I didn't know if you could take a tour of the museum separately ...
AVERAGE	Sep-17	(K) 포트와인 시음 (E) Tasting port wine	(K) ...일단 박물관 같은데서 혼자 보는 시간을 갖고 이후 가이드가 데리고 다니면서 영어로 설명해줍니다... (E) ...Once you have time to watch alone in a museum or something like that, the guide will take you and explain it in English ...
Reviews in Danish			
VERY GOOD	Jul-18	(D) Rejse med Kulturrejser bragte os til Cálem portvinshus. (E) Traveling with Cultural Travel brought us to Cálem Port Wine House	(D) ... Stedet er udover produktionssted også et museum, hvor guidet tur kan købes...Det var en dejlig oplevelse jeg kan anbefale dig at prøve. (E) ...In addition to the production site, the place is also a museum where guided tours can be purchased ... It was a wonderful experience I can recommend you to try.
	Mar-18	(D) Godt og informativt! (E) Good and informative!	(D) ... Fint museum som indledning og fantastisk dygtig guide ... (E) ...Nice museum as an introduction and wonderfully skilled guide ...

TERRIBLE	Jul-17	(D) Ikke pengene værd!! (E) Not worth the money !!	(D) Skulle se deres museum som tager 10 min, men skulle vendte på engelsk tur guide i 45 min og da hun endelig kom var det en hurtig tur... (E) Should see their museum which takes 10 min but had to turn on English tour guide for 45 min and when she finally arrived it was a quick tour...
Reviews in Chinese (simplified)			
EXCELLENT	Nov-19	(Ch) 讲解精彩的酒窖品酒之旅 (E) Explain a wonderful wine cellar tasting tour	(Ch) ...先是去博物馆学习基础知识，然后有专人提供英语和葡萄牙语的讲解服务... (E) ...first go to the museum to learn the basics, and then have someone to provide interpretation services in English and Portuguese ...
	Nov-17	(Ch) 上了历史课然后喝得微醺 (E) Took a history lesson and drank a little	(Ch) ...我首先会花半小时在一个迷你博物馆里，虽然很有趣，但你可以在十分钟内看完... (E) ...I will first spend half an hour in a mini museum. Although it is fun, you can finish it in ten minutes ...
AVERAGE	Aug-19	(Ch) 收获颇丰的游览，品尝美味的波尔图酒 (E) A rewarding tour, taste delicious Porto wine	(Ch) 通过这个游览，你能了解到波尔图酒的艺术之处。博物馆陈列得很科学，能学到很多... (E) Through this tour, you can learn the art of Porto wine. The museum is very scientific and can learn a lot ...

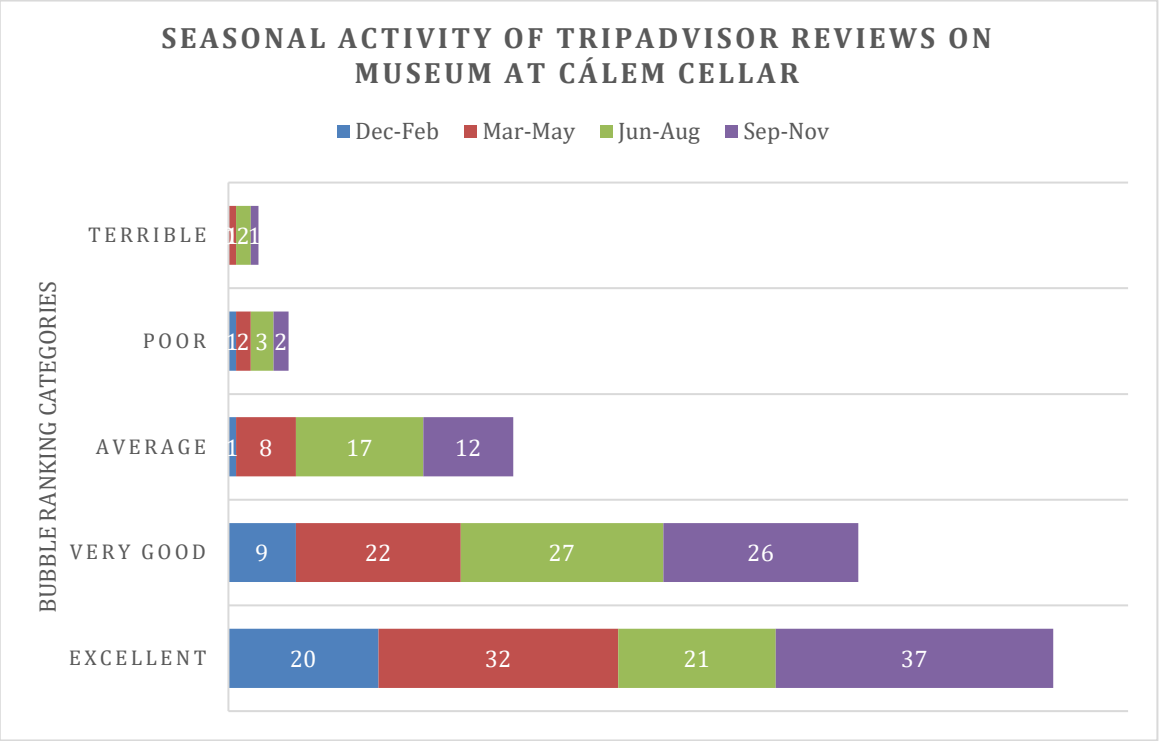
A8. Tripadvisor traveler types - reviews on museum at Cálem cellar



Traveler type*	The number of travelers according to each language						Total number	Total number in percentage
	Eng	Pt	Fr	Sp	It	Other		
Traveling as couple	60	11	28	14	14	8	135	61%
Traveling with family	3	7	9	6	1	2	28	13%
Traveling with friends	15	4	9	12	2	2	44	20%
Traveling solo	3	2	1	-	1	4	11	5%
Traveling on business	1	1	-	-	-	-	2	1%

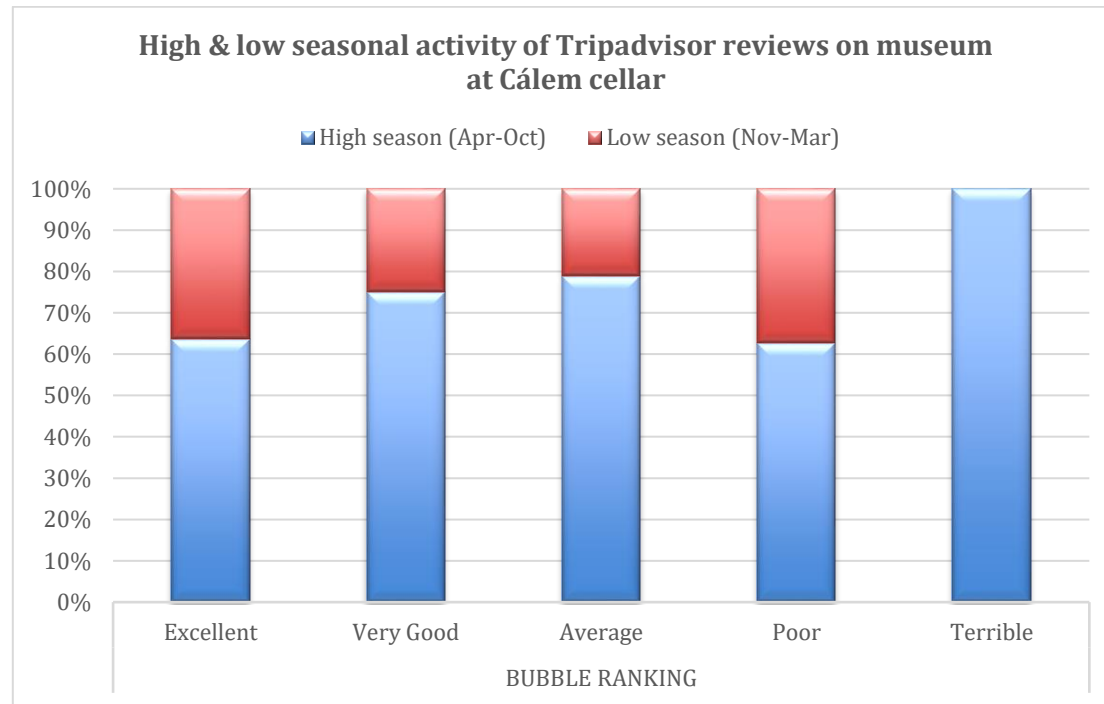
**Note: not all travelers specified their type while writing reviews*

A9. Seasonal activity of Tripadvisor reviews on museum at Cálem cellar



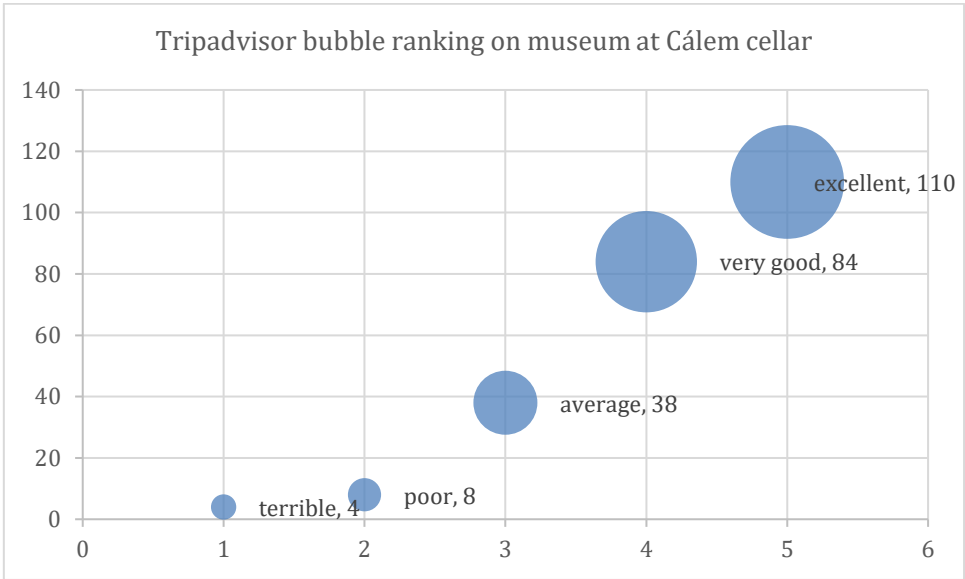
SEASONAL ACTIVITY	MONTHS	BUBBLE RANKING					Total
		Excellent	Very Good	Average	Poor	Terrible	
	Dec-Feb	20	9	1	1	0	31
	Mar-May	32	22	8	2	1	65
	Jun-Aug	21	27	17	3	2	70
	Sep-Nov	37	26	12	2	1	78
	Total	110	84	38	8	4	244

A10. High & low seasonal activity of Tripadvisor reviews on museum at Cálem cellar



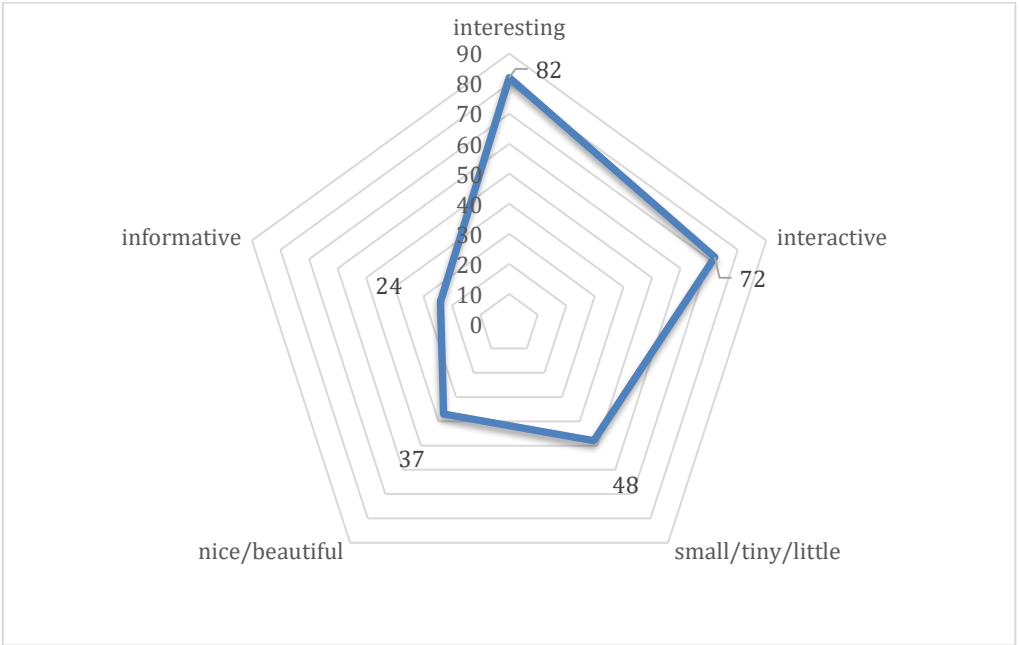
HIGH/LOW SEASONAL ACTIVITY	BUBBLE RANKING					Total
	Excellent	Very Good	Average	Poor	Terrible	
High season (Apr-Oct)	70	63	30	5	4	172
Low season (Nov-Mar)	40	21	8	3	0	72
Total	110	84	38	8	4	244

A11. Tripadvisor bubble ranking on museum at Cálem cellar



Bubble ranking category	Number of reviews on museum	Number of total reviews on Porto Cálem experience
terrible	4	43
poor	8	74
average	38	275
very good	84	690
excellent	110	868
total	244	1950

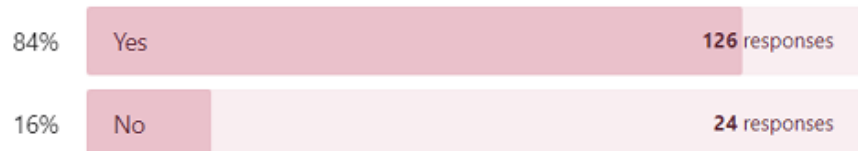
A12. Tripadvisor UGC: visualization of repetitive descriptors on museum at Cálem cellar



A13. Online survey: Question 1 results

1 When travelling to a wine tourism destination, are you interested in visiting a wine museum?

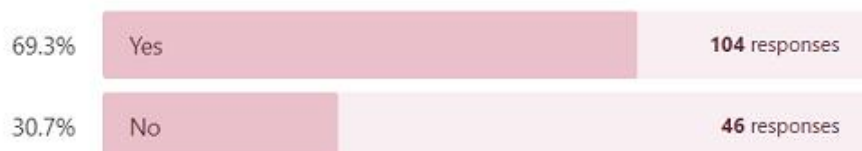
150 out of 150 people answered this question



A14. Online survey: Question 2 results

2 Have you ever visited a wine museum?

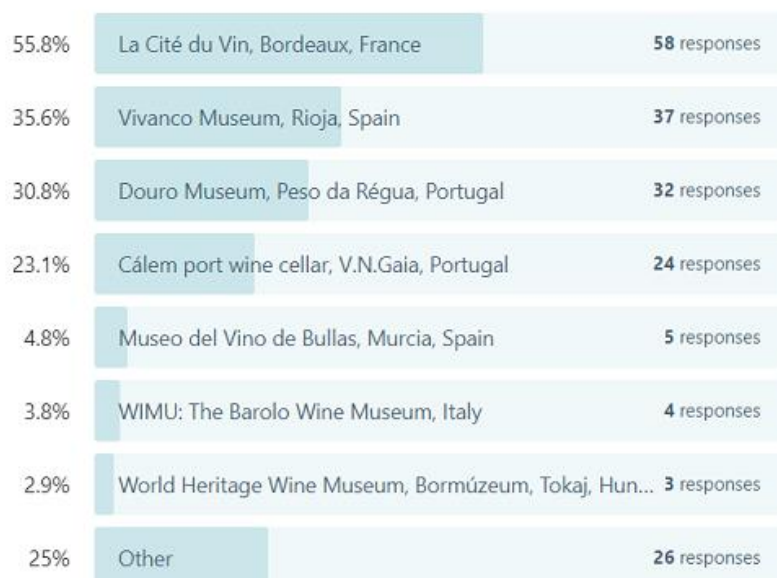
150 out of 150 people answered this question



A15. Online survey: Question 3 results

3 If Yes, which wine museum/s have you visited? If No, please click on the arrow to proceed for the next questions.

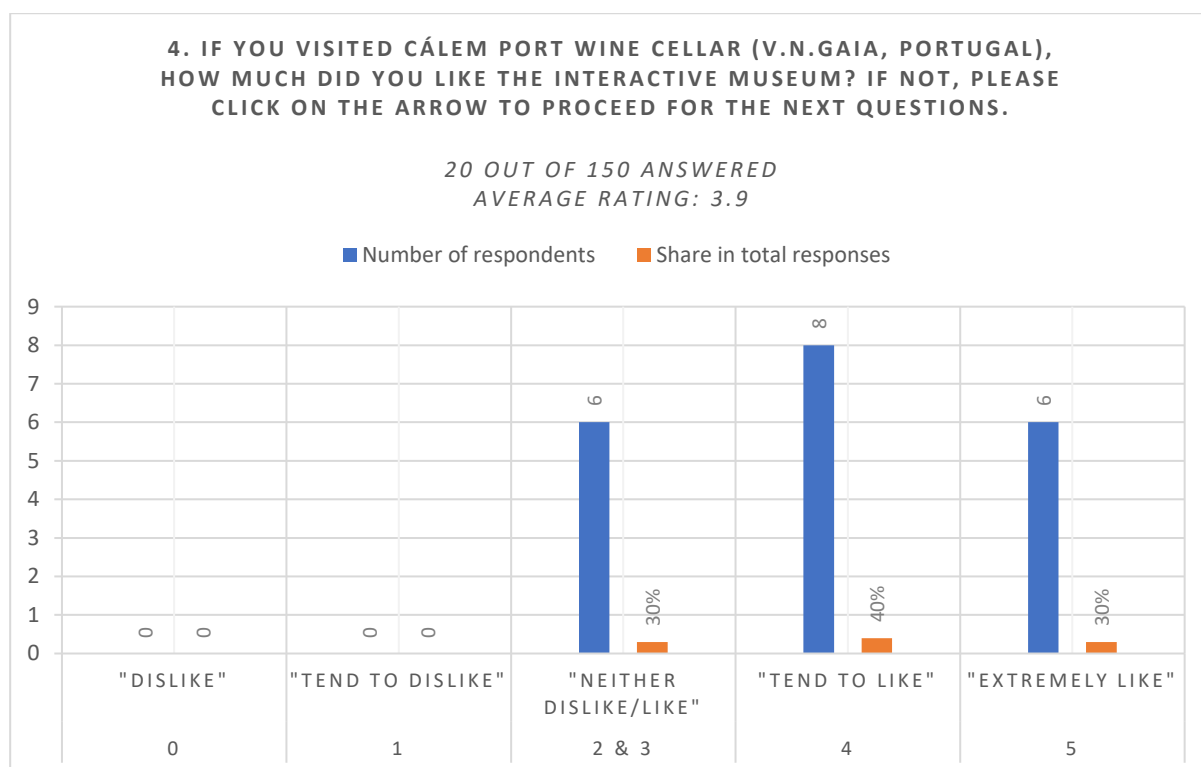
104 out of 150 people answered this question (with multiple choice)



A16. The list of wine museums visited by survey participants under “Other” option

Bali, Indonesia	Ararat	I have visited in Armenia
Germany	Chateau Montelena	Loisium, Langenlois, Austria
Istra, Croatia and Seksard, Hungary	Germany (e.g. Bernkastel-Kues)	Georgian wine museum in Twins Bio Wine (Georgia)
Rheingau wine museum	Bulgaria	Antinori, Italy
Rheingau wine museum Broemserburg castle, Germany	Karas, Hin Areni, Armenia, Voskevaz, Gevorkian	Museu del Vi els Cups, Montbrió del Camp (Spain); Musée du Vin de Paris (France)
Taylor's	Areni	Voskevaz, Armenia
Wine museum in Paris	Areni, Armenia	Yerevan brandy factory
Vilafranca del Penedes Wine Museum (Winseum?)		

A17. Online survey: Question 4 results



A18. Online survey: Question 5 results

5 Do you prefer a wine museum to be: interactive or traditional exhibition with historical facts?

150 out of 150 people answered this question



A19. Online survey: Question 6 results

6 What is your favorite part at wine museum?

150 out of 150 people answered this question (with multiple choice)



A20. Online survey: Question 7 results

"What do you dislike about wine museums?" (106 out of 150 answered)

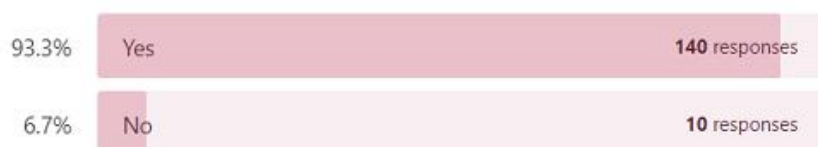
Too many people sometimes	When they are overcrowded
long discourses, too long explanation	Games
Crowds	Too many visitors
The focus on the brand	Boring at times
Not proper historical approach	Small wine selections
nothing specifically	can take too long
guides without drive and professionalism	Boring info
the short videos depicted	Long introductions
Quiz	I like everything.)
Sometimes the price for the entrance	impersonality
There is no point to dislike	Prices at wine shop
Games	Long stories
disorganized, too commercial	Very long tours
I like everything...	Nothing, it's cool idea
Seeing boring static diagrams with text	Lots of similar things in some of them
really long audio guides	I like everything about wine museum.
The tickets should be cheaper (La cite du Vin)	sometimes they are boring
All was good	all are the same
I like everything about it	Long history presentation
Tours more than 30 minutes	Long texts
traditionalism	Too much information
When they are very old styled, not interactive	lack of human guide<
I wouldn't like a traditional tour.	All can be interesting!
If the explanations are too content heavy	Compulsory to buy
when there's no English explanation	when it's not interactive and you have too much information to read
I like wine museums except when it is to commercial and based on sells	There is no many wine museums in the world.
Lacking personal interaction with wine makers	Too much technology and less or useless information
would be interesting to emphasize on production processes for some kind of tourists.	The large groups in tour, individual is better
Guides saying the same jokes they tell everyone	When crowed (La Cité du vin, Bordeaux is a good example sometimes)
Museum without interactive and just photos or random videos.	Too many videos to watch, too many exhibits
When the museum has only exhibitions with texts	When the content is explored with too much

to read	words and little visual attributes.
When there are big texts to read very long videos	repeating the same wine story
it cannot be genuinely exciting and I consider it a marketing stunt more than a full-fledged museum. another place for tourists to cash in.	Some resemble boring excursions and don't involve enough interactive sessions, tastings and discussion
They are boring and the information is not presented in a way that the visitor would be intrigued and wanting to learn	Some are very banal and too obvious. I prefer to learn something new about the wine/region.
Many do not involve social history and are only about wine without a cultural perspective	Winemaking process simply exhibiting static machinery, or usual winemaking process videos
I don't have any bad experiences about wine museums. But I think, wine museums must show their local products, so wine museum will have diversify of products and make tourist more interested about that.	I don't dislike a lot of things, if I can tell you very honestly I don't like some tourists who go to the cellars to do what they want (like being stupid and disrupt visits))
when there is only demonstrated photos and someone tell the story who do not has any relations with wine or wine making	When they just explain how to make wine and the history of the winery, because in the end all are the same
I dislike it when museums offer no explanations on wine or the items in the exhibit. I also don't like cluttered spaces with too much information at once.	If the design is not well prepared. It must be adequate to wine topic. Also, lack of signals to guide people and not many options for handicap people
If they are interactive, the technology they use can become quickly outdated, or they are not always interesting for groups of people because they focus too much on wine, or they are not fun because they are too serious, or they offer no wow moment or experience that makes them more worthwhile to visit than a local winery	In general nothing. Maybe I would dislike the lack of access to some information due to language barrier like in Vivanco, and I also dislike the fact that sometimes the content is so much that I cannot cover all of it in one visit.

A21. Online survey: Question 8 results

8 Do you expect tasting wines at wine museum?

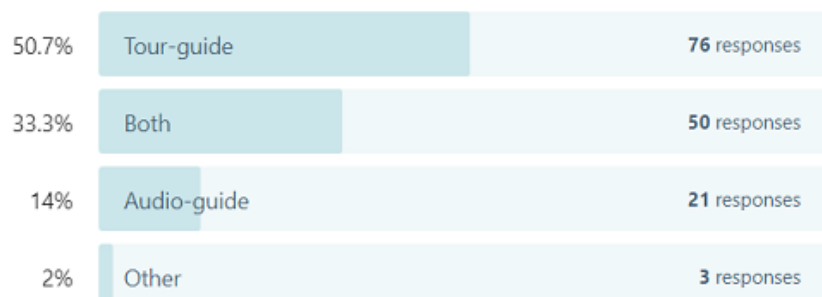
150 out of 150 people answered this question



A22. Online survey: Question 9 results

✓ 9 Do you prefer audio-guides or tour guides?

150 out of 150 people answered this question



A23. Online survey: Question 10 results

"And the last question. Do you have any remark or memorable experience to share regarding wine museums? Thank you!" (87 out of 150 answered)

Discovering new wines	I like them for their sense of history
In different places, different experiences	My advice: don't drink too much)))
Took part of making pomegranate wine	Yes, creating one
Yes, Cite du vin. the music room of wine	the old traditional wine making tools
writing your name on barrel	Ancient tools to make wine.
Yes, I do, but they are more personal.	I like to hear the stories from the old times
Armenia should be presented as a historic wine country.	Cite du Vin is incredible for the aromas table. It is the only and best I ever seen.
We had a theatre show about knights and princess in relation to wine story.	Production process and history of that particular wine house
well combined with knowledge and entertainment, la city du vin could be an example	A museum with panoramic view of the vineyard or the landscape is always fascinating.
Interesting eroticism installation at La Cite du Vin	La cite du vin in Bordeaux is just an exemplary venue of a wine-museum
Napa valley museum In Yountville, is a real gem. It has great visiting exhibits and a Napa Valley history section. The tasting room comes with its contemporary art gallery. Caymus vineyards were great. I enjoyed the Cabernets Sauvignon Caymus 1916 wine .	I really appreciate it when a museum tries to portray wine in a different way, not placing it as a sacred historical object but showing its relationship with the consumer.
I love going and be able to guess wine aromas, to learn about the history of a region and games	Showing how elaborate things are made, like barrels. Workshop at la cité du vin of taste of the

	world
The best experience is when is interactive. I like when I'm active, I don't like when is just a passive tour listening. And, I think museum should talk also about the agriculture/viticulture side of the wine.	La cité du Vin is very interactive, with short videos and pictures the visitor can learn a lot about the different wine regions in the world or about the winemaking process.
Learning about the tools used in the old times for winemaking is awesome for me!	La cite du vin is nice, the tasting in the roof is good and you can choose what you want to see and has different options for every visitor
Opportunity to taste wines from the area where museum is located (if wine is produced) is a must, but also international as sometimes in old countries can be difficult to find. Opportunity to showcase small and big producers, without distinction. Organize meet the winemaker and pairings masterclasses appeal	if they can offer weekly events (like movie screenings, or tastings with wine makers or sommeliars, or photo/art exhibitions, wine museums can more easily remain relevant and attract people more than once and provide a space for entertaining the local population, not only tourists
Don't have any remarks, it was just interesting and something new for me:)	The beautiful view at the top of Bordeaux Wine's Museum and the tasting courses.
For me, it's always very interesting to visit wine museums when we have a guide or a person to explain the experience.	There are some wonderful wine museums in Greece where you can find out how vine and wine came from!
Every year in Armenia on May there is wine festival, so I always participate...	Going back to centuries and seeing the barrels
I loved the tiny vineyards of various varieties in Vivanco	I liked everything about my experience in wine museum of Paris
I think, when my expectation accordance with the reality like, they allowed me to try their best wine. It's enough for me.	what I remember the most is the overall experience and if the guide made me want to try the wine
I think visiting wine museums are always a great pleasure, and that tells a lot about the country and the culture that has. So, keeping it more traditional is an important issue	I enjoyed wines and cheeses discovery and tasting workshop at Bordeaux wine museum. It was great. Pairing wine and cheese was very interesting.
I like to visit a wine museum when I know that it will [be] in a small group and the information that the guide will provide will be more personalized.	The Cité du Vin as the only one visited was impressive but not the most memorable experience from Bordeaux. Visiting Chateaux is more fun
It was not for wine but for rum in Martinique. It was a great visit because you are free to move in the very large garden, there is a mix between the historical story of the habitation, the family	Yes, when I visited Taylor's I like it but the fact that they have audio guides makes everything perfect and detailed. Then we have cellars like Calem and others that have tour guides and are

and the traditions. and also there was a contemporary exhibition of art that offers a fresh view of the traditional beverage. Is was very original, nice and quiet, and inspiring.	criticized for not making good visits (because they are made by human beings who fail and are not perfect, while an audio guide is a recorded voice that does not fail).
I have never been in any wine museum where represented different companies, their products, etc. However, if this could considered as wine museums you can take into account. Armenian wine making companies organizing tours through visiting their vineyards and factories where professionals represent the history of winemaking, the story of their company and so on and for me this is the best type of wine museums where the visitors may see, touch, take a part in processes and taste the wine. In this way the visitors will be impressed and will remember about the company and wine product for a long time. Some Companies from Armenia are: Karas Wines, Armenia Wine, Armas, Visiting to Areni-1 cave.	

A24. Proposal for Discover Your Port Wine tablet experience
at Cálem cellar's interactive museum

IDEA	DESCRIPTION	BENEFITS	DRAWBACKS
A Toast with Velhotes	Inspired by the social media campaign on creating Velhotes friends' memes. Installing the same game for the visitors.	raise awareness about the most famous Port wine	might be misused
Which Port Wine are you?	Like the former experience, the idea is to exclude the sharing and sending of any information. The visitors will fill a character shaping form to identify them with a Port wine style. Next, more details on that specific style will be presented.	- better idea and orientation on visitors' favorite style, - trigger to try one or more	possible mismatch with the current exemption of self-guided experience
Staff picks	The presentation of facts & figures on the staff favorite and best sold styles and wines under Cálem brand.	first-hand & trusted recommendation from the staff	possible to forget until reaching the shop
Port Wine & Gastronomy	A game needs to be designed to have options on selecting the recommended pairings.	- clear image on pairings, - easier idea for consumption	possible overlapping with the information presented further by the tour guide
Ask Mr. Cálem	A question & answer session with Mr. Cálem who will be the key actor in storytelling.	- interactive visualization - vivid presentation	might be difficult if the number of viewers exceeds 6
Vintage Compass	The list of Cálem Vintage or Colheita ports so that the visitors will find out if their desired year was declared Vintage and if available for sale.	- boost the sales of wines - provide a memorable experience	might be disappointing if no matching
Make Your Port Wine	The players will select the options and make their imaginary Port wine which will match Cálem wines and will know which bottle to buy. To further the long-term links, the visitors will be able to scan the QR code to follow the aging of their wine and will be able to book shipping later.	development of long-term relationships with their visitors	high numbers of engagement might make the management of QR codes time-consuming & increasing the workload
Cálem Insta-Moments	The presentation of ideas for photo shooting ideas.	increased brand promotion	might prolong the tours
Comment Board	Enabling the visitors to write about their feedback.	reveal the image among visitors	not complete if at the first part