

# MDDM

Master Degree Program in  
**Data-Driven Marketing**

## **The Impact of Social Media Marketing on Promoting the Cultural Heritage Tourism**

A Case Study of Portugal

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Dissertation

presented as partial requirement for obtaining the Master Degree Program in Data-Driven Marketing

**NOVA Information Management School**  
**Instituto Superior de Estatística e Gestão de Informação**



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# **THE IMPACT OF SOCIAL MEDIA MARKETING ON PROMOTING THE CULTURAL HERITAGE TOURISM – A CASE STUDY OF PORTUGAL**

By

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Master Thesis / Project Work presented as partial requirement for obtaining the Master's degree in Data-Driven Marketing, with a specialization in Digital Marketing and Analytics.

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July 2023

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*Vera Trigo de Moraes*

*[Oeiras, July 15, 2023]*

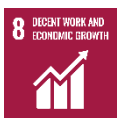
## ABSTRACT

This research is the result of an exploratory and descriptive investigation that focuses on analyzing 21 social media profiles of entities related to the cultural and heritage tourism sectors in Portugal. The purpose is to gather concrete data and observe the most successful social media marketing strategies employed by these entities. The research aims to address two main research questions: “How can social media marketing contribute to the building and strengthening of Portuguese Cultural Heritage and Tourism?” and “How can marketers incorporate virtual reality into a marketing strategy in the cultural tourism and heritage sectors and derive value from it?”. Therefore, the intention is to explore how social media platforms can be leveraged to promote and attract visitors to Portuguese cultural heritage sites and tourism destinations. By analyzing the social media profiles of relevant entities, the research seeks to identify effective strategies that contribute to the overall promotion and enhancement of Portugal's cultural heritage and tourism offerings. The research also aims to investigate how virtual reality can be integrated into marketing strategies within the cultural tourism and heritage sectors. Virtual reality has the potential to provide immersive and interactive experiences, allowing potential visitors to engage with cultural and heritage sites virtually. The study seeks to explore how marketers can harness virtual reality technologies to create valuable and engaging content that entices visitors and enhances their overall experience. By examining the social media profiles and activities of these entities, the research aims to provide insights into successful social media marketing practices, as well as explore the potential of virtual reality in marketing strategies for cultural tourism and heritage sectors. The findings of this research can help tourism organizations understand the impact of consumers' behavior and preferences and guide them in making informed decisions about their marketing and promotional efforts.

## KEYWORDS

Historic Cultural Heritage Tourism; Digital Marketing; Social Media Marketing; Tourism Development; Cultural Tourism; Cultural Heritage; Tourism; User Experience; Virtual Experience; Social Media; Portugal.

### Sustainable Development Goals (SGD):



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## 1. INTRODUCTION

The development of Information and Computer Technology (ICT) changes fundamentally the communication and interaction between customers and organizations and creates new opportunities to the whole tourism industry (Buhalis, 2003). According to Lange-Faria and Elliot (2012), social media has become the *modus operandi* of the 21st century, being an integral part of people's lives and exerting an enormous influence on people when they have to decide on any touristic activity (Sosyal et al, 2022). Social media is more than social networking and content sharing platforms, it influences the customer's behaviour in terms of awareness, information seeking, attitudes, decision-making, and especially in the purchasing and post-purchasing moment, as it supports users to give their personal thoughts and opinions through user-generated content to a global audience (Bosio et al, 2018).

According to Zurub et al (2015), the tourism industry is fundamental to the economic growth of countries, as it makes the economic wheel turn and grow continuously, since it has a direct impact on the cities' infrastructure and local businesses. Regarding the importance of the tourism industry but focusing attention on the specific location of this research, it is possible to conclude that Portugal offers a wide range of centres of touristic appeal, starting with its beautiful coastline, historic cities, cultural attractions, and sunny weather. With centuries and centuries of history, Portugal is a country with a rich cultural heritage, and cultural tourism is a popular way to experience the country's history, traditions, and art. In recent years, Portugal has become an increasingly popular tourist destination, with a growing number of visitors seeking unique experiences. In addition, Portugal was considered the "Best Tourist Destination in Europe" in the European edition of the World Travel Awards 2022 (Turismo de Portugal, 2022).

Over the last decade, the tourism industry in Portugal has increasingly embraced social media platforms to reach out to potential tourists, promote destinations, and engage with tourists. Research conducted by EGM (Electrical Grid Monitoring) show that the tourism sector is one of the fastest sectors trying to reach its target audience by using the internet and social networks (Van Der Bank & Van Der Bank, 2015). On the other hand, the implementation of technology and its consumption is gradually reshaping the tourism industry and has contributed to a great extent. Thus, progressive technological excellence has given rise to innovative technologies such as Virtual Reality (VR) and Augmented Reality (AR), and this growing demand is one of the main reasons for introducing and adopting technological innovation in the particular area of digital marketing. (Hassan A., Rahimi R., 2016).

Social media gives many opportunities for cultural tourism development, especially in rural areas, which have many unique cultural values (Sosyal et al, 2015). However, there are also some potential negative impacts of social media marketing on cultural heritage tourism. This involves creating a homogenization of cultural heritage sites, where sites are modified to meet the demands of tourists rather than preserve their cultural significance. Additionally, social media can create overcrowding at cultural heritage sites, which can have negative impacts on the environment, infrastructure, and local communities. In summary, social media marketing has had a significant impact on cultural heritage tourism. While it has created new opportunities for tourism organizations and visitors, it is important to carefully consider the potential negative impacts and ensure that cultural heritage sites are preserved and protected for future generations. This moves discussion to the challenges faced by

touristic-related organizations in using technological innovation as a marketing tool when it comes to cultural and heritage tourism.

The aim of this research is to analyse how social media marketing has been used in the promotion of cultural tourism and heritage in Portugal, exploring, on the other hand, the intersections and relationships between cultural tourism, heritage, and marketing within the framework of information and communication technologies. It incorporates both traditional and new trends of virtual reality (VR) on the cultural tourism and heritage sector in Portugal, in order to understand how they complement each other, and whether this interaction can be improved, and how. The findings in the present research answers two research questions: “how can social media marketing contribute to the building and strengthening of the Portuguese Cultural Heritage and Tourism?” and “how can marketers involve virtual reality into a marketing strategy in the cultural tourism and heritage sectors and provide value from it?”.

## **2. LITERATURE REVIEW**

### **2.1. TOURISM**

From the standpoint of gathering information about the broad concept of “tourism”, the World Tourism Organization (UNWTO) defines tourism as “a social, cultural and economic phenomenon which entails the movement of people to countries or places outside their usual environment for personal or business/professional purposes.” This definition includes a wide range of activities, such as leisure tourism, business travel, cultural tourism, adventure tourism, medical tourism, and more. It also recognizes the impact of tourism on host communities and emphasizes the importance of sustainable tourism development that balances economic growth with environmental and social responsibility.

For Stephen Page (2019), tourism can be defined as a "dynamic phenomenon and a highly driven activity in a post-modern society where travellers are constantly seeking new and diverse activities". Furthermore, in his book "Tourism Management", Page emphasises that tourism is closely associated with quality-of-life issues, as it presents individuals with the chance to have a break from both the complexities and stresses of daily life and work, providing the context for relaxation, refreshment and the opportunity for doing something different. This is becoming increasingly related to notions of wellbeing and the way holidays assist people in relaxing, recuperating and achieving personal goals outside of work. The framework proposed by Page also states that "it is clear that tourism is also becoming a powerful process affecting all parts of the globe".

Author Peter Robinson describes in his book “Tourism: The Key Concepts” that tourism is a social and economic phenomenon that involves the movement of people to other countries or places. Robison further states that “tourism is often discussed as leisure, or as hospitality, and sometimes as recreation, although in truth it is none of these things, yet includes all of them, but within a framework where time and location are key variables.”

An additional and fundamental fact about tourism is that the act of travelling has a pedigree that goes back thousands of years and yet the idea of travelling for leisure, education or health purposes really gained prominence during the 18th century 'Age of Enlightenment' with the development of the 'Grand Tour' in Europe (Fletcher et al, 2017).

Bound to all these discussions, the concept of “tourism” is therefore interpreted in various ways. Nevertheless, it is one of world’s largest and fastest growing industries, contributing significantly to the global economy, job creation, and cultural exchange.

#### **2.1.1. CULTURAL HERITAGE**

On the specific topic of cultural heritage, the Surugiu and Surugiu (2015) research states that it “includes different sub-sections: archaeology, architecture, art, tours of churches and cathedrals, historic tours, museums, military history, music festivals, opera and pilgrimages.”

According to UNESCO, cultural heritage refers to the monuments, groups of buildings, and sites that have outstanding universal value from the historical, aesthetic, archaeological, scientific, or anthropological point of view. It includes physical structures such as buildings and monuments, as well as intangible elements such as traditions, music, performing arts, and oral histories that are passed

down from generation to generation. Cultural heritage also encompasses natural landscapes and other cultural spaces that hold significant cultural and historical value. The preservation and protection of cultural heritage are crucial for maintaining cultural diversity and promoting mutual understanding and respect among different communities. (UNESCO, 2009).

Heritage, in turn, is the cultural and natural legacy we have inherited from past generations, and although heritage is concerned with the past, the implications of its present conservation are oriented towards its future because heritage resources are an increasingly globalized economy, workforce, legislative, and political milieu (Hall M., 2014), and moreover it can be considered as “the key and many times the primary reason for visiting certain tourist destinations” (Fernandes C., Silva G., 2007).

#### **2.1.1.1. CULTURAL HERITAGE TOURIM**

There is a plethora of definitions describing cultural heritage and tourism. In essence, cultural heritage tourism refers to the act of travelling to experience the cultural and historical artifacts and sites that define a particular region or country’s history. Nevertheless, culture, heritage and tourism do have standard definitions which relate them to each other and may therefore be difficult to define independently (Naval, Serra, 2019).

Authors Bob Mckercher and Hilary du Cros (2002), define cultural tourism as “first and foremost a tourism activity in which a destination’s cultural or heritage are presented for the consumption of tourists.” Moreover, cultural heritage tourism is often associated with sustainable tourism, as it promotes the conservation of cultural and natural resources and supports local communities by creating jobs and economic opportunities. Likewise, when planned and managed effectively, these sectors together can be a driver for positive change. However, when poorly managed, cultural heritage tourism can have a detrimental impact on communities (Kaminski J., Benson A., Arnold D., 2014).

Further, many European countries have used culture and heritage as “a key offering in its tourism portfolio” (Kaminski et al, 2014). Greg Richards (1996) states that “cultural consumption has grown, and tourism is an increasingly important form of cultural consumption”. The cultural heritage tourism is therefore a global phenomenon that is becoming increasingly competitive; thus, many countries are investing more and more their tourism strategies on the promotion of cultural heritage.

#### **2.1.1.2. SOCIAL MEDIA PLATFORMS**

Social media refers to online platforms and tools that allow individuals, businesses, organizations, and communities to create, share, and exchange information, ideas, and content in virtual social networks, through various forms of media, such as text, images, audio, and video that facilitate the “perception of interactions among users and derive value from user-generated content” (Carr & Hayes, 2015).

Having a website and social media accounts allow tourism businesses to have a strong online presence, which is crucial in today’s digital age. This means that potential customers can easily find and learn about the business, leading to increased visibility and exposure. In a marketing point-of-view, web pages and social media are powerful marketing tools that allow tourism businesses to reach a large audience at a relatively low cost. Targeted advertising can be easily created in order to reach specific demographics and promote a business product and/or service. Furthermore, responding to comments and messages in the social media platforms can create a sense of community and foster brand loyalty,

so it's a great way to engage customers and build relationships. By actively managing the online presence and responding to reviews, tourism businesses can enhance their reputation and attract more customers. Therefore, some hotels and some touristic related services "have quickly adapted to social media in order to receive feedback, monitor trends, carry out promotional and marketing activities, achieve sales objectives and not fall behind the competition" (Wang et al. 2011).

Considering the fact that social media play an important role in cultural and heritage tourism, which is one of the alternative tourism types, it was concluded that people widely use social networks to buy many tourism-related services and to get information about the destination they will go (Sosyal et al, 2022). Therefore, social media has an important role in the development of cultural tourism, and will, for sure, become more and more important as information and communication technologies develop (Sosyal et al 2022).

### **2.1.1.3. SOCIAL MEDIA PLATFORMS IN THE TOURISM SECTOR**

The rapid growth of information and communication technologies (ICTs) and the spread of the internet have changed the structures of the industry worldwide. New technologies have been embraced in the tourism industry in Europe and America for more than 30 years, and this trend is likely to continue. ICT is becoming an expanding source of tourism for a country's historical and cultural attractiveness as a destination, as the population begins to travel abroad. (Ma J., Buhalis D., Song H., 2003). Consequently, social media platforms have been changing the behaviour and user experience in the tourism sector, therefore tourism companies and touristic-related services have been looking to invest more and more in their online presence, in order to follow and support this type of consumers, who seek information to possibly buy their products and/or services through the internet. (Benson V., Morgan S., 2014).

Authors Sigala et al (2010) state that ICT and social media platforms have led to significant changes in tourists' behaviour in terms of travel arrangements, the travel itself, and post-travel behaviour. Such changes are having an impact on travellers' decision-making processes as they help the new tourism consumer to be better informed, to become autonomous with regard to the information generated by the tourism company, and to be involved to a greater extent in the selection and purchase process. The authors further state that ICT plays a crucial role in the three phases of the purchase process: pre-consumption, consumption, and post-consumption. In the pre-consumption phase, the tourist seeks the necessary information to plan the vacation, forms expectations, weighs alternatives, compares and selects what most interests him/her the most. After notifying the supplier of the chosen products and/or services, the tourism experience is consumed and the tourist is then connected to the internet to find detailed information about a particular activity or resource, add further information to that already obtained information or hire new services. Finally, in the post-consumption phase, the tourist shares the experience on social media platforms in the form of photography, video, blogs, microblogging, maps, geo-referencing, or travel communities, using a variety of devices such as PCs, smartphones, and tablets.

#### **2.1.1.4. SOCIAL MEDIA PLATFORMS IN THE CULTURAL TOURISM AND HERITAGE SECTORS**

Authors Surugiu and Surugiu (2015) emphasize that the internet is a key principle on how business is conducted and developed in the tourism sector, bringing innovative management processes both socially and economically also representing a great support to its expansion.

Social media has changed the way people plan and experience cultural tourism and heritage in several ways, therefore, the importance of including social media as a marketing tool increases (Sosyal et al 2022). Consequently, most marketing strategies incorporate measures related to social media, as it provides the greatest advantage of reaching customers in different parts of the world and receiving feedback in real time, employing minimum resources (Surugiu M., Surugiu C., 2015). Furthermore, Geraldine et al (2019), contribute to this clarification by describing digital platforms as powerful tools in the relationship, capture, and customer loyalty, and these are increasingly influencing new consumer behaviours, forcing new practices in tourism communication. In this scenario, by using social media platforms cultural heritage sites and tourism organizations can promote their attractions and events to a global audience, increase their visibility, and engage with potential visitors.

“Certain destinations and spots became popular thanks to social media and marketing activities while others remain less-known.” (Şormaz et al 2021). Social media platforms like Facebook, Instagram, and Twitter have become an essential tool for tourists to research and plan their trips. Tourists become more interested in new technologies each day as it helps to find information about cultural heritage sites, attractions, and events. Besides, tourists can also read reviews and see pictures and videos of other travellers’ experiences on social platforms, which can influence their decision-making. In summary, social media marketing has had a significant impact on cultural heritage tourism as in other sectors, while it has created new opportunities for tourism organizations, it has allowed tourists to have much more control on the information and instruments to make a travel arrangement in order to have access to different tourism products and/or services (Sosyal et al, 2015). That said, the technology is still evolving and “the number of e-tourism companies using information and communication technologies (ICT) will continue rising in the next decades” (Sosyal et al, 2015).

#### **2.1.1.5. VIRTUAL REALITY IN THE TOURIM SECTOR**

Virtual Reality (VR) can be described as “generating a three-dimensional image” and refers to a computer-generated simulation or artificial environment that allows a user to interact with it in a seemingly real way (Tiusanen, 2017). Technology is reshaping business strategies and, likewise, is also reshaping the structure of tourism. Hence, marketers need to continuously innovate their strategy. Guttentag D. (2009) states that “VR’s applications for the tourism sector are numerous and its implications for the sector are significant, so tourism researchers and professionals should gain a greater understanding of VR to best prepare themselves to face the challenges and take advantage of opportunities that VR presents.” Notwithstanding tourism's long-standing association with physical location and authenticity, virtual reality (VR) was being implemented even in pre-pandemic tourism contexts, alongside other contemporary strategies such as augmented reality (AR), 3D virtual worlds, immersive media, and gamification (Maksim et al 2022).

Virtual tourism is a fusion concept merging virtual reality (VR) and tourism into one and emerges to facilitate and provide new touristic experiences and sensations to tourists without travelling. As a result, VR has been used most frequently for marketing illustrate a place and project a destination image to potential visitors (Maksim et al 2022). The virtual environment is typically created with the goal of immersing the user in an experience that feels as if they are physically present in that environment and can involve a variety of sensory experiences including visual, auditory, and even haptic (touch) feedback.

Foronda-Robles et al (2021) indicate that there are several technological solutions commonly adopted in the cultural heritage sector, among the most productive being audio guides, touch screens, interactive paths, virtual visits on portable devices, direct experiments, and interactives installations.

Guttentag D. (2009) concluded that VR highly benefits the areas of planning, management, marketing, entertainment, education, accessibility, and heritage preservation within the tourism industry, but above all it benefits the heritage preservation by creating virtual experiences (VE) that will therefore replace the actual visit to the threatened sites. The sense of VE is mainly for the protection of culturally sensitive heritage environments or attractions, avoiding tourist overcrowding. On the other hand, the research conducted by authors Adachi R., Cramer M., and Song H. leads to potential disagreement as a result of the different perspectives through which it is indicated that despite the growing interest in using VR for tourism marketing, the type of media used to view VR promotional videos such as the 360-degree, has a significant impact on the image of a destination, however it has been found not to affect visit intention, and is also considered as not significant. This is important because it clearly illustrates the fact that VR can be successfully implemented as a marketing tool and the tourism businesses can extract value from it.

#### **2.1.1.6. VIRTUAL REALITY IN THE PORTUGUESE CULTURAL TOURISM AND HERITAGE SECTORS**

Authors Guerra J., Pinto M., and Beato C., (2015) state: “observe the heritage, a monument, architecture, or a sculpture and immediately receive useful additional information to interpret better. This is one of the promises of VR technology.” Furthermore, with the development of low-cost devices, the access to these VR tools is easier than ever, in addition to their entertaining and therefore motivating properties (Morel M. et al, 2015). Having said that, the advantages of VR include the connection between history and heritage, and between culture and tourism, in a non-invasive and rapid capture of historical and cultural sites.

Virtual experiences are booming in the Portuguese tourism and can provide a great opportunity for people all around the world to explore Portugal’s rich culture and history without physically being there. There are several VR themes: starting with Virtual Tours of Historic Sites, such as the Jerónimos Monastery in Lisbon or the Convent of Christ in Tomar, both offer virtual tours that allow visitors to explore the sites from the comfort of their homes; then there’re Online Cooking Classes, Portuguese cuisine is renowned for its seafood and bold flavours, and many cooking schools in Portugal offer online cooking classes that allow participants to learn how prepare traditional Portuguese dishes; then comes the Virtual Wine Tastings, Portugal is home to many world-class wineries, and virtual wine tastings offer an opportunity to explore the flavours and aromas of Portuguese wine without leaving home;

further there're Cultural Workshops, Portuguese culture is rich and diverse, and virtual workshops on topics such as fado music, traditional dance, and art can provide an immersive experience that allows visitors to learn about the culture of Portugal; and lastly the Virtual Festivals: Portugal is famous for its lively festivals such as the Carnaval in Madeira or the Festas de Lisboa, in Lisbon. Virtual festivals allow visitors to experience the excitement and energy of these events from the comfort of their own homes.

According to an article written by Marco Santos (The Portugal News, 2019), Portugal provides a diverse list of virtual tours that allow the tourists to learn about Portuguese history and culture while also providing a pleasant user experience. Starting with the iconic "Tram Ride through Lisbon", which consists in a short video experience where it's possible to get an idea of what's it's like to ride on a Lisbon tram. Then, the National "Azulejos" Museum in Lisbon website displays several collections of the traditional, blue-tinted ceramic tiles. Further, there's a tour called "7 Wonders of Lisbon" with a local guide, that enables tourists to explore the city through virtual maps, photos, videos guides and 3D imagery. The outstanding National Palace of Sintra also offers a virtual tour, where it's possible to admire the array of tilework, murals, and furniture pieces that are centuries old. The well-known Calouste Gulbenkian Museum also displays a 360-degree virtual tour on its website. And as a last example, the Fado Museum made available digital sound files, providing some of the best examples of the traditional fado music (Santos, 2021).

#### **2.1.1.7. USER EXPERIENCE IN THE TOURISM SECTOR, INCLUDING IN THE CULTURAL VR EXPERIENCES**

Tiusanen P. (2017), states that attractions are an essential part of the destinations, so as for the user's travel experience, thus, attractions can be considered in most cases as the whole reason why a tourist visits a certain destination. In line with Tiusanen's approach, the Portuguese tourism operators must focus on customer service and satisfaction in order to ensure a positive user experience. This can be accomplished through several means, including providing proof of high-quality accommodation, reliable transportation, and informative and engaging tours and activities. In addition, it is important that tourism operators embrace the user experience in information and communication technologies to improve the user experience and to stay up to date. This can include delivering user-friendly websites and mobile applications, offering online booking and reservation systems, and using social media to engage visitors and provide valuable information about the local attractions and events.

According to Merks et al (2021), VR applications in the tourism industry can positively impact the tourist experience, regardless of the type of tourist experience, and therefore can have multiple benefits if included as a marketing tool in the tourism destinations and companies. Nevertheless, it's also claimed that VR in tourism experiences can provide a feeling of temporary isolation due to being closed off from the real world, however, that feeling of isolation disappears soon after experiencing VR. On the other hand, Zhang et al (2022) pointed out that today's tourism operators contain multiple sets of technologies, and thus virtual tourism projects, that help tourists familiarize themselves with the destinations, reducing user anxiety when choosing a destination. There seems to be a consensus among the mentioned authors in identifying the benefits of the VR in the tourism industry, as it demonstrates that VR is increasingly available to people and that many touristic-related services also



already feature this type of VR services, which allows tourists to access this information and make their own decisions that will certainly benefit their user experience.

### 3. METHODOLOGY

Methodologically, this research applies a qualitative method of direct observation to some social media profiles, providing a qualitative interpretation of these profiles, along with the process of interviewing some professionals from the sectors under study. This method is called “netnography research”, a characterization by Kozinets (2010), which “uses social science methods to present a new approach to conducting ethical and through ethnographic research that combines archival and online communications work, participation and observation, with new forms of digital and network data collection, analysis and research representation (p. 14).” Kozinets affirms in his book that netnography is a “specific sets of research positions and accompanying practices embedded in historical trajectories, webs of theoretical constructs, and networks of scholarship and citation; it is a particular performance of cultural research followed by specific kinds of representation of understanding (p. 14).” Additionally, the study of social media is widespread, significant and deserves research attention, and is therefore a world of possibilities for human understanding in technological social interaction. (Kozinets, 2010).

The authors Gondin et al (2020), state that applying netnography as a Research Method in Tourism has shown some limitations that act as restrictive factors, such as the superficiality in the analysis of the data collected, and the lack of a reflective analysis on the behaviors and discourses manifested in virtual communities. Nevertheless, netnography displays facilitating aspects that encouraged its choice, such as the easy access to data collection in the virtual environment and the records of travelers and stakeholders of the tourism activity, the less intrusive data collection than face-to-face methods, among others. Moreover, studies on the themes of cultural and heritage tourism and VR with regard to Portugal are also increasingly numerous. In terms of common ethnographic procedures in relation to netnography, Kozinets (2010) recommends the following methodological steps and procedures for netnographic studies: Input: formulation of research questions and identification of the most appropriate online community for a study. Data collection: direct copying of computer-mediated communications of online community members and observations of the community and its members, interactions, and meanings. Analysis and interpretation: categorization, code analysis and contextualization of communicative acts. The author also emphasizes that all these steps should be in line with research ethics (Gondim et al, 2020).

Kozinets further elaborates on the various choices that are important in the particular stage of data collection, giving some guidelines for searching, finding, selecting and storing data. According to the principles of qualitative data analysis, the important steps to consider are as follows:

- Proceed in a systematic and rigorous manner (minimize human error).
- Record the process, memos, diaries, etc.
- Focus on answering the research questions.
- Level of interpretation appropriate to the situation.
- Time (the process of enquiry and analysis is often simultaneous).
- Seeking explanation or clarification.
- Evolution/emergence.

Furthermore, Kozinets also provides useful information related to data analysis, such as not focusing on the objective meaning of the text, but on what that text means to the people in the situation under

study, and remembering to try to bracket the analysis, i.e. tell your story rather than your own as a researcher, as well as a number of other useful tips. (Bowler, 2010).

To emphasize the "netnographic research" method, 21 social media profiles of entities linked to the cultural and heritage tourism sectors in Portugal were chosen to measure and collect some concrete data and one website / platform - Fever Lisboa, to gather some feedbacks on the VR experience "Flying over Lisbon" organized by the Lisbon Store Centre as well as the VR exhibition "Frida Khalo" at Mãe D'Água. Subsequently, the first visits were made to the defined social networks so as to build a research script and identify the need to search for the above-mentioned information. In this way, table 1 represents the selection of some active and successful profiles on social networks, both on Instagram and Facebook, of entities related to Culture, Tourism and Heritage in Portugal. An analysis was also made to the websites of some of these entities, and of another platform that sells online tickets for cultural activities and that collects several testimonies of the experiences - Fever, Lisbon, in order to obtain a better data analysis. However, the main focus of this study is in fact the social media profiles. Thus, the platform is only used to make a first analysis and centralize the data.

**Table 1 – Data Sources Analysis**

<b>Author/Data Source</b>	<b>Dimensions</b>	<b>Variables</b>	<b>Methodology</b>
<b>Visit Portugal - Turismo de Portugal</b>	Promotion of tourism activities and involvement of tourists in social media.	1.Nº of followers; 2.Nº of likes; 3.Nº of views; 4.Nº of comments; 5.Nº of shares.	1.Qualitative analysis – netnography. 2.Online interview with tourism managers – 15 questions.
<b>Visit Porto and North – Turismo do Porto e Norte</b>	Promotion of tourist activities in the city of Porto and the North of Portugal, and involvement of tourists in social networks.	1.Nº of followers; 2.Nº of likes; 3.Nº of views; 4.Nº of comments; 5.Nº of shares.	Qualitative analysis – netnography.
<b>Visit Algarve – Turismo do Algarve</b>	Promotion of tourist activities in the region of Algarve and involvement of tourists in social networks.	1.Nº of followers; 2.Nº of likes; 3.Nº of views; 4.Nº of comments; 5.Nº of shares.	Qualitative analysis – netnography.
<b>Lisboa Secreta</b>	Promotion, tips, plans and inspiration of the best of Lisbon.	1.Nº of followers; 2.Nº of likes; 3.Nº of views; 4.Nº of comments; 5.Nº of shares.	Qualitative analysis – netnography.
<b>Porto Secreto</b>	Promotion, tips, plans and inspiration of the best of Porto.	1.Nº of followers; 2.Nº of likes; 3.Nº of views; 4.Nº of comments; 5.Nº of shares.	Qualitative analysis – netnography.
<b>Parques de Sintra</b>	Management of the natural and cultural values located in the area of the cultural landscape of Sintra and Queluz; Promotion of its activities and information about its services on social networks.	1.Nº of followers; 2.Nº of likes; 3.Nº of views; 4.Nº of comments; 5.Nº of shares.	Qualitative analysis – netnography.

<b>Património Cultural – DGPC</b>	DGPC promotes Cultural Heritage in Portugal by providing information on social networks about its activities and monuments. On its website it's possible to buy tickets for all activities and monuments.	1.Nº of followers; 2.Nº of likes; 3.Nº of views; 4.Nº of comments; 5.Nº of shares.	Qualitative analysis – netnography.
<b>Patrimonium</b>	Promotion and management of heritage in Portugal, using social networks to promote its activities and projects. On its website it's possible to buy tickets for all activities and monuments.	1.Nº of followers; 2.Nº of likes; 3.Nº of views; 4.Nº of comments; 5.Nº of shares.	Qualitative analysis – netnography.
<b>Fundação Calouste Gulbenkian</b>	Gulbenkian essentially promotes its exhibitions and activities on the social networks, as well as informing all those interested in culture about its timetables and other useful information. The website offers an extra and innovative option which is the 360º virtual tour.	1.Nº of followers; 2.Nº of likes; 3.Nº of views; 4.Nº of comments; 5.Nº of shares.	Qualitative analysis – netnography.
<b>Fundação Serralves</b>	Serralves promotes its activities on social networks, so it conveys a more informative message and image. Serralves has a interactive posture with its target audience on social media by creating some quizzes. Its website sells tickets to the exhibitions.	1.Nº of followers; 2.Nº of likes; 3.Nº of views; 4.Nº of comments; 5.Nº of shares.	Qualitative analysis – netnography.
<b>Fundação Casas Fronteira e Alorna</b>	It essentially promotes its activities on social media, providing information such as schedules, etc. It is possible to buy tickets through its website.	1.Nº of followers; 2.Nº of likes; 3.Nº of views; 4.Nº of comments; 5.Nº of shares.	Qualitative analysis – netnography.
<b>Hotel Casa Holstein</b>	Historical Hotel located in Sintra that promotes some cultural and touristic activities. It uses	1.Nº of followers; 2.Nº of likes; 3.Nº of views; 4.Nº of comments; 5.Nº of shares.	Qualitative analysis – netnography.

	social networks to promote its services.		
<b>Palácio do Grilo</b>	Promotes the activities and services (restaurant & bar).	1.Nº of followers; 2.Nº of likes; 3.Nº of views; 4.Nº of comments; 5.Nº of shares.	Qualitative analysis – netnography.
<b>Câmara Municipal de Lisboa</b>	Promotes the activities directly associated with the “Câmara Municipal de Lisboa”.	1.Nº of followers; 2.Nº of likes; 3.Nº of views; 4.Nº of comments; 5.Nº of shares.	Qualitative analysis – netnography.
<b>Junta de Freguesia da Estrela</b>	It promotes all the cultural activities associated to “Junta de Freguesia da Estrela” on social networks.	1.Nº of followers; 2.Nº of likes; 3.Nº of views; 4.Nº of comments; 5.Nº of shares.	Qualitative analysis – netnography.
<b>Black Cat Cinema</b>	Uses social media to promote its events and cinema sessions, providing some useful information related to its services.	1.Nº of followers; 2.Nº of likes; 3.Nº of views; 4.Nº of comments; 5.Nº of shares.	Qualitative analysis – netnography.
<b>Jardins Abertos</b>	The festival that opens the gates of Lisbon’s city gardens and promotes its programme on social media to attract public/tourists to Lisbon’s gardens during the festival dates.	1.Nº of followers; 2.Nº of likes; 3.Nº of views; 4.Nº of comments; 5.Nº of shares.	1.Qualitative analysis – netnography; 2.Brief face-to-face interview with about 5 questions to one of the festival volunteers, who was coordinating visitors and informing about the festival programme.
<b>Lisbon Story Centre – Museum</b>	Uses social networks to promote the Museum; Lisbon Story Centre Museum reshapes some pictures taken by the tourists which creates a feeling of “community”.	1.Nº of followers; 2.Nº of likes; 3.Nº of views; 4.Nº of comments; 5.Nº of shares.	1.Qualitative analysis – netnography; 2.Virtual cultural experience – Visited the museum and created a “diary of my experience”.
<b>Fever Lisboa (website) – About the VR experience “Voar sobre Lisboa” at Lisbon Story Centre and the Frida Kahlo exhibition</b>	X	1. Type of comments, to understand what the “user experiences” were like.	1.Qualitative analysis – netnography;
<b>Pavilhão do Conhecimentos – Centro Ciência Viva</b>	Uses social networks to promote essentially its activities.	1.Nº of followers; 2.Nº of likes; 3.Nº of views; 4.Nº of comments; 5.Nº of shares.	1.Qualitative analysis – netnography.
<b>MAAT – Museu de Arte, Arquitetura e Tecnologia</b>	Uses social networks to promote its activities and art work.	1.Nº of followers; 2.Nº of likes; 3.Nº of views; 4.Nº of comments; 5.Nº of shares.	1.Qualitative analysis – netnography;
<b>Feira do Livro – Lisboa</b>	Uses social networks to promote the event itself	1.Nº of followers; 2.Nº of likes; 3.Nº of views; 4.Nº	1.Qualitative analysis – netnography;

	and to make some announcements.	of comments; 5.Nº of shares.	
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Regarding the interviews, this exploratory study conducted a total of 9 interviews with 12 experts in these sectors and 1 questionnaire/quiz with 6 questions on Instagram, to a list of "close friends" with 22 people in total. These same interviews were then conducted to measure the success of the entities' social media marketing strategy and were carried out with tourism managers and some social media users with a particular interest in culture, tourism, heritage, and VR experiences. All the interviews lasted between 25 and 30 minutes, and the asked questions focused mainly on marketing strategy and social media usage, and with 2 open questions about VR experiences in Portugal. For this purpose, it was necessary to understand the promotion of the sectors with strong content, and finally to look at the relationship between communication through social media and the development of VR experiences. Moreover, some of the profiles selected for this study were found using a wide range of keywords/sentences in search engines. Some examples include "virtual reality experience tourism in Portugal" and "virtual reality in Portugal". In addition, based on the topics indicated in this research, several entities with a strong social media presence were also selected. Also, the following analysis criteria were used: the number of followers, which refers to the number of likes or followers of the entities' social media profiles, the number of views of the videos hosted on the entities' social media platforms, the number of likes of the entities' posts shared on social media, the positive comments, the negative comments and other comments. To conclude, the qualitative approach was chosen based on the nature of the data expected to be collected to answer the two research questions defined.

**Table 2 – Interviewed Managers and Social Media Users**

<b>Interviewees</b>	<b>Date of the interview</b>	<b>Structure affiliation</b>
Interviewee 1  Interviewee 2  Interviewee 3	May 2023	Tourism Professionals/Managers.
Interviewee 4	May 2023	Communication Professional in the cultural events sector.
Interviewee 5	April 2023	Social media user with a strong interest in Portuguese culture. Plus, this user works in the tourism events sector.
Interviewee 6	April 2023	Professional designer from the tourism and culture sector. Great interest in culture and architecture, often participates in cultural events, visits various museums, including technological/immersive exhibitions.
Interviewee 7	May 2023	Marketing student with a strong interest in cultural events, namely art and music. The student participates in several events that she finds through social media.

Interviewee 8  Interviewee 9	May 2023	Managers from other sectors, but who have a strong interest in culture, namely Portuguese culture. They often participate with their family in cultural events, which they know mostly through social networks.
Interviewee 10	May 2023	Sales & Marketing Professional from other sector, with a strong interest in museums and art exhibitions, especially those of modern art involving technological experiences.
Interviewee 11	June 2023	Professional from another sector, with an interest in culture and heritage. His professional life intersects with Portuguese culture, so there is a great interaction with cultural activities. In addition, he has a strong interest in technology and innovation, so he visits some cultural experiences in this area whenever possible.
Interviewee 12	May 2023	Professional in the cultural sectors in Portugal, he is in constant interaction with all these aspects: art, music, museums, heritage, cultural events, etc. On the other hand, he explores the issue of VR within these same sectors, with the main objective of innovating in his business.

Sources: developed by the authors.

## 4. EMPIRICAL STUDY

### ONLINE FOCUS SAMPLE CHARACTERISATION AND DESCRIPTION

A significant component of this research relies on the execution of the sample characterization and description, which is composed by entities related to tourism, culture and Portuguese Cultural Heritage, and the results of this effort are represented in tables 2, 3 and 4, where the identified determinants of social media marketing and VR adoption in the inherent concept can be perceived. Therefore, the present section provides details about the entities chosen for each sector, as well as explores their social media marketing strategy, while presenting the data collected through the netnography conducted and the interviews conducted with users with a special interest in culture and heritage and with some experts in the mentioned industries, and the trend towards digital transformation in cultural tourism and heritage.

**Table 3 – Tourism**

Data Source	Instagram	Facebook
Visit Portugal – Turismo de Portugal	776K Followers	1,5K Likes
		1,5K Followers
Visit Porto and North – Turismo do Porto e Norte	36,8K Followers	166K Likes
		180K Followers
Visit Algarve – Turismo do Algarve	121K Followers	220K Likes
		229K Followers

Table 2 presents the research results regarding Visit Portugal and two other regions of the country: Visit Porto and North and Visit Algarve, whose main objective is to illustrate the social media marketing strategy adopted so far. The social media marketing of Visit Portugal is in line with the online social structures and interactions through the publication and sharing of content on social networks such as Facebook, YouTube, Instagram, and Twitter, which are privileged tools of communication with tourists visiting Portugal. However, the social media marketing strategy varies from platform to platform and meets Visit Portugal's objectives for each one. First by addressing the Instagram of "Visit Portugal", it appears that the platform has 776K followers and the strategy used is user-generated content. In the case of Facebook, it appears that the profile has 1.5K followers and 1.5K likes on the page. As for its strategy, it differs from the Instagram strategy, that essentially uses news created on the official Visit Portugal website, including the respective links for the target audience to access directly. However, both strategies on these platforms have the same goal, to promote the activities and inspire potential tourists through their posts. In addition, the professional from Turismo de Portugal concluded that, although both platforms perform very well, Facebook is in fact the best performing social network, with greater engagement with the public. Notwithstanding the above conclusions, it is important to note that "Turismo de Portugal" essentially promotes its activities on social networks but does not sell products or services on social media.



Regarding the "Visit Porto and North" account, which is, in fact, a subcategory of the official account of "Turismo de Portugal" - Visit Portugal, which represents the entire northern region of the country. The main objective of this account is, precisely, to promote tourism activities in the North region. As for the account "Visit Algarve" that represents the entire region to the Algarve, southern area of Portugal, it is verified that like the accounts mentioned above, its main objective is to promote tourism activities and the Algarve region, also resorting to "user generated content" on Instagram and complementing with some news related to tourism in the region on Facebook. It is noteworthy the interaction of the profile with its target audience, which demonstrates a great engagement. Between both regions, it is verified that the account "Visit Algarve" presents a bigger engagement with its target audience than the account "Visit Porto and North". However, both have an active presence, use the strategy of user generated content, and present their activities and packages in the feed of their profiles.

The social media marketing strategy for all platforms on which "Turismo de Portugal" is present, is similar for all regional Tourism accounts. The great purpose of these sub-categories is to promote the remaining regions of the country, and somehow to combat and circumvent the issue that arises about the places of great natural beauty that are not well known and little publicised.

**Table 4 – Culture**

<b>Data Source</b>	<b>Instagram</b>	<b>Facebook</b>
Lisboa Secreta	404K Followers	392K Likes 458 Followers
Porto Secreto	77,7K Followers	86K Likes 115K Followers
Fundação Calouste Gulbenkian	112K Followers	337K Likes 357 Followers
Fundação Serralves	148K Followers	245K Likes 253K Followers
Black Cat Cinema	20,1K Followers	2,4K Likes 2,6K Followers
Jardins Abertos	18,3K Followers	9,4K Likes 10K Followers
Lisbon Story Centre – Museum	1133 Followers	11K Likes 11K Followers
Pavilhão do Conhecimento – Centro Ciência Viva	14,1K Followers	76K Likes 78K Followers
MAAT – Museu de Arte, Arquitetura e Tecnologia	90,3K Followers	104K Likes 110K Followers

Feira do Livro – Lisboa	33,6K Followers	78K Likes
		80K Followers

For this section, several profiles have been selected that showcase the best of Lisbon and Porto, as both cities boast rich cultural heritage, historical sites, and vibrant industries. Lisbon and Porto attract a significant number of tourists and have a strong online presence, making them ideal subjects for studying social media's impact on cultural heritage and tourism. Furthermore, both cities are known for their strong presence on various social media platforms. Numerous Instagrammable spots, hashtags, and influencers have contributed to the online promotion and visibility of these cities. This way, analysing social media content related to Lisbon and Porto can reveal patterns, trends, and the effectiveness of digital marketing strategies in the context of cultural heritage and tourism. Therefore, table 3 includes some profiles linked to Portuguese Culture such as museums, some cultural events and pages of inspirations and suggestions of cultural activities in the cities of Lisbon and Porto.

For a first approach, the profiles "Lisboa Secreta" and "Porto Secreto" were selected, which are essentially run by the same teams, but each of these pages targets different cities: Lisbon and Porto. "Lisboa Secreta" is an online guide that highlights the lesser-known aspects of Lisbon, offering unique insights into the city's gems, local culture, and off-the-beaten-path attractions. The profile features stunning photographs capturing the enchanting streets, colourful neighbourhoods, historic landmarks, and scenic views of Lisbon. The content includes intriguing captions or stories accompanying the photos, providing historical context, interesting facts, or insider tips about the featured locations. It highlights hidden cafes, tucked-away bookstores, charming boutiques, vibrant street art, undiscovered viewpoints, or any other fascinating spots that most tourists might not stumble upon. Moreover, "Lisboa Secreta" profile also shares recommendations for local events, festivals, cultural activities, and lesser-known dining spots. It strives to showcase the authentic side of Lisbon, promoting exploration and encouraging visitors to experience the city beyond its popular tourist destinations. Concerning the profile "Porto Secreto", given that it is also managed by the same team, it features an identical social media marketing approach and an identical visual image. However, the "Lisboa Secreta" profile has a higher number of followers, which can be justified by the fact that Lisbon is the country's capital. Nevertheless, both accounts present a high engagement and a large number of followers and likes in all posts.

In short, and to complete the conceptual trilogies formed by "culture, heritage and tourism", it is highly important to delve into other types of entities such as museums, to outline the current post-modern identity context, clearly mediated by digital and ubiquitous communication. Thus, the following profiles with the following characteristics were selected: *Fundação Calouste Gulbenkian* in Lisbon with 112k followers on Instagram and 357k followers on Facebook, *Fundação Serralves* in Porto with 148k followers on Instagram and 253k followers on Facebook, Lisbon Story Centre with 1133 followers on Instagram and 11k followers on Facebook, *Pavilhão do Conhecimento* in Lisbon with 14,1k followers on Instagram and 78k followers on Facebook, and lastly, MAAT Museum in Lisbon with 90.3k followers on Instagram and 110k followers on Facebook.

The Calouste Gulbenkian Foundation (Fundação Calouste Gulbenkian) aims to improve people's lives by promoting the arts, culture, education, and science, both in Portugal and internationally. It is therefore an important focus in this study, as it is the largest centre for modern art and science in

Portugal, features virtual tours on its website, and has an emphasis on offering exhibitions of modern, innovative, and technological art. Regarding Gulbenkian's social media presence, it's noted that it maintains a presence on various social media platforms such as Facebook, Twitter, Instagram and LinkedIn to share information about its activities, news, events, projects and initiatives, and to engage with the public.

Finally, bringing the media landscape to the forefront, but highlighting another "virtual environment", a few profiles related to some events organized by entities also linked to Portuguese Culture and Tourism, such as the Black Cat Cinema, the *Jardins Abertos*, and the *Feira do Livro de Lisboa*, have been selected to examine its performance on social media platforms, along with its adopted social media marketing strategy. In this way, these creative resources have a great performance on social networks: the Black Cat Cinema counts with 20,1k followers on Instagram and 2,6k followers on Facebook, the *Jardins Abertos* has 18,3k followers on Instagram and 10k followers on Facebook, and the *Feira do Livro de Lisboa* has 33.6k followers on Instagram and 80k followers on Facebook.

**Table 5 – Portuguese Cultural Heritage**

Data Source	Instagram	Facebook
Parques de Sintra	43,2K Followers	91K Likes 93K Followers
Património Cultural – DGPC	13,3K Followers	1,6K Likes 2,1K Followers
Patrimonium	2041 Followers	1,5K Likes 1,7K Followers
Fundação Casas Fronteira e Alorna	4336 Followers	5,6K Followers
Hotel Casa Holstein	8494 Followers	1,4K Likes 1,4K Followers
Palácio do Grilo	36.7K Followers	998 Likes 1,2K Followers
Município de Oeiras	37,2K Followers	91K Likes 104K Followers
Câmara Municipal de Lisboa	200K Followers	476K Followers
Freguesia da Estrela	6245 Followers	17K Followers

Last but not least, table 4 presents a list of social media profiles of cultural heritage organisations located in Lisbon, Cascais, Sintra and Oeiras, as these locations are popular tourist destinations that contribute valuable knowledge to the fields of cultural heritage, tourism, technology, accessibility and education, thus providing information on best practices, promoting innovation and improving the overall cultural experience for visitors and locals. These profiles were selected from a variety of heritage sites, starting with "Parques de Sintra" which includes Pena Park and Palace, Sintra Palace, Queluz Palace, Moorish Castle, Monserrate Park and Palace, among others, which are some of Sintra's

most iconic monuments, attracting thousands of tourists every year. Subsequently, the DGPC entity was selected because it is in charge of the management of cultural heritage in mainland Portugal, covering practically all technical and scientific domains and structured functionally in central services, based in Lisbon, and in Museums, Monuments and Palaces, located in different parts of the country. Then was chosen a different profile called "Patrimonium" which is essentially a brand dedicated to the management and promotion of cultural assets, working in the following areas: cultural mediation, room assistance and surveillance support, cultural marketing, heritage inventory, research and content production, musealization, and management and consulting. Then three profiles of manor houses and palaces in Lisbon and Sintra were selected: Fundação Casas Fronteiras e Alorna, Hotel Casa Holstein and Palácio do Grilo, which are currently open to the public for visits, events and other tourist activities, as is the case of Hotel Casa Holstein and Palácio do Grilo. Lastly, three profiles linked to the Oeiras and Lisbon Municipalities were selected: Oeiras City Council, Lisbon City Council and Estrela Parish as these are, indeed, the most active and involved in projects linked to culture and heritage.

Starting by approaching "Parques de Sintra" in a more detailed way, a company that manages and conserves various historical and natural sites in the Sintra region of Portugal, it is possible to emphasize that "Parques de Sintra" has an active presence on social media platforms where they share news, updates, information about their various sites, and showcase the beauty of their sites through visually appealing photos. The Instagram profile has 43.2K followers and promotes essentially all its tourism activities, and contrary to other entities, it does not resort to the "user-generated content" strategy but rather to photographs taken by professional photographers who actively participate in the events and activities organised by the entity. As for its Facebook profile, it has 91k likes and 93k followers. The strategy applied on Facebook is similar to Instagram, which implies the promotion of their activities and monuments through photos taken by professional photographers and complementing this information with some news and links to e-tickets. There is strong interaction with the target audience on both platforms, which means that they develop marketing campaigns, produce promotional materials, and engage in digital marketing efforts to attract tourists and visitors interested in experiencing the cultural heritage of the region.

Besides, it was possible to attend to an activity organised by "Parques de Sintra", namely an immersive and interactive show that brings light and magic to the New Garden of the National Palace of Queluz, "Aladdin, Princess Jasmine and the Genie of the Lamp" developed by OCUBO studio in partnership with "Parques de Sintra", with the support of Sintra City Council. With a combination of luminous sculptures, video mapping, augmented reality and interactive installations, visitors are invited to rediscover and experience this space in a whole new way and immerse themselves in the imagery of Aladdin with all their senses. This kind of immersive shows along with cultural experiences are memorable experiences people will treasure for a lifetime, first because the setting is unique, the National Palace of Queluz provides a distinctive and enchanting backdrop for an immersive show, the multisensory approach can transport participants into Aladdin's world, making the experience even more memorable and impactful and as a result, it can have positive economic effects, stimulating local businesses, generating revenue and promoting the destination as a centre for cultural entertainment.

In the case of the DGCP, the entity responsible for the management of cultural heritage in mainland Portugal, there is evidence that it has developed an integrated communication strategy aimed at raising public awareness and informing the public about activities, about the importance of cultural

heritage in contemporary society and about the programming of museums, monuments, and palaces. The DGPC organises technical and scientific meetings and promotes education and training activities in universities, municipalities, and schools. It has a publishing programme aimed at different areas of specialisation and audiences such as: Routes, Catalogues, Monographs, Studies, Standards, Essays, Meeting Proceedings, in the areas of History of Art, Heritage, Conservation and Restoration, Archaeology, Ethnology and Inventories, and also, periodically, the RP Heritage Magazine and the Portuguese Magazine of Archaeology. In addition, the official website of the DGPC, the weekly newsletter and the presence on social networks, project themselves outwards, informing about the activity with a daily update. At the same time, the websites, and blogs of the 26 museums, monuments, and palaces that we manage promote, in detail, the respective initiatives, in a logic of strengthening the identity and affirmation of each of these facilities. To complete, the official Instagram has 13.3K followers and Facebook has 2.1K followers and 1.6K likes.

The communication strategy of the Direção-Geral do Património Cultural (DGPC) about Portuguese World Heritage sites is, therefore, vital for raising awareness, promoting preservation, attracting tourism, fostering education, engaging stakeholders, and enhancing Portugal's international reputation. By effectively communicating the value and importance of these sites, the DGPC can contribute to their long-term sustainability and ensure their continued recognition and appreciation. In order to reinforce such conclusions, authors Remoaldo et al (2014) indicate in their research on Guimarães, Portugal, which is based on a survey of 276 tourists, that many tourists were aware of the city's world heritage status, which incorporates a historic centre, monuments, and architectural buildings. Moreover, the authors also state that these perceptions shape the image of Guimarães, as factor analysis indicates that "historical context and functionality" was the most reliable and valid factor behind the choice to visit the city (Remoaldo et al, 2014).

## INSTAGRAM QUIZ

To deepen the results obtained through this exploratory study, a questionnaire was carried out on Instagram to 22 "close friends" by personal network, with 6 questions related to the study topic. This questionnaire allowed to have an overview of how young Portuguese people between 20 and 30 years old use the time they spend on social networks. There is a relationship between the entities chosen for analysis in this study, which are presented in tables 1, 3, 4 and 5, and the feedback obtained through the questionnaire.

Young Portuguese people show a high interest in culture and other tourist activities, and, in addition, they have revealed that they consult the online information provided by these chosen entities, to inform themselves, to buy tickets, to visit exhibitions and to get inspiration for future trips. Therefore, table 6 presents the general details about the questionnaire and table 7 covers all the questions asked to the sample of 22 "close friends" on personal Instagram.

**Table 6 – Instagram quiz to 22 “close friends” by personal network**

Interviewees	Date of the Quiz	Structure affiliation
22 Interviewees	May 2023	“Close friends” list on a personal Instagram profile.

**Table 7 – Results from the Instagram quiz**

<b>Question 1 – “Do you follow any Instagram account (e.g.) Visit Portugal, Visit Porto, Visit Algarve, Town Halls, Municipalities, Museums (e.g.) Gulbenkian, Exhibitions, Events, Festivals, Palaces, etc., any account that is linked to culture?”</b>	10 people out of 22 follow pages related to these sectors on Instagram: museums, cultural events, monuments, "Visit Portugal", "Visit Algarve", "Visit Porto e Norte", "Secret Lisbon", "Secret Porto", etc. The rest stated that they do not follow but consult this type of content with some frequency.
<b>Question 2 – “Do these types of accounts (which I mentioned earlier) encourage you to visit places in any way? Do they inspire with the content shared?”</b>	Although 10 people out of 22 (young Portuguese between 20 and 30 years old), do not follow this type of pages on Instagram, it is concluded that they eventually "peek" at the accounts and their content, whether posts, stories or reels. To conclude, social networks, and in this case Instagram, have a great influence on people and can get their message across, reaching a large number of people. Independent of the fact that people follow this type of pages or not, the communication/message reaches them.
<b>Question 3 – “Have you ever bought a culture-related ticket via social media? E.g. did you click on a link in a story and buy the tickets on the website?”</b>	17 people out of 22 answered that they haven't bought anything through Instagram. One person from my “close friends” list replied that she saw an ad on Instagram about the "black cat cinema" and bought the tickets through the link in the official account story.
<b>Question 4 – “Have you ever had any kind of virtual experience (VR) linked to culture? In Portugal or in the world. If yes, can you tell me which one?”</b>	Only 1 person evidenced the VR experience: Frida Khalo exhibition in Lisbon, Portugal.
<b>Question 5 – “Do you consider technology (VR) a threat or a positive aspect? Do you feel that it increases your desire to visit a place/monument, or do you feel that because you have seen it virtually that you stop going physically to the place/monument?”</b>	20 out of 22 people answered that they consider it a positive aspect, but they do not stop visiting the site/monument because they consulted it online/virtually. Only 2 people answered as a "threat", which means that they stop visiting the site/monument because they consulted it online/virtually.
<b>Question 6 – “What is the best culture-related experience you have had so far? Ex. out of the box exhibitions, events, festivals, etc. anything you can think of. Talk a bit about it, explain why it marked you.”</b>	Frida Khalo exhibition in Lisbon and the Black Cat Cinema in Lisbon.

Sources: developed by the authors.

Further description of the two experiences mentioned above:

- **Black Cat Cinema:** outdoor movie sessions in iconic and cultural places in Lisbon, Portugal, such as: Santos-O-Velho, Arroz Estúdios, Escala 25, Casa Holstein in Sintra and Creative Hub.

Black Cat Cinema's official Instagram account has 19.3k followers. It presents a very pretty and careful image/visual, therefore the vast majority of its posts are high-quality photos of their events, in this case, movie sessions. They have an active presence online and most of their online activity is focused on promoting their "services". Sometimes they also put informative posts about their "services". There is a great interaction of the target audience with the "event", so the official account of the event has been available to answer all the questions asked.

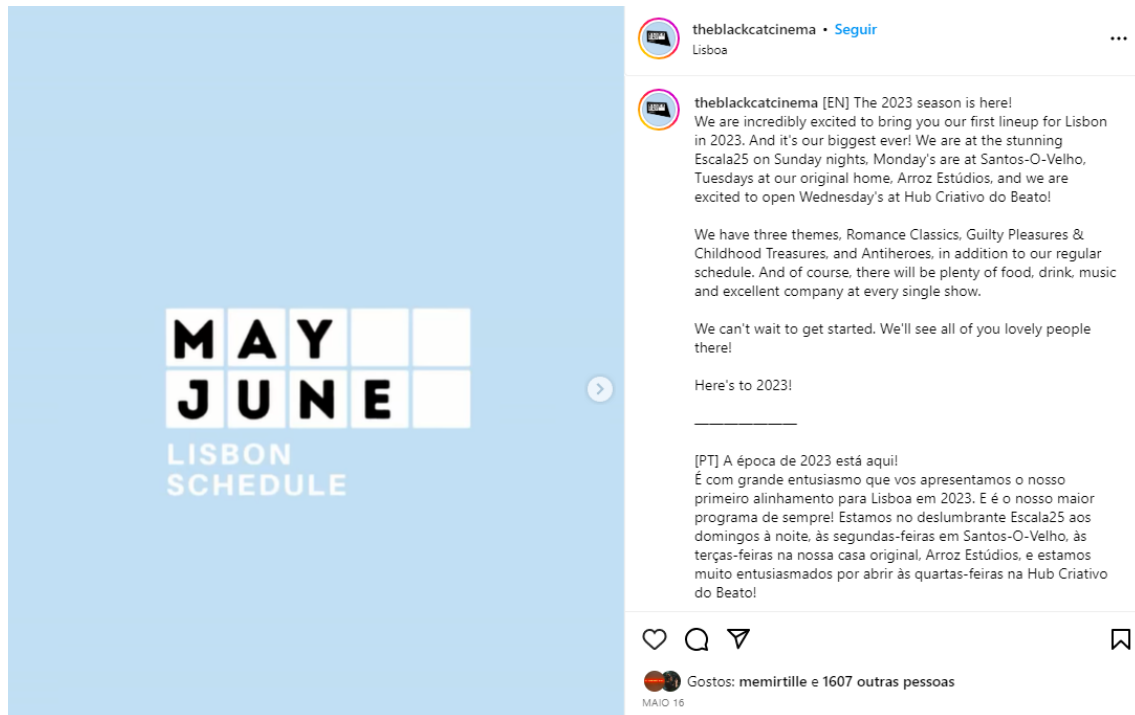


Figure 1 – The Black Cat Cinema profile on Instagram – Lisbon Schedule of the 1<sup>st</sup> event of the year 2023 (May/June).



Figure 2 – The Black Cat Cinema profile on Instagram – Interaction with the audience.

- **Immersive exhibition of the life of Frida Kahlo at “Mãe D’Água”:** a 360º audiovisual show highlighting key moments in Frida’s life. 3 users highlighted the VR exhibition on the life of Frida Kahlo, for appreciating the artist in question and for never having experienced an immersive experience before. They comment that it was a memorable experience to be repeated.

#### ☆ Opiniões dos utilizadores



Figure 3 – Frida Kahlo Exhibitions – Feedbacks extracted from Fever – Lisbon Website



## 5. RESULTS AND DISCUSSION

This exploratory research on the relationship between social media communication and the promotion of cultural tourism and heritage in Portugal, and the inclusion of some virtual reality experiences in the same sectors, revealed essential and significant results. In fact, the semi-directive interviews conducted allowed a preliminary confirmation of the research problem. The results of the qualitative study concern seven main axes of the research, namely:

- Use of social media as a promotional tool for cultural tourism and heritage activities.
- Promotion of the destination.
- Promotion of the package and/or company.
- Promotion of events.
- Inclusion of links.
- Virtual reality as a tourism trigger.
- User experience with VR tourism experiences.

In synthesis, this exploratory qualitative study has enabled to collect significant results and to contextualize its research questions. The findings obtained from the exploratory analysis showed that the responses from social media users, users of cultural activities and some tourism professionals significantly correspond to the theoretical contributions, as they confirmed the existence of a strong relationship between communication through social media platforms and the promotion of cultural tourism and heritage.

### **USE OF SOCIAL MEDIA AS A PROMOTIONAL TOOL FOR CULTURAL TOURISM AND HERITAGE ACTIVITIES**

Cities are becoming increasingly complex, and information and communication technologies (ICTs) are bringing intelligence to organisations and communities, thus contributing to a more competitive tourist destination. Improved access to information, coupled with a new type of tourists willing to share information on social media, allows a better understanding of tourists' behaviour regarding the distribution of their location in destinations. Thus, smart tourism portrays individuals as information creators, refining the alternatives available to track their location. Moreover, these new data largely contribute to the understanding of space consumption in tourist destinations and therefore allow us to distinguish between overcrowded sites and sites with growth potential. This allows decision-makers to design new ways of planning and management for a sustainable and smart future. (Encalada et al, 2017).

Information will always remain important in the tourism sector, so the inclusion of social media as a marketing strategy has shown visible and measurable results in visitor and satisfaction rates, which is why it should continue to be strong enough to attract tourists to a region (Sosyal et al, 2022). Furthermore, ICTs enable the enhancement of a territory's cultural heritage and economy in the context of tourism innovation, so tourism-related entities and cultural and heritage organisations allocate most of their promotional budget to online channels and less to traditional guides or media (Foronda-Robles et al, 2021). The authors Foronda-Robles et al (2021) also affirm that these technologies improve the tourist experience and ensure a return on investment for the destination

and have become a fundamental tool for the promotion of cultural heritage. Moreover, the cultural tourist has gone from being an information consumer to an information generator in social networks, actively collaborating with this type of promotion.

The authors Hammou et al (2020) elaborated a synthesis and a proposed different type of gratification in social networks clustered into five sections: information search, entertainment, social interaction, self-expression, and impression management. Then referring to the theories of uses and gratifications as one of the most efficient approaches to understand the main motivators for the use of social networks, the authors also refer in their study that the social network user seeks, when connecting, to satisfy one of these gratifications, or even several at the same time. Within this same theory of uses and gratifications of social networks, it is possible to highlight the fact that social networks are, therefore, a communication tool for cultural heritage, allowing its transmission, safeguarding and promotion (Hammou et al 2020).

In order to present results, which somehow meet the theories mentioned above, but focusing on the study area of this research, it is possible to conclude that, according to a public study on National Museums in Portugal conducted by DGPC (Direção Geral do Património Cultural), it was found that in every ten respondents, seven confirm that they inform themselves on social networks before visiting a cultural monument. The same research shows that the great majority of the public resorted to a single source of information, while three out of ten respondents use up to three sources, such as the museum or monument's website, Facebook and even Twitter account (Sic Notícias, 2023). DGPC (Direção-Geral do Património Cultural) statistics indicate that national museums, monuments, and palaces recovered almost two million visitors after the covid-19 pandemic and show that the most visited cultural monument was the Jerónimos Monastery, in Lisbon, and the Belém Tower. Among the monuments, the Convent of Christ, in Tomar, also classified as a World Heritage Site, and considered one of the most important monumental complexes in Portugal, also stands out. These statistics also indicate that the Monuments were the DGPC cultural equipment that recovered the most in terms of number of entries, moving away by 29% compared to the reference year (2017). Meanwhile, Museums and Palaces registered a drop of approximately 40% in 2022. This fact can be strongly associated with the role that tourists' online opinions and user-generated content play as mediators of the tourism experience on social media and highlights an emerging virtual tourism culture (Sosyal et al, 2022).

## **PROMOTION OF THE DESTINATION**

The presence on various social media channels demonstrates the high relevance of social media marketing (Bosio et al, 2018). Likewise, tourists use all of the sources available to get information about the destination, and therefore informational content known as user-generated content (UGC) is much more reliable as it is created without any expectation of profit. Furthermore, user-generated data and content is a very promising resource both for collecting macro-level travel statistics on visits to tourist destinations and for understanding and potentially predicting mobility patterns for specific cultural attractions and events (Sosyal et al, 2022).

In agreement with the theories adopted by the authors Stuedahl (2009), Liew (2014) and Hammou et al (2020), it is clear that social media is a veritable medium for the communication and promotion of cultural heritage and therefore tourism operators and organizations should assume responsibility for

its communication and promotion, which will shorten the distances among organizations and tourists. In this sense, social media will provide a truly revolutionary approach to cultural heritage practice.

There are three phases that influence the process of shaping the travel experience, according to the research work of Milano, Baggio and Piattelli (2010): the pre-experience, the experience during the trip or stay and the post-experience. Based on these theories, it may be concluded that communication and promotion of cultural heritage on social media has a profound impact on all three phases of the travel experience. Ranging from inspiring and planning the trip to enhancing the on-site experience and facilitating post-trip reflection and sharing, social media amplifies the influence of cultural heritage, promotes community engagement, and contributes to a more enriching and meaningful travel experience.

Now delving deeper into the three phases that influence the process of shaping the travel experience:

- **Pre-Experience:** this phase occurs before the actual travel experience takes place. During this phase, travellers engage in various activities such as gathering information, making travel arrangements, and setting expectations for the trip. Factors like previous experiences, social interactions, media exposure, and personal characteristics play a significant role in shaping the expectations and motivations of travellers. The pre-experience phase greatly influences the overall perception and satisfaction of the travel experience.
- **Experience during travel or stay:** this phase refers to the period when the traveller is physically present at the destination. It involves the direct experience of the destination, including interactions with the local culture, attractions, activities, and services. The quality of tourism infrastructure, the behaviour of residents, the authenticity of the experiences, the overall ambiance of the destination all contributes to shaping the travel experience during this phase. Positive experiences during this phase can lead to enhanced satisfaction and positive word-of-mouth recommendations.
- **Post-Experience:** this phase occurs after the traveller has returned from the trip. During this phase, travellers reflect on their experiences, memories, and emotions associated with the journey. This phase includes the process of evaluating the trip, sharing experiences with others, and integrating the travel experience into one's personal identity and storytelling. The post-experience phase also includes the formation of long-term impressions and attitudes toward the destination, which can influence future travel decisions and behaviours.

These three phases (pre-experience, experience during the trip or stay and post-experience) interact and influence each other, shaping the overall travel experience and travellers' satisfaction levels. Understanding these phases can help destination managers and marketers design strategies to enhance the travel experience and create positive long-term effects for both travellers and the destination itself. It is worth mentioning that the strategy used by Visit Portugal on Instagram, user-generated content, is one of the greatest examples when it comes to "source of inspiration" for all potential tourists who want to visit Portugal. Using user-generated content on Instagram accounts related to the tourism of Portugal can offer several benefits: authenticity and trust that will significantly influence the user's decision-making process when planning a trip; increased engagement as it helps to build a sense of community and fosters a stronger connection with the audience and encourage followers to like, comment, and share the content; diverse perspectives, by featuring

content from various travellers, different aspects of Portugal's tourism can be highlighted, including popular destinations, hidden gems, local traditions, and unique activities; user-generated content can also act as social proof, demonstrating that others have enjoyed their experiences, which can leverage the "influencer effect"; and lastly, it has the potential to go viral, reaching a much larger audience than traditional promotional content.

## **PROMOTION OF THE PACKAGE AND/OR COMPANY**

Through this exploratory study and through the interviews carried out both to professionals in the field of tourism and culture, as well as to individuals with a special interest in culture and heritage in Portugal, it appears that one of the major points is the promotion of the packages and/or of the tourism organizations. In this way, the strategy of social media marketing adopted by the chosen organizations for this research includes, in most cases, the promotion of the packages and/or of the company itself. Thus, the character of the posts is clearly to promote the services offered by a particular company related to these sectors, displaying an informative nature, and providing to its target audience details about its services, opening hours, testimonials, etc.

Regarding museum profiles, it can be noted that museums choose to use a "curated content" strategy, which basically consists of curating visually appealing content and educational content related to their collections, exhibitions, or historical facts. They can highlight specific artefacts, share stories behind them or show behind-the-scenes glimpses of museum operations. This strategy aims to pique the public's interest and create a sense of exclusivity and knowledge. Moreover, museums often promote their events on social media platforms, such as lectures, workshops, or temporary exhibitions, in order to promote their work: sharing details, highlights and inviting followers to participate. This strategy creates a sense of anticipation and encourages public participation in museum activities.

While social media promotion is an ongoing effort, consistency, creativity and a genuine connection with the target audience are the key when it comes to building a strong online presence for any cultural tourism package and/or company in Portugal. As such, including the promotion of the packages and/or the company in the social media marketing strategy is indeed an effective way to reach a wider audience and generate interest in the offerings. However, there are some key aspects to consider when promoting cultural tourism and heritage on social media: setting the objectives, determining the target audience, developing a content strategy that showcases Portugal's cultural richness, defining the appropriate social media platforms, developing a content strategy and encouraging user-generated content, engaging with the audience, in some cases collaborating with some influencers and travel bloggers can help amplify a company's message, allocating a budget for social media advertising, measuring performance and, finally, encouraging reviews and testimonials from satisfied customers.

The images 4, 5 and 6 below illustrate examples of promotional actions of the Calouste Gulbenkian Foundation on Instagram. Through these pictures, it is possible to verify that Gulbenkian's social media marketing strategy, and in this case specifically for Instagram, resorts to high-quality images and videos that showcase its packages and services, capturing the essence of its cultural initiatives and highlighting its spaces. In addition, Gulbenkian uses engaging captions that provide context, share

interesting facts about their packages or evoke emotions related to the cultural experiences they offer. Moreover, the captions always include engaging and personalized hashtags.

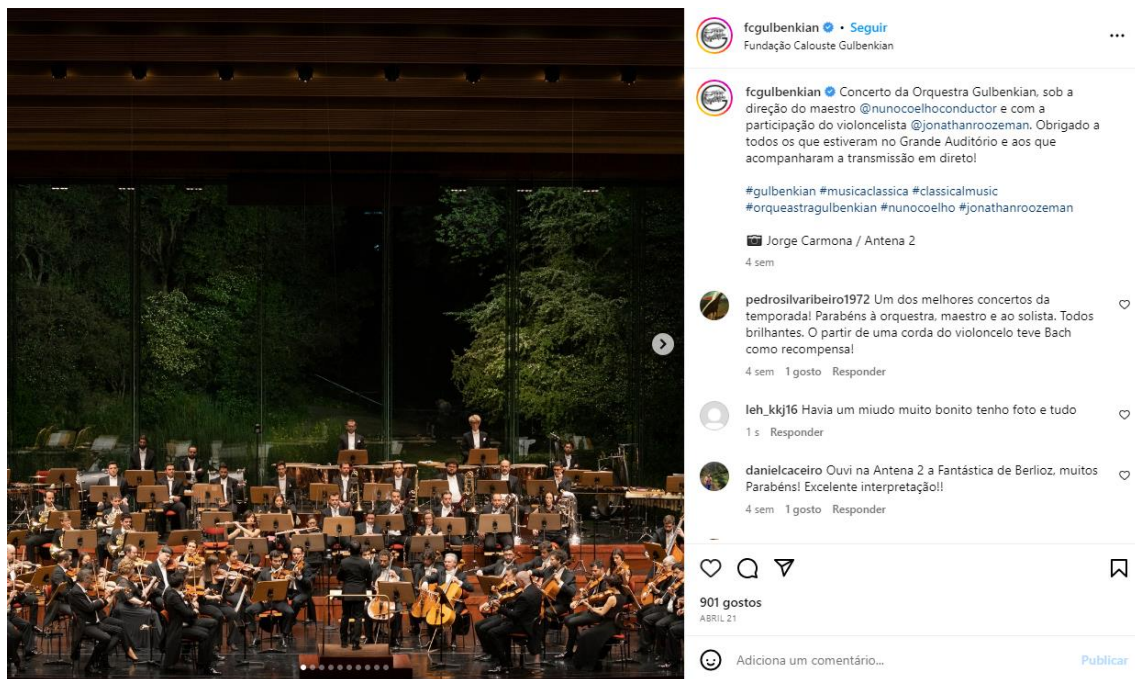


Figure 4 – Gulbenkian Official Profile on Instagram – Promotion of the company/package.



Figure 5 – Official Profile on Instagram – Promotion of the company/package.





Figure 6 – Official Profile on Instagram – Promotion of the company/package.

## PROMOTION OF EVENTS

The profiles of the entities presenting events, or the profiles aimed at specific events such as “The Black Cat Cinema”, “Jardins Abertos” and “Feira do Livro”, provide all the necessary information and encourage the participation in the events. This social media marketing strategy relies on photographs and videos created by the entities which are related to past events, in order to make the target audience aware of the event itself and make them want to get to know and participate in the event.

These types of profiles share "pre-event buzz", such as teasers, behind-the-scenes glimpses and announcements related to upcoming events. This type of strategy aims to generate excitement and engage followers by giving them a sneak peek of what they can expect. During the event, profiles provide real-time updates, photos and videos that showcase key moments, performances, or attractions. This strategy encourages the public to participate in future editions. Moreover, it is also a common practice of this type of profiles to provide early access to ticket sales or special discounts through stories and/or posts on Facebook and Instagram. In addition, profiles can also encourage attendees to share their experiences and generate user-generated content in their feeds or stories. And finally, profiles share highlights and recaps after the events, which can include photo galleries, video compilations or testimonials, a strategy that encourages them to participate in future editions as well.

Most importantly of all, these profiles must regularly analyse engagement, monitor feedback, and adapt their strategies based on the preferences and trends of their audience. Combining multiple strategies and staying active on social media, they can effectively promote their events, interact with their audience, and build a loyal community.

To exemplify the "event promotion" strategy, as well as some official profiles of the events in question, images 7, 8, 9, 10, and 11 illustrate all the essential details for successful communication and awareness of the events under consideration. Also, images 9 and 10 were used in a "carousel" format, a strategy that has been quite successful. These posts allow users swipe through multiple images or videos within a single post. "Carousel" communication enables brands to tell a more comprehensive and engaging story and tend to generate higher engagement rates compared to single-image posts, as users are more likely to swipe through the "carousel" to view all the content, instead of reading all the captions/descriptions.



Figure 7 – Palácio Marques da Fronteira - Official Profile on Instagram – Promotion of the event “Jardins Abertos”.



Figure 8 – Palácio Marques da Fronteira – Promotion of an event.



Figure 9 – Palácio Marques da Fronteira – Promotion of an event.





Figure 10 – Palácio Marques da Fronteira – Promotion of an event.

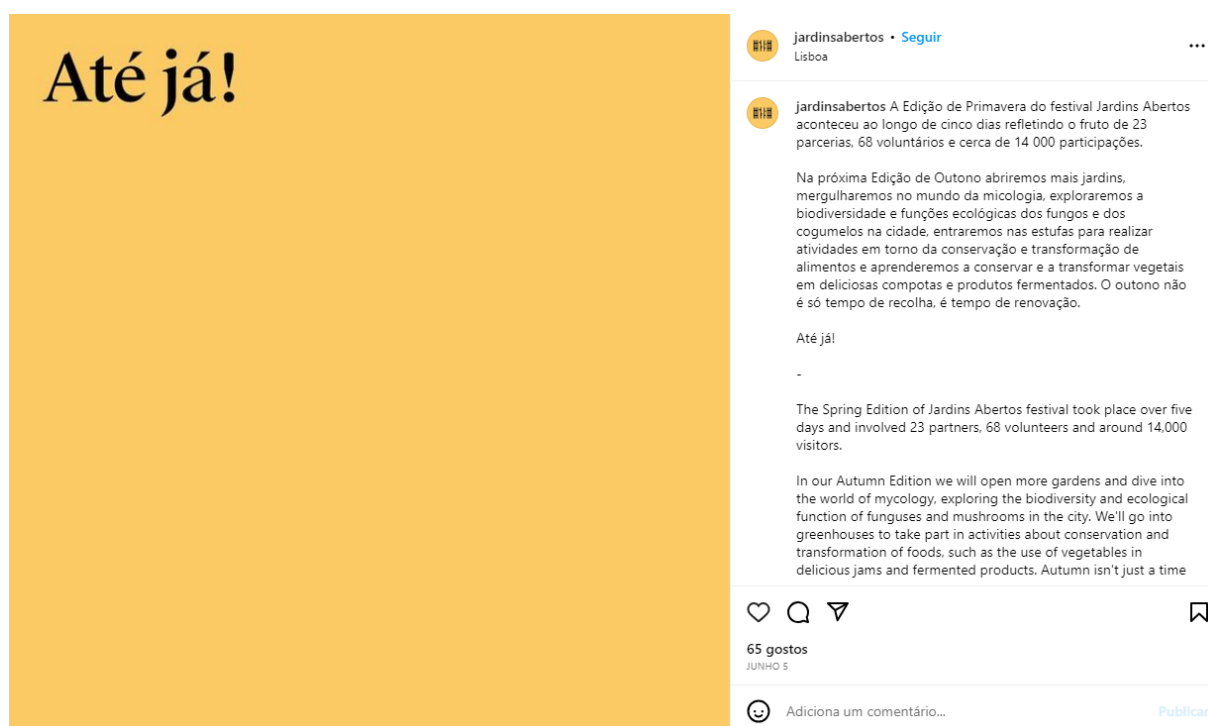


Figure 11 – Palácio Marques da Fronteira – Promotion of an event.

## LINKS

Several Portuguese event profiles on Instagram use the "link in bio" feature to promote their events. This feature allows profiles to include a clickable link in their profile description, directing users to a specific web page or landing page. In addition, these links can also be displayed in the stories of Instagram profiles. Most profiles automatically post on Facebook and Instagram at the same time. However, on Facebook there is the possibility to post and mention a link in the description, which is something widely used by the entities studied in this research.

An excellent example of an institution that is utilizing this strategy is the Serralves Foundation, a renowned institution located in Porto, Portugal, which is dedicated to contemporary art, architecture, and landscape, and which encompasses the Serralves Museum of Contemporary Art, the Serralves Park and the Villa de Serralves. The Serralves Foundation has been actively using Instagram features, such as InstaStories and bio links, to interact with its audience and provide them with valuable information and updates. Thus, InstaStories have been used to share dynamic and temporary content, where the Serralves Foundation presents exhibitions, gives a sneak peek into upcoming events, provides exclusive experiences and interactive polls and quizzes to encourage audience participation. The bio section of its Instagram profile includes its official website, online ticketing platform and current exhibitions. These links provide a convenient way for audiences to access more information or make bookings directly from your Instagram profile. By effectively using InstaStories and bio links, Fundação de Serralves can leverage Instagram as a powerful tool to engage with their audience, promote their cultural offerings and drive traffic to their website or other online platforms. This allows them to maintain an active presence on social media and keep up with the latest trends.

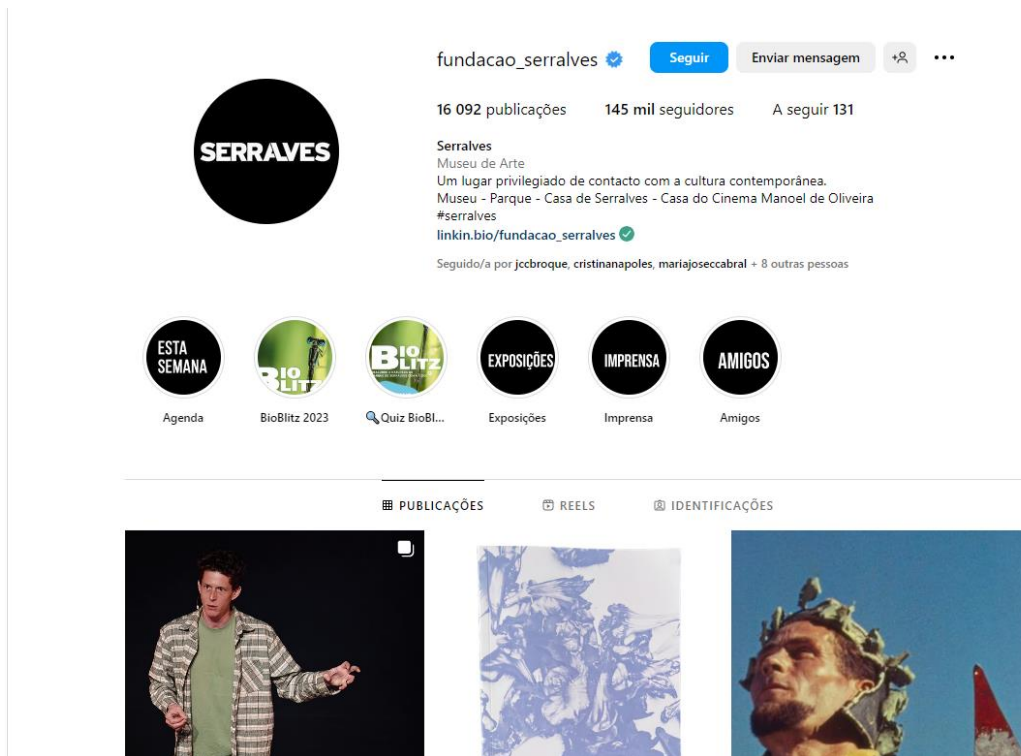


Figure12 – Serralves Foundation Profile on Instagram with the inclusion of “link in bio”

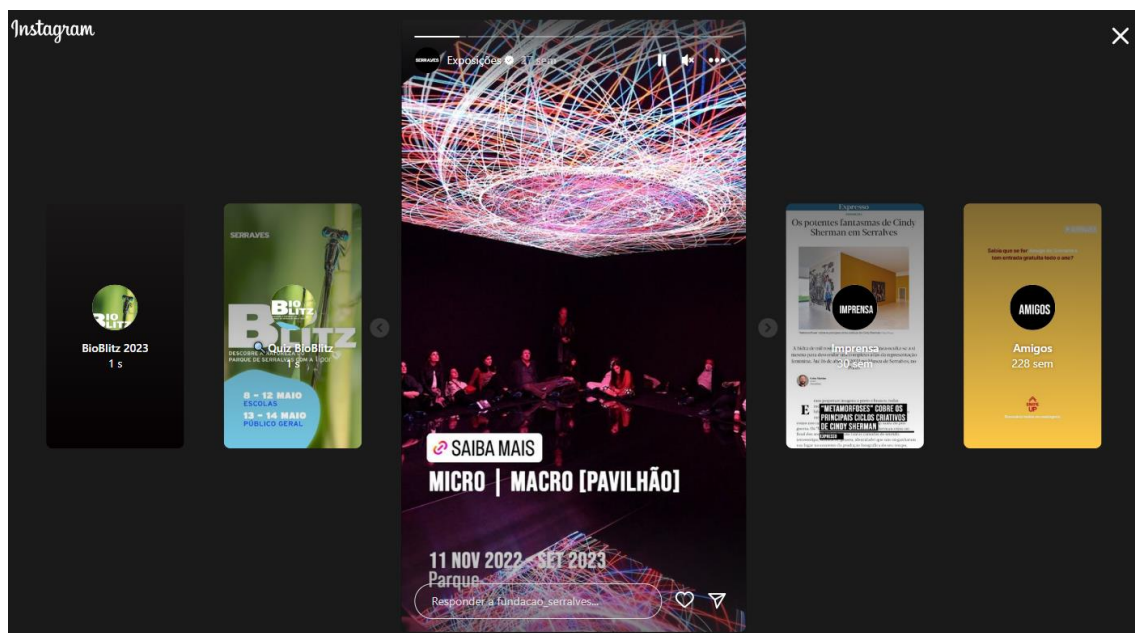


Figure 13 – Serralves Foundation Profile on Instagram, promoting cultural activities on instastories, including links

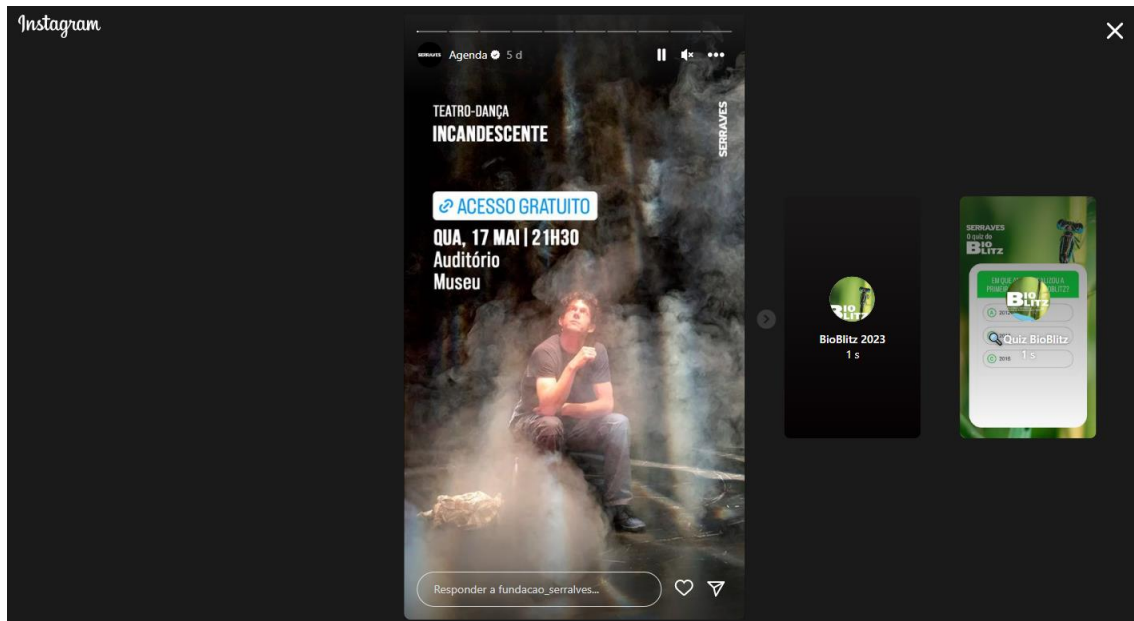


Figure 14 – Serralves Foundation Profile on Instagram, promoting cultural activities on instastories, including links

Parques de Sintra is another prime example of a Portuguese organization that has made effective use of links in bios and Instagram stories to engage with its audience, showcasing the stunning architecture and history of the Palaces on Instagram, often sharing links to its website and ticketing platform so visitors can learn more about how to plan their visit.

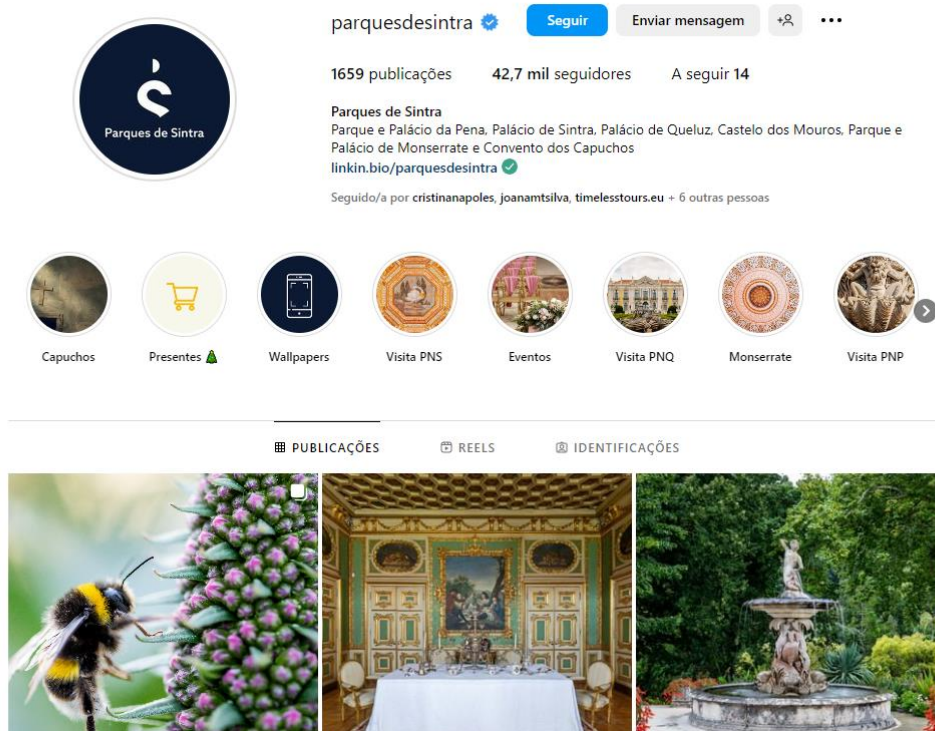


Figure 15 – “Parques de Sintra” Profile on Instagram, using links in bio

## VIRTUAL REALITY AS A TOURISM TRIGGER

The usage of VR technology brings many benefits to the tourism sector as it can enhance tourists' experiences and help organisations to add value to their products as well as increase sales. VR can help tourism organisations and institutions to promote points of interest and add additional information that can be used to enhance the discovery of monuments, sites, or attractions, as well as hotels. Consequently, VR may therefore be implemented in museums or cultural heritage sites, especially to attract more visitors. Thus, the implementation of VR solutions has the potential to reshape the design of exhibitions and the very environment of museums, influencing the attention of visitors. Besides, this type of technology also develops and fosters new tourist destinations to provide interactive cultural and heritage experiences, as it may bring the history of the site to the tourist, contributing to the preservation and the recognition of cultural heritage sites (Martins et al, 2020).

There are several advantages of digital images of heritage and tourism: immersive visualisation in virtual reality and non-invasive and fast capture of historical and cultural sites (Guerra et al, 2015). In addition, it improves the tourist experience, contributes to cultural preservation, and helps to showcase the beauty and uniqueness of Portuguese tourist destinations. Aligning to this observation, a Portuguese company offering design and web development services, is a world leader in projects involving 360° photography, high quality virtual tours and innovative applications with panoramic images that allow an immersive experience (Guerra et al, 2015).

However, there are some counterpoints. During the interview, one of the managers of Turismo de Portugal, makes some not so optimistic approaches regarding the implementation of VR in the tourism industry. The manager states that virtual reality is something that is stagnant, because there is a serious difficulty on the part of some entities linked to cultural and heritage tourism to implement and adapt their strategies. In the counterpoint presented, it appears as an intervening factor that modifies the relationships between people and the way of making tourism, because it is an industry that lives, essentially, of the relationships between people, cultures, and communities. Conversely, the authors Godovykh et al (2022), state in their research that virtual tourism experiences may not be a replacement for physical travel but can be seen as "another form" of travel, rather than a mere replacement.

## **USER EXPERIENCE WITH VR TOURISM EXPERIENCES**

Nowadays, a significant part of strategic planning for cultural institutions encompasses understanding and improving the visitor experience, which is a continuous process, and the matter has proven to be intricate and as complex as the diversity of human beings. It is well known that previous experiences, gender, age, and many other factors that contribute to the differences and diversity of human nature eventually shape the outcome of an individual's visit to a museum. Some identified factors are personal, which include the visitor's existing expectations and preferences, some are social, which are related to human connections during the visit, and some are physical, which are related to the space and content of the exhibits (Marques D., 2018).

Authors Godovykh et al (2022) concluded in their study that virtual tourism experience is related to users' emotional responses, attitudes, and behavioural intentions. In line with these findings, authors Zhang et al (2021) alongside authors Lee & Oh (2007) affirmed that virtual tourism has a crucial role in

increasing familiarity of destinations, reducing tourist's anxiety or risk and affecting decision making about the mode and experience of travel.

To make this discussion even more assertive, it was possible to add an even more personal touch, since it became possible to live some virtual tourism experiences in some Portuguese museums. Starting with the immersive and state-of-the-art virtual reality experience "flying over Lisbon", organised by the Lisbon Story Centre Museum, which permits one to experience the magical sensation of flying over the Lisbon area in a unique jetpack, the conclusion is that VR is a trigger for Portuguese cultural tourism, since it promotes its monuments, telling in a widespread way their stories and also showing in a widespread way the places to visit. Anyone who is interested in technology and innovation will easily join this kind of experience and feel motivated, curious, and dazzled by the experience. In addition, it was also possible to visit the Frida Kahlo exhibition at "Mãe D'Água" in Lisbon, which aims to recreate the experience of visiting a physical exhibition, but in digital format. The exhibition consists of a curated collection of Kahlo's paintings, drawings, and other artworks, which showcase her unique style and powerful expression. Upon entering the virtual experience, the visitor is greeted with information about Frida Kahlo's life, her artistic influences and her significance in the art world. It creates a sense of immersion by utilising 360-degree panoramic views. This enables users to navigate the exhibition space, virtually "walking" from one artwork to another, just as they would in a physical gallery. Moreover, the VR exhibition includes ambient sounds and music to enhance the overall atmosphere and create a more engaging experience.

Nonetheless, virtual experiences have been found to be advantageous and therefore there are notable sensations strongly associated with virtual experiences and social interaction features, such as visual, auditory, and occasionally tactile VR offerings, which further enhance guest satisfaction and loyalty (Godovykh et al, 2022). The present study allowed to determine some specific sensations highly related to virtual tourism experiences. The sensations most evidenced through the netnography method and the interviews are: enthusiasm and curiosity, loneliness, and low participation in VR experiences.

- **Enthusiasm and curiosity:** the virtual tourism experience in Portuguese cultural museums is likely to generate a sentiment of enthusiasm and curiosity, as individuals engage with the rich cultural heritage, explore interactive features, access rare artifacts, and have the opportunity to learn and discover in an innovative way. According to Godovykh et al (2022), travellers are likely to be fully immersed in the virtual experience, disconnected from the real-world environment, participating in the realism of the virtual scenarios, as well as communicating revisit intentions similar to the actual experience of the physical destination. The authors have further pointed out that various virtual experiences may have an emotional involvement, bringing "enjoyment" to the foreground, which will consequently lead to strong memories for all individuals who experience it.
- **Loneliness:** while virtual tourism can provide opportunities to explore new places and cultures from the comfort of one's own home, it may also lack the physical presence and social interactions that are often associated with traditional travel. This way, some individuals may find virtual tourism to be a solitary experience, especially if they are exploring destinations without any companions or if the virtual environment fails to provide meaningful interactions. The absence of real-time connections and the inability to physically immerse oneself in the surroundings can contribute to feelings of loneliness or a sense of detachment. On the other

hand, some people might enjoy the tranquillity and independence that virtual tourism offers. They may appreciate the ability to explore at their own pace without the need to coordinate with others or deal with the challenges of physical travel. For these individuals, virtual tourism can be a source of relaxation and introspection rather than loneliness. It's important to note that virtual tourism experiences can be enhanced through the integration of social elements, such as virtual tours with live guides or the option to connect with other travellers in virtual environments. These features can help mitigate feelings of loneliness and create a sense of community, even in a digital setting. A study found that temporary feelings of loneliness and isolation were frequently mentioned when wearing wearable devices. While the users had fun, they also felt isolated in the VR environment and did not connect in the way they wanted to. "Does wearing bulky glasses that prevent face-to-face contact really bring us closer to friends and family?", "Or does it create distance and isolation?" It has been found that tourists experience a sense of isolation during VR tourism experiences as users are unable to receive instant feedback and VR apps do not offer opportunities for natural interaction (Nawijn et al 2021).

- **Low Participation in VR experiences:** visitors encounter a variety of new media technologies, ranging from high-definition video and animation, which includes music and sound effects, touch screens, and 3D model manipulation that host most interactive experiences. The implementation of technologies, however, depends on the theme of a museum, and there may be different specific objectives for using interactives on site. Nevertheless, there are inevitable issues that individuals eventually encounter, which are not exactly whether or not a museum or other tourism organization includes interactive technology, but rather how to use it (Marques D. 2018). On the basis of the theory presented and the testimonials from the interviews with individuals with special interest in culture, heritage, tourism, and technology, it was found that some individuals have more difficulty in accessing this type of technology due to a lack of information and knowledge about the subject. People have a general understanding of the subject, but when questioned in a more objective way, they're not quite sure of what it actually consists of. It was noted that the vast majority of individuals have already had some experience related to this theme, from interactive exhibitions that joined the traditional method of visiting a museum, using interactive technology, to online 360 degree visits, through the museums' websites, especially during the pandemic.

However, some of the reasons strongly linked to low participation in VR experiences in culture and tourism in Portugal may be related to the following topics:

- **Limited awareness:** people may not be aware of the availability and benefits of virtual experiences in culture and tourism. The promotion and marketing of such experiences may be insufficient, resulting in low visibility and limited public knowledge.
- **Lack of technological access:** virtual experiences typically require access to suitable technology and a stable internet connection. In some cases, individuals may not have the necessary equipment or internet connectivity to engage in virtual experiences effectively.
- **Preference for traditional experiences:** Portugal has a rich cultural and tourism heritage, attracting visitors who may prefer traditional, physical experiences over virtual ones. The allure of historical sites, stunning landscapes, and vibrant cities may overshadow the appeal of virtual alternatives for some people.

- **Language barriers:** language can be a significant barrier for individuals who do not speak Portuguese or have limited proficiency in English and/or Portuguese, as many virtual experiences may not offer translations or multilingual options.
- **Limited interactivity and engagement:** virtual experiences may not always replicate the same level of interactivity and engagement as physical experiences. Some people might prefer the personal touch and direct sensory engagement that comes with visiting museums, historical sites, or natural landmarks in person.
- **Perception of reduced value:** virtual experiences may be seen as less valuable compared to physical experiences, leading to a reluctance to participate. Some individuals may associate virtual experiences with lower quality or authenticity, which can deter their interest.

## VR INTO A MARKETING STRATEGY IN THE CULTURAL TOURISM AND HERITAGE SECTORS

The virtual world brings new forms of exchange and communication between its users, according to Rodrigues (2017). Incorporating communication technologies, and combining them with interactive design, brings new opportunities to the marketing universe, as organisations can become more creative and reach new consumer markets. Nevertheless, the authors Zhang et al (2021) claim that although virtual tourists have been available for more than a decade, it is still relatively unexplored by the most tourists. Hence, opinions on virtual tourism remain controversial due to the sharp distinction between virtual tourism and face-to-face tourism, and the effects this comparison has on tourists' decision-making, evaluation, and behaviour.

The authors Godovykh et al (2022) concluded in their study that the use of virtual tourism experiences may contribute to tourism research in several ways. First of all, it will assure optimal intangible experiences, which are difficult to provide in real contexts. Also, it will then facilitate the objective measurement of the temporal dimensions of the tourist experience at different moments before, during and after the virtual trip. Then, it will allow the study of subjects in natural virtual environments, taking into account the levels of immersivity and realism of virtual scenarios. Lastly, it will help to avoid self-report biases by observing tourists' actual behaviour and collecting sensor and mobile device-based psychophysiological responses. Besides, in the case of virtual destinations, the online environment will not constitute a limitation to research, because people will behave in real destinations and immerse themselves in a virtual experience, perceiving the realism and subsequently disconnecting themselves from the real-world environment. Introducing virtual destinations will also have promising implications for destination marketing and management, for tourism providers and tourists, since it would provide new business opportunities for tourism providers in difficult times, such as crises and peak demand, and create new niche markets for distinctive customer segments. Additionally, virtual destinations may offer new opportunities to people who cannot visit the real destination or for vulnerable population categories (Godovykh et al, 2022).

In the past few years, Portugal has witnessed the appearance of VR-focused businesses and startups specialised in cultural and tourism applications. These organisations intend to provide innovative solutions and virtual experiences to showcase Portugal's rich cultural heritage and diverse tourism offerings. In this way, the strategies incorporating the strategic marketing plan most used by Portuguese entities are as follows:

- **Virtual tours:** VR enables visitors to virtually explore cultural and heritage sites. Using immersive 360-degree videos or interactive VR experiences, visitors are able to virtually visit museums, historical sites and landmarks in Portugal.
- **Historical reconstructions:** VR can recreate historical moments and environments, giving visitors the feeling of being transported back in time. By reconstructing significant events or historical periods, cultural tourism destinations in Portugal can engage visitors in interactive storytelling experiences.
- **Museum Exhibitions:** VR headsets or interactive displays provide virtual access to artefacts, artworks or historical reconstructions within the museum that may not be physically present. This approach greatly contributes to the visitor experience, allowing them to explore exhibits in a more engaging and interactive way.
- **Virtual Cultural Events:** VR has been used to promote and hold cultural events remotely. For example, during the COVID-19 pandemic, virtual reality was used to create virtual versions of festivals, concerts, and exhibitions in Portugal. These virtual events allowed people from all over the world to participate and experience Portuguese culture, even when physical presence was not possible.
- **Marketing Campaigns:** VR experiences are increasingly integrated into marketing campaigns to promote cultural tourism destinations in Portugal. Tourism boards, cultural organizations, and local businesses utilize VR to create captivating and immersive promotional content. This content can be shared on social media, websites, and other digital platforms, attracting potential visitors, and showcasing the unique cultural heritage of Portugal.
- **Education and Interpretation:** VR is used as an educational tool to enhance cultural interpretation and storytelling. Interactive VR experiences can provide historical context, explanations, and audiovisual content to educate visitors about the cultural significance of different sites. This immersive approach fosters a deeper understanding and appreciation of Portugal's cultural heritage.



## 6. CONCLUSIONS AND FUTURE WORKS

This research study aimed to analyze how social media marketing has been used to promote cultural and heritage tourism in Portugal, as well as the context of this market with regard to Virtual Reality (VR) technologies, in which there has been significant technological growth in recent years, allowing Portugal to approach other European countries in terms of technology and innovation. Therefore, this research intended to answer the following questions: 1) “how can social media marketing contribute to the building and strengthening of the Portuguese Cultural Heritage and Tourism” and 2) “how can marketers involve virtual reality into a marketing strategy in the cultural and heritage sectors and provide value from it?”.

For this purpose, a qualitative study was carried out using the “netnography” method and, in addition, some interviews were conducted with users of social networks and cultural activities and with tourism and culture managers in Portugal. The methodology addressed in this study has allowed to verify that the Portuguese cultural and heritage tourism sectors are expanding these technologies, and therefore social media marketing is becoming a powerful tool within the marketing strategy of many entities in these sectors, for the promotion of tourism activities and services. Hence, this investigation has identified that the platforms of social media, namely Facebook and Instagram, have been playing a vital role in the promotion of cultural and heritage tourism, as they are the medium that most impacts the activity of Portuguese entities and organizations. The online presence of such entities and organizations on social media is crucial for the transmission of history and cultural identity. Moreover, the most effective and widely used strategy is “user generated content”, as this humanizes experiences and brings individuals together on social media, creating a kind of online community.

The interviews conducted led to the conclusion that ICTs do indeed characterize today's digital society, with all generations turning to digital platforms for advance information to find details about services, activities, places, monuments, among others, being instantly accessible to everyone around the world. This allows Portuguese entities and organizations to ensure their visibility to a wider audience, reaching new audiences and captivating existing ones, as well as representing places by providing varied information on services. Thus, all the information available on the platforms will have an impact on people's plans.

Regarding the adoption of virtual reality and even augmented reality, it was found that the country is in a phase of exploration and transformation and is therefore at an early stage as there are few companies using them, little dissemination, and few users, due to the fact that tourism is a sector that essentially depends on the relationships between people, cultures, communities and experiences. Piñeiro-Navel et al (2018), have described tourism as an activity in which goods and services are used to create a form of experience, and the experiences are important because they form the basis of each person's life stories. The realization that we are not just concerned with products, but with the stories they can tell us and that we can tell about them, applies perfectly to tourism. People who visit a place, a city, a monument, or a museum are visiting it because they have heard stories about it and want to confirm or deepen those stories by visiting it. At that point, that visit will become the subject of future stories (Piñeiro-Naval et al 2018). However, virtual reality experiences in these sectors have been an opportunity for all cultures and destination communities, although not without inherent risks.

An important point to highlight in this research is that Covid-19 pandemic has accelerated the process of implementing technological experiences, leading entities to look for new ways to reach their target audience, including, for example, 360-degree immersive visits on the official websites, immersive exhibitions in museums and galleries that allow visitors to examine digital replicas in detail, see interactive visualizations and access additional information, improving their understanding and appreciation of the exhibitions. The Lisboa Story Centre Museum and the Calouste Gulbenkian Foundation are strong examples of entities that have adopted this type of technology with significant positive success. In addition, social networks have proven to be a strong source of communication with the target audience, providing all the necessary details about this type of experiences and, in some way, boosting the knowledge of the most "disconnected" part of the audience.

For the future, it will become increasingly important for tourism operators to work in strategic and transparent ways, ensuring the quality and veracity of the information content they produce for social media platforms. It's a fact that we are at the beginning of a shift from the traditional perception of tourism to mobility in virtual reality, now possible thanks to the spread of media and digital devices, in a sort of "second life" where individuals are their own avatar. Virtual travel seems to be about to become the new thing, providing new opportunities and imaginative experiences, so some companies are already moving in this direction (Monaco S. 2018). Furthermore, according to a research study by Cranmer et al (2020), it is concluded that augmented reality (AR) is increasingly being used as a marketing, information and experience channel in the tourism industry, while their study also reveals several dimensions of value that provide important implications for strategy development, implementation and design of tourism experiences. The results reveal that AR is an innovative technology proposed as a tool to enhance tourism experiences, surpassing the current ones.

Within all these scenarios presented, it can be concluded that the new generation is exploiting the potential offered by new digital and communication technologies, using them to promote, build and interpret specific meaningful pathways. In this context, the emergence of the information society is a crucial development affecting the demand for tourism operators (Monaco S. 2018). Therefore, it may be an interesting strategy to increasingly invest in the balance between "traditional visits" with VR experiences in the cultural and heritage tourism sectors in Portugal to improve the overall visitor experience. Traditional visits allow tourists to physically immerse themselves in the cultural and historical aspects of a destination. They are able to explore historical sites, interact with local communities and witness authentic traditions first-hand. These experiences provide a sense of place and authenticity that cannot be replicated through VR. On the other hand, virtual reality experiences can complement traditional visits by offering additional layers of engagement and understanding. Virtual reality technology can recreate historical moments, ancient civilizations, and cultural practices in a highly immersive and interactive way. This allows visitors to gain a deeper insight into Portuguese heritage and experience elements that are no longer present or accessible in their original form. By finding a balance between traditional visits and virtual reality experiences, tourists can enjoy the best of both worlds. They can explore physical sites, engage with local culture, and appreciate the tangible aspects of Portuguese heritage. At the same time, they can also use virtual reality to delve deeper into historical contexts, watch virtual reconstructions and take part in interactive educational experiences that enhance their understanding of the country's heritage.

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## APPENDIX

### A. Calouste Gulbenkian Foundation Online Presence on Instagram

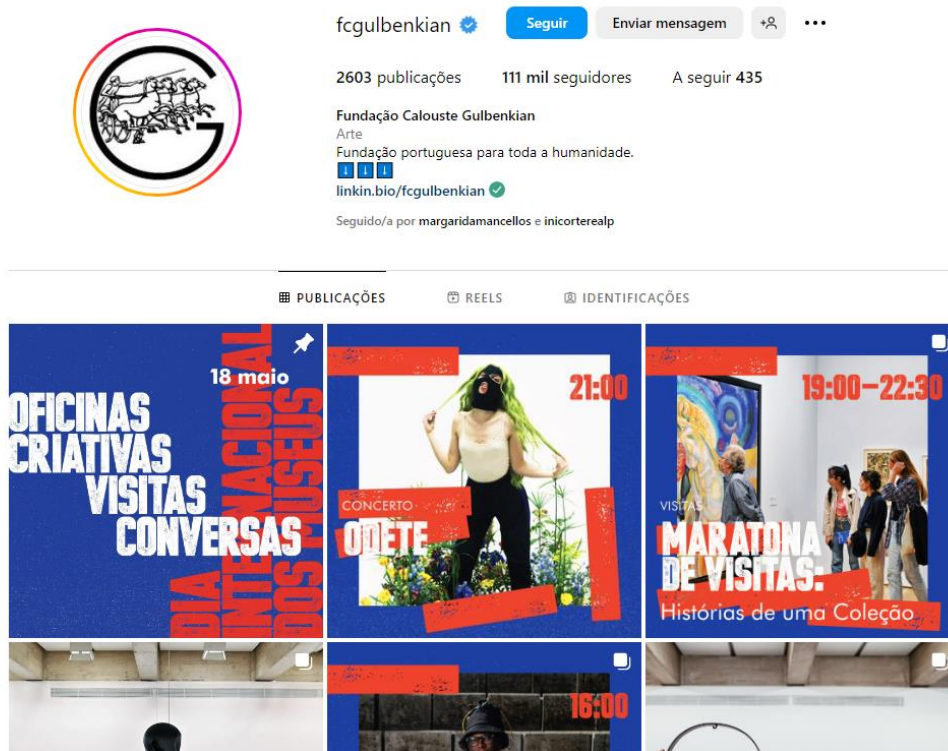


Image 1 – Total of Followers



Image 2 – Promotion of its activities and services



Image 3 – Promotion of its activities and services



Image 4 – Promotion of its activities and services



## B. Calouste Gulbenkian Foundation Online Presence on Facebook

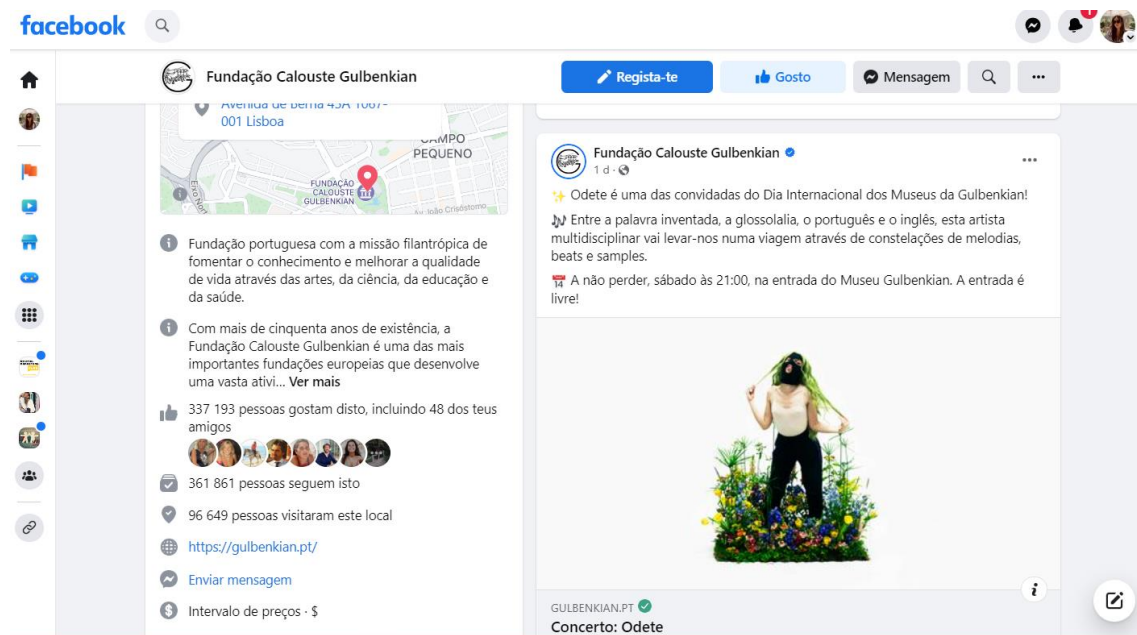


Image 5 – Total of Followers and Page Likes

## C. Calouste Gulbenkian Foundation – 360º Virtual Tour

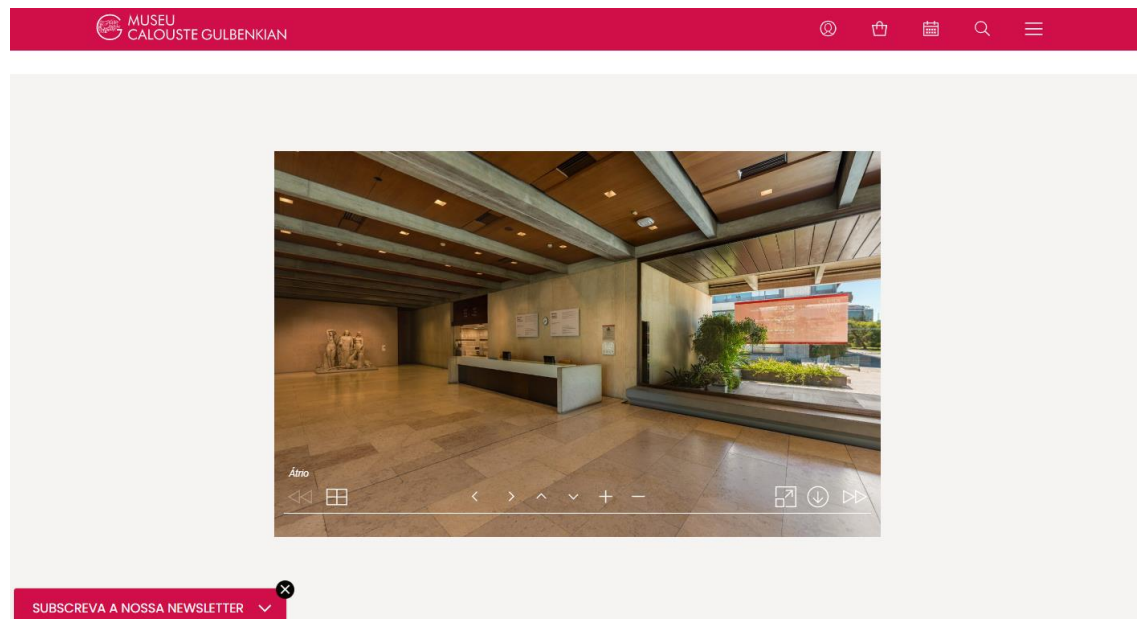


Image 6 – 360º Virtual Tour

## D. Serralves Foundation Online Presence on Instagram

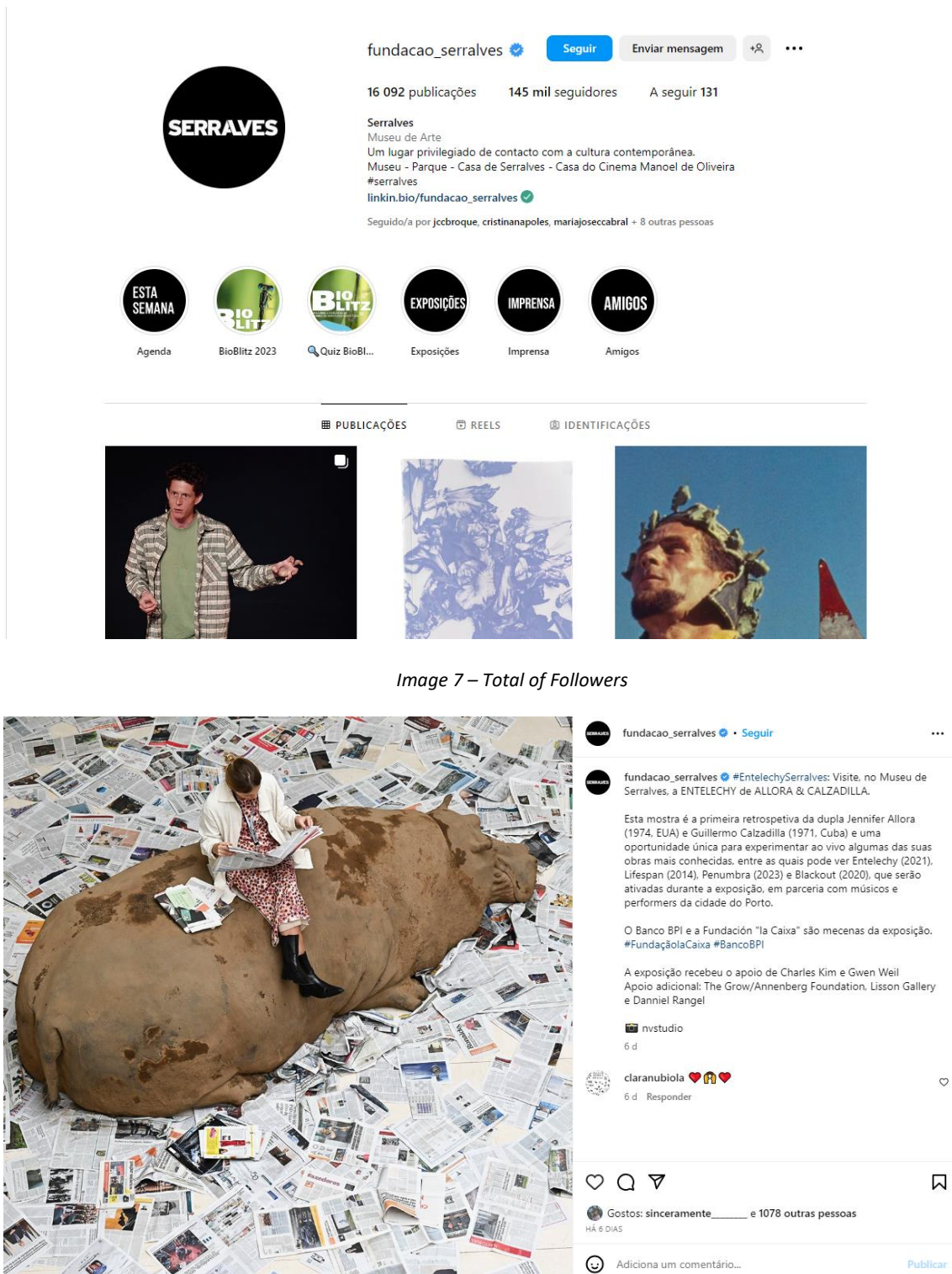


Image 7 – Total of Followers

Image 7 – Promotion of its activities and services



Image 8 – Promotion of its activities and services



Image 9 – Promotion of its activities and services



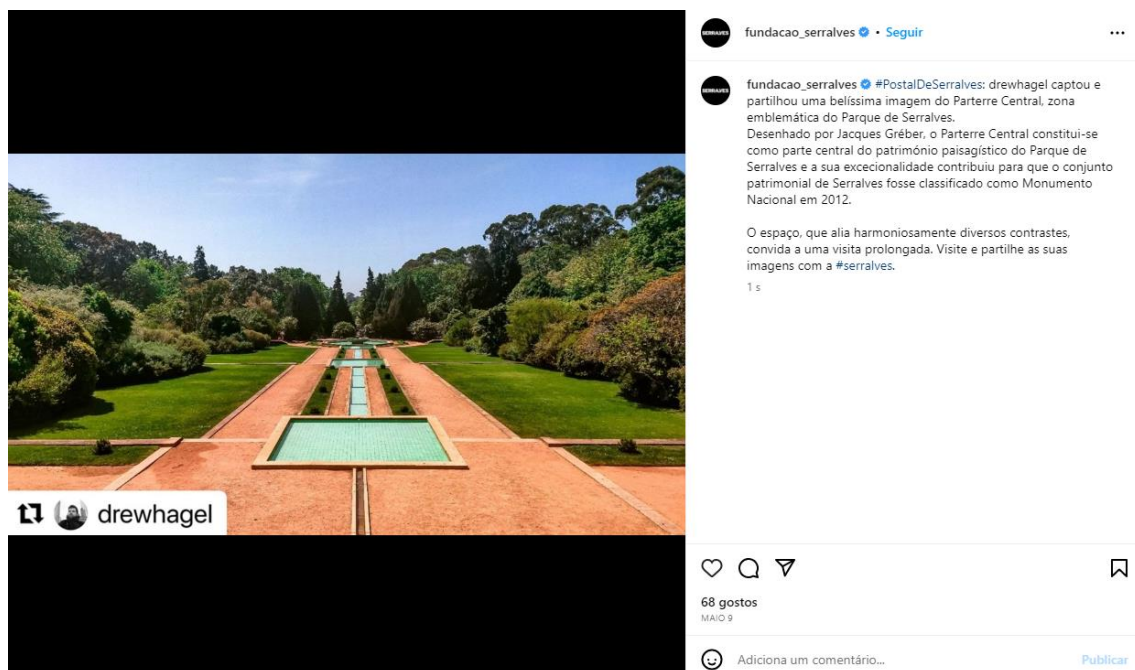


Image 10 – Promotion of its activities and services

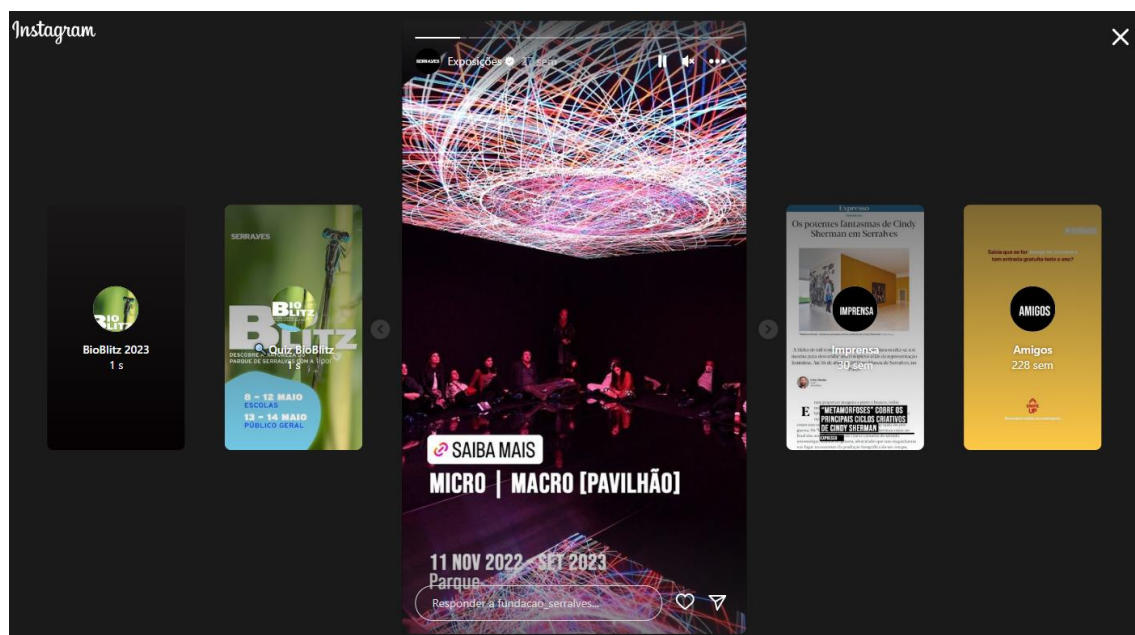


Image 11 – Promotion of its activities and services via InstaStories

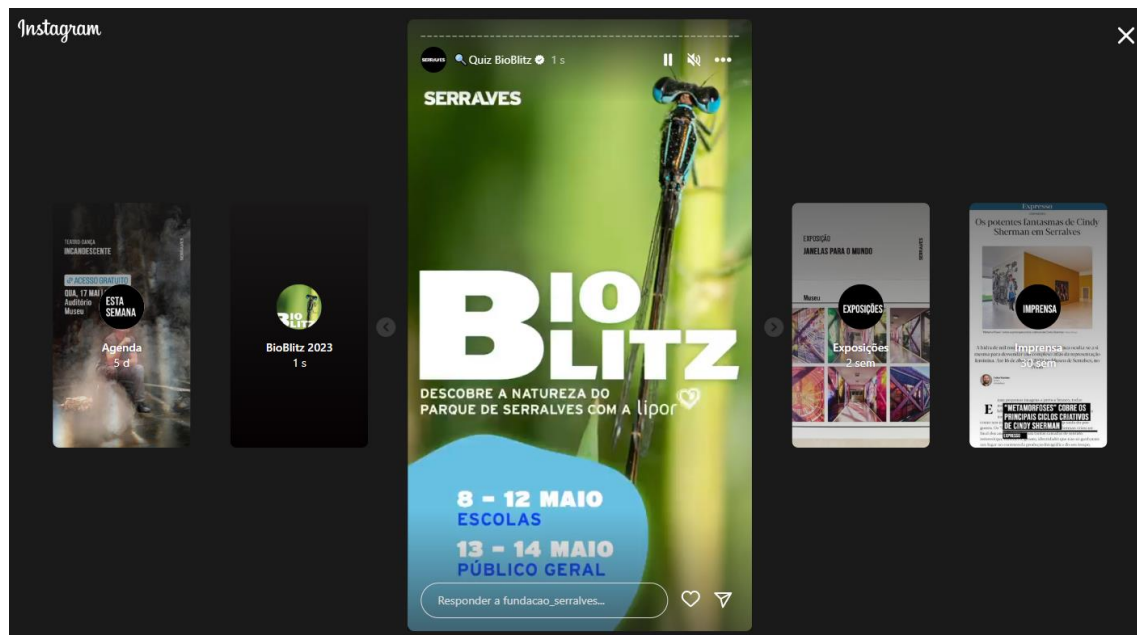


Image 12 – Promotion of its activities and services via InstaStories

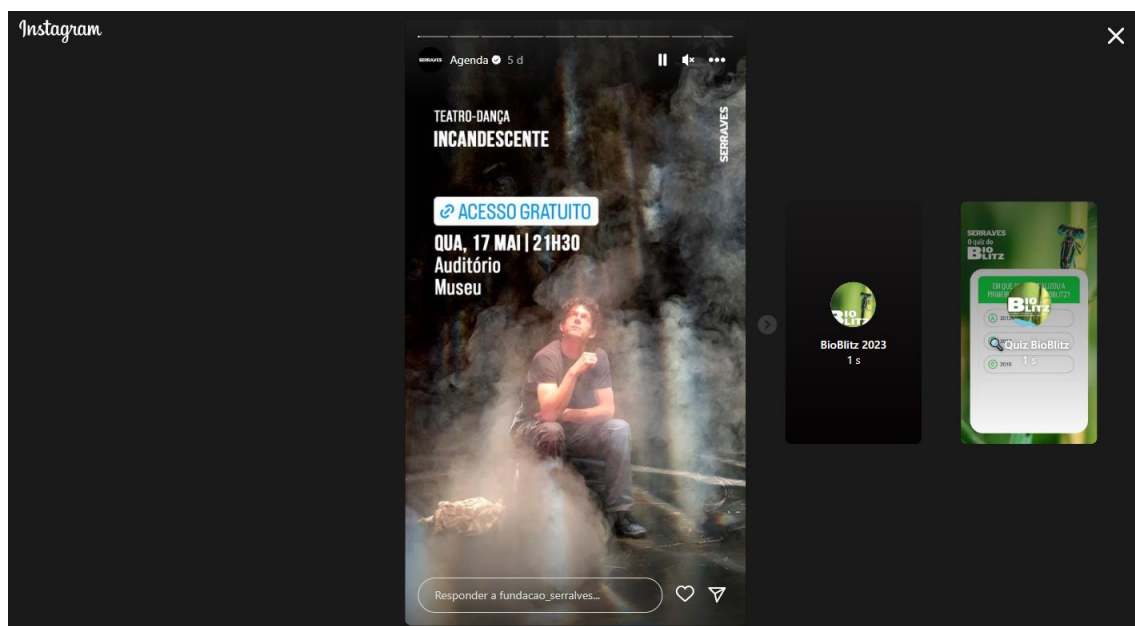


Image 13 – Promotion of its activities and services via InstaStories

## E. Serralves Foundation Online Presence on Facebook



Image 14 – Total of Followers and Page Likes

## F. DGPC – “Direção-Geral do Património Cultural” Online Presence on Instagram

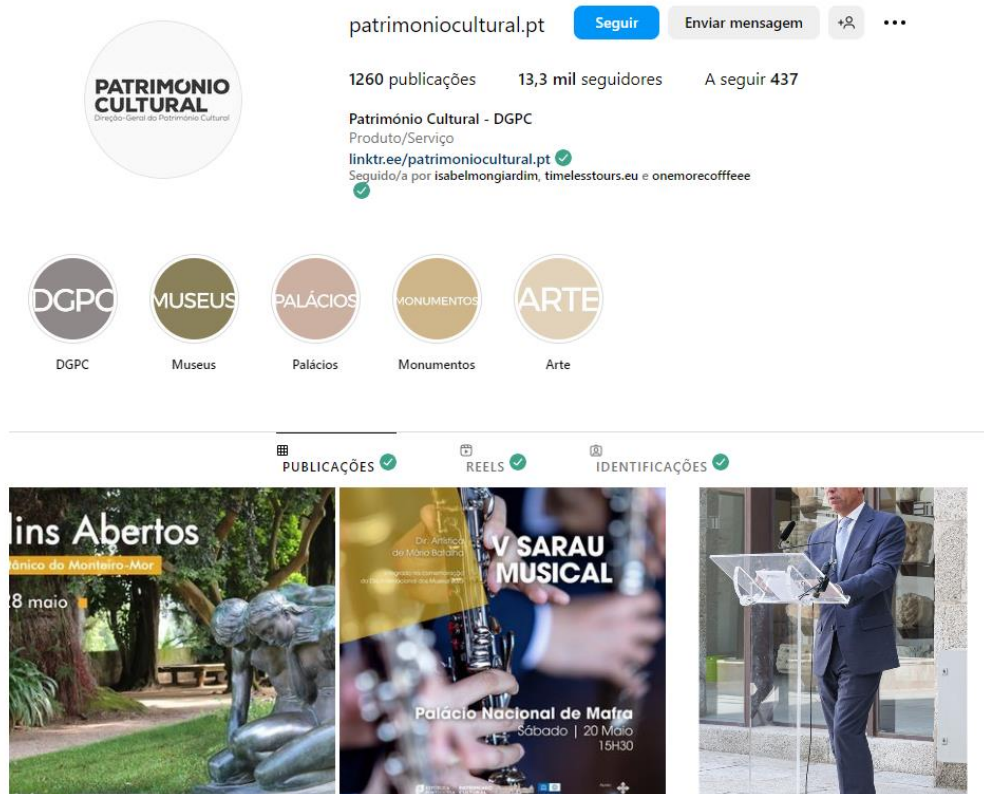


Image 15 – Total of Followers





Image 16 – Promotion of its services and activities

## G. DGPC – “Direção-Geral do Património Cultural” Online Presence on Facebook



Image 17 – Total of Followers and Page Likes

## H. “Lisboa Secreta” Online Presence on Instagram

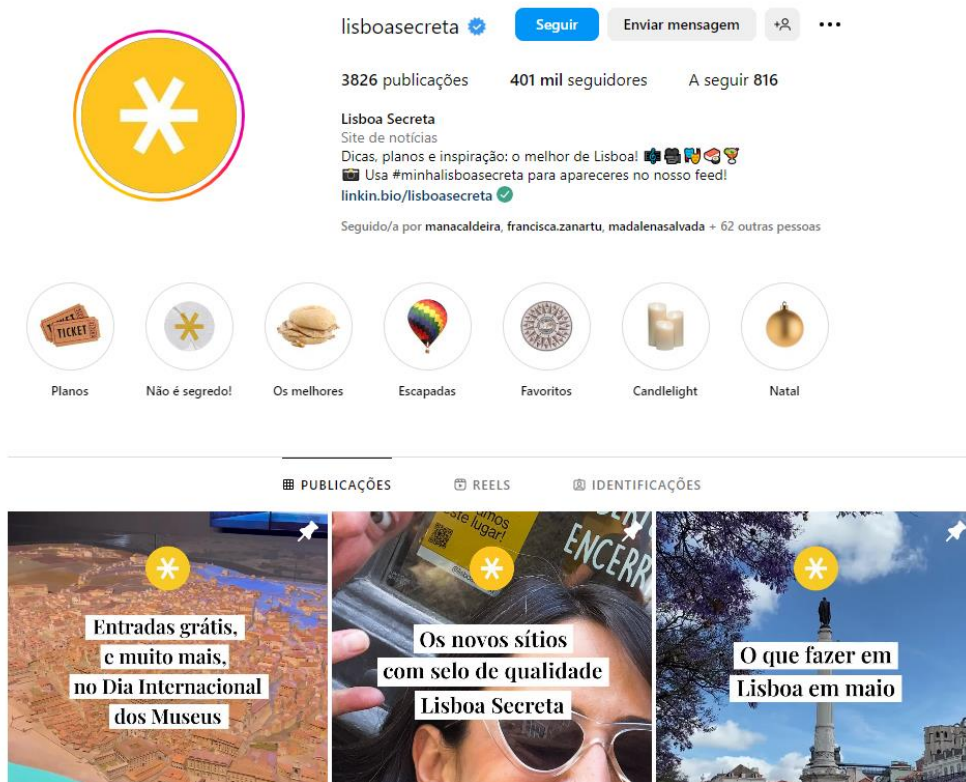


Image 18 – Total of Followers

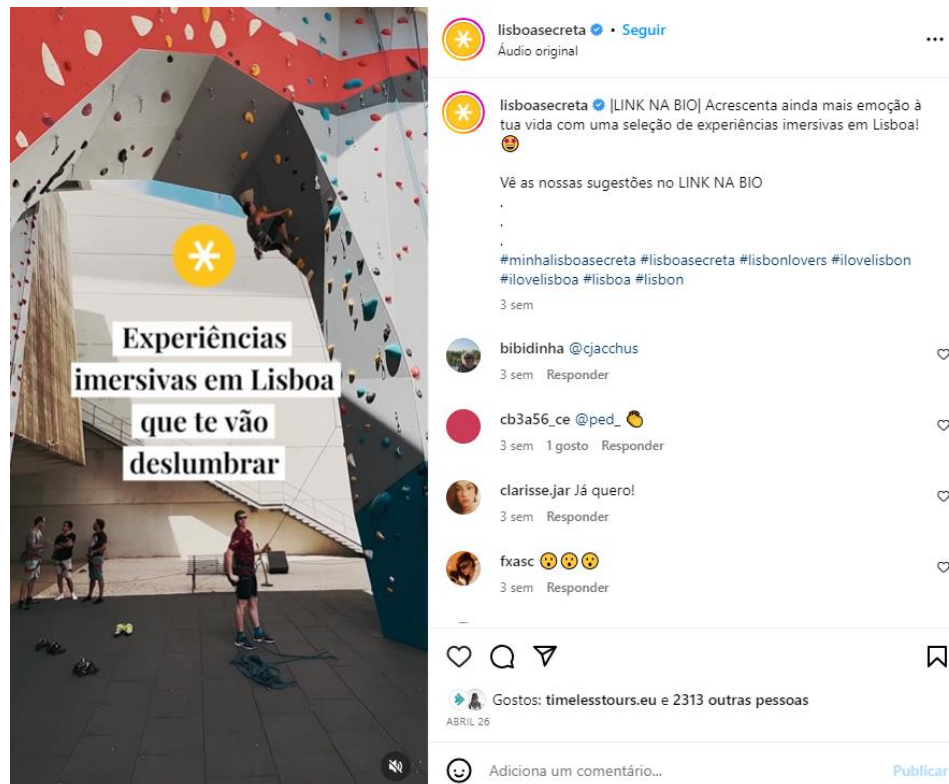


Image 19 – Lisbon’s Online Guides



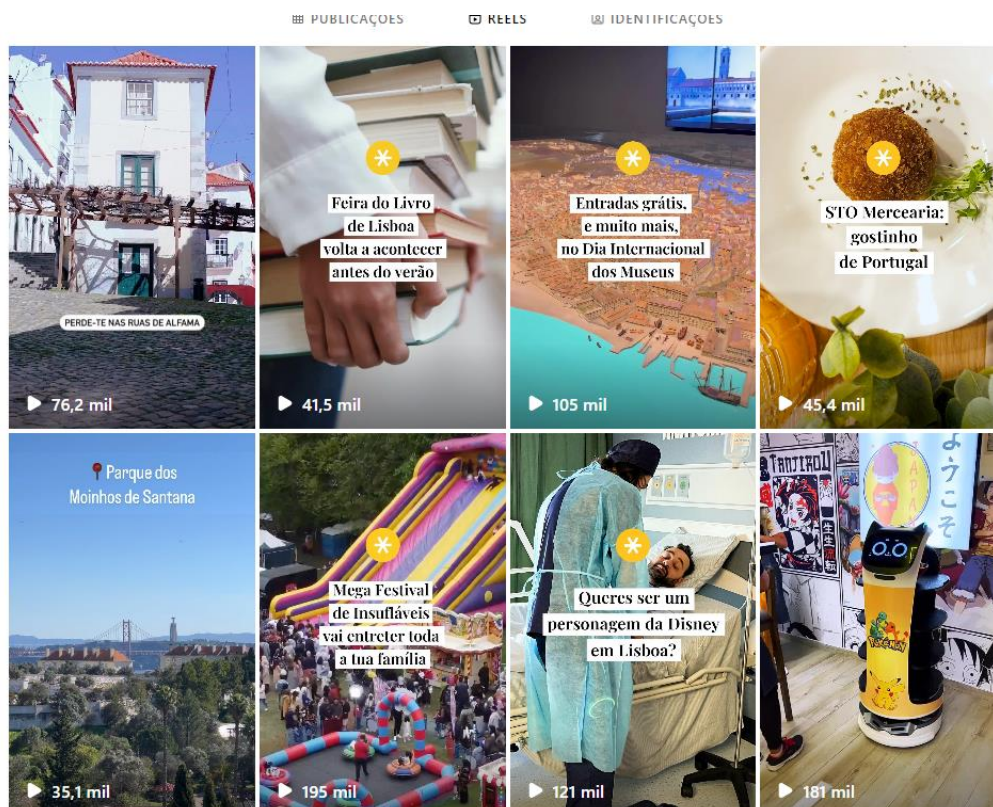


Image 20 – Lisbon's Online Guides

## I. "Porto Secreto" Online Presence on Instagram

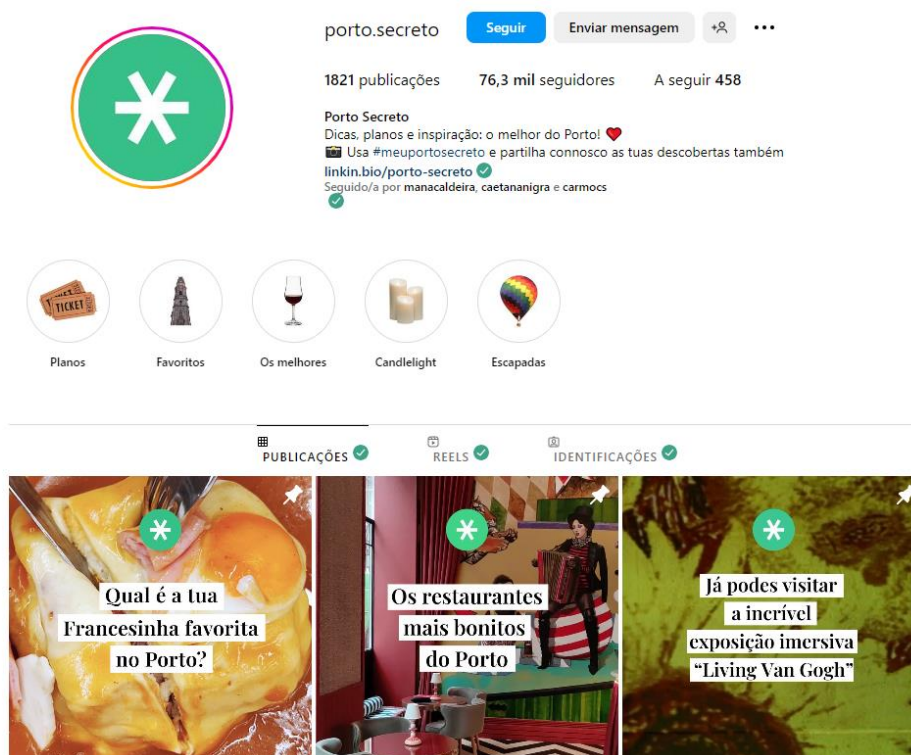


Image 21 – Total of Followers

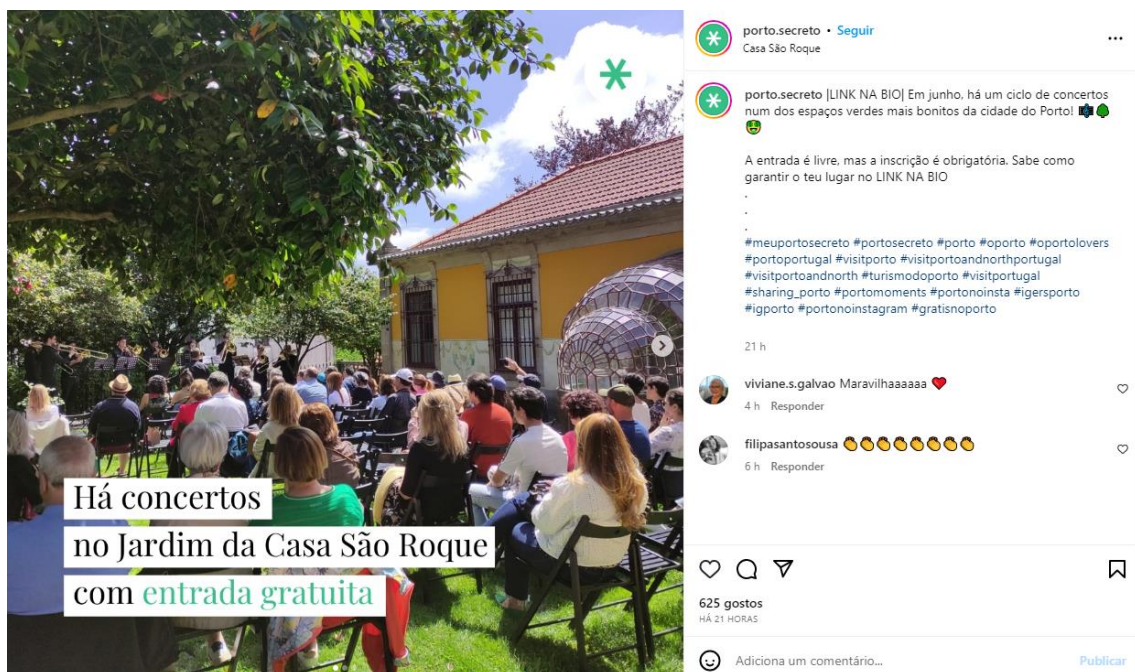


Image 22 – Porto's Online Guide

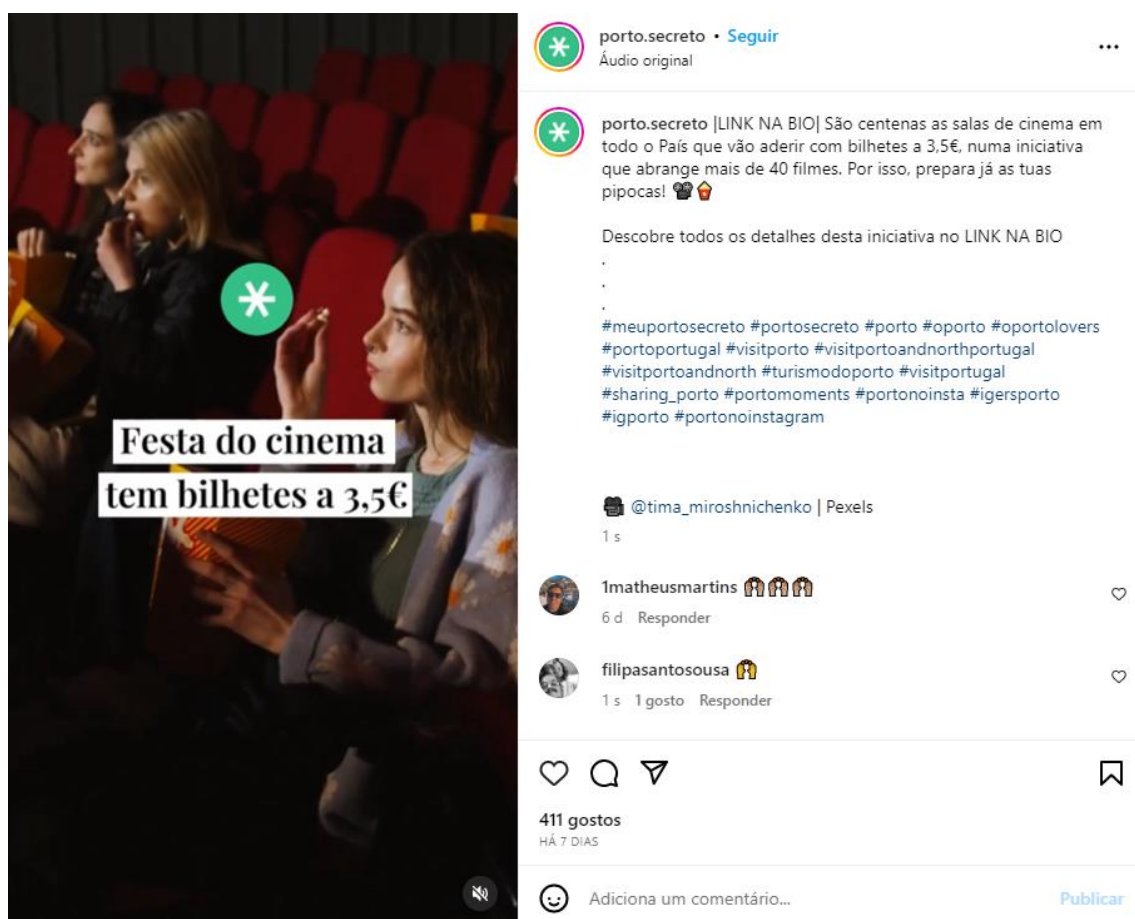


Image 23 – Porto's Online Guide



## J. Visit Portugal Online Presence on Instagram

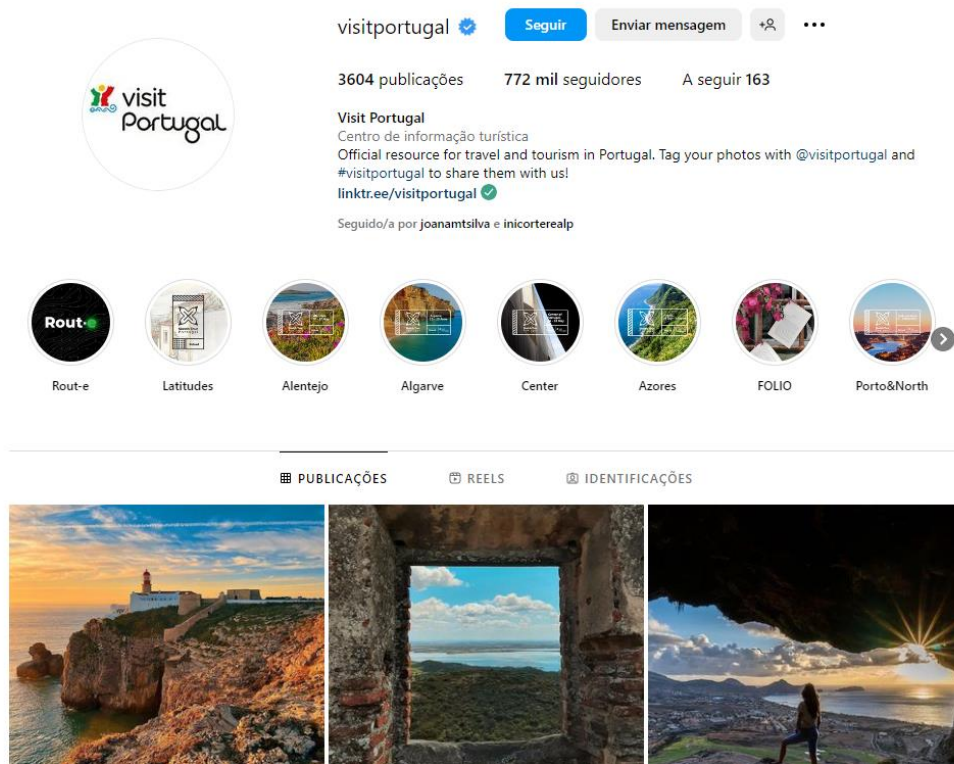


Image 24 – Total of Followers



Image 25 – Promotion of its activities through UGC



Image 26 – Promotion of its activities through UGC

## K. Visit Portugal Online Presence on Facebook

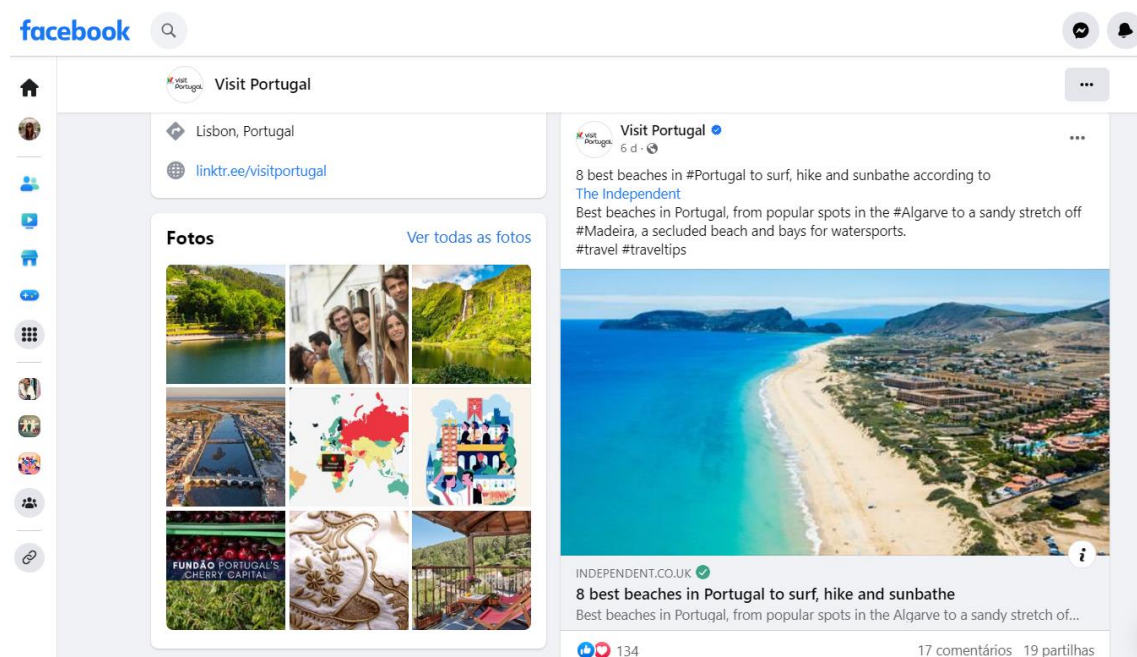


Image 27 – Promotion of its activities through UGC and News/Articles



## L. Visit Algarve Online Presence on Instagram

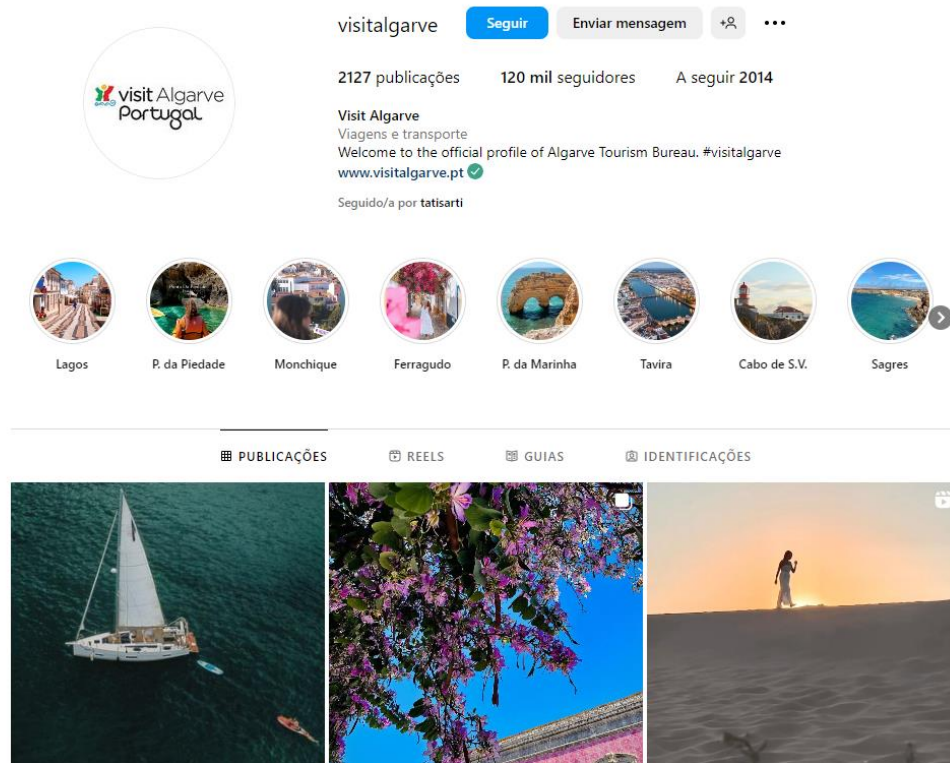


Image 28 – Total of Followers

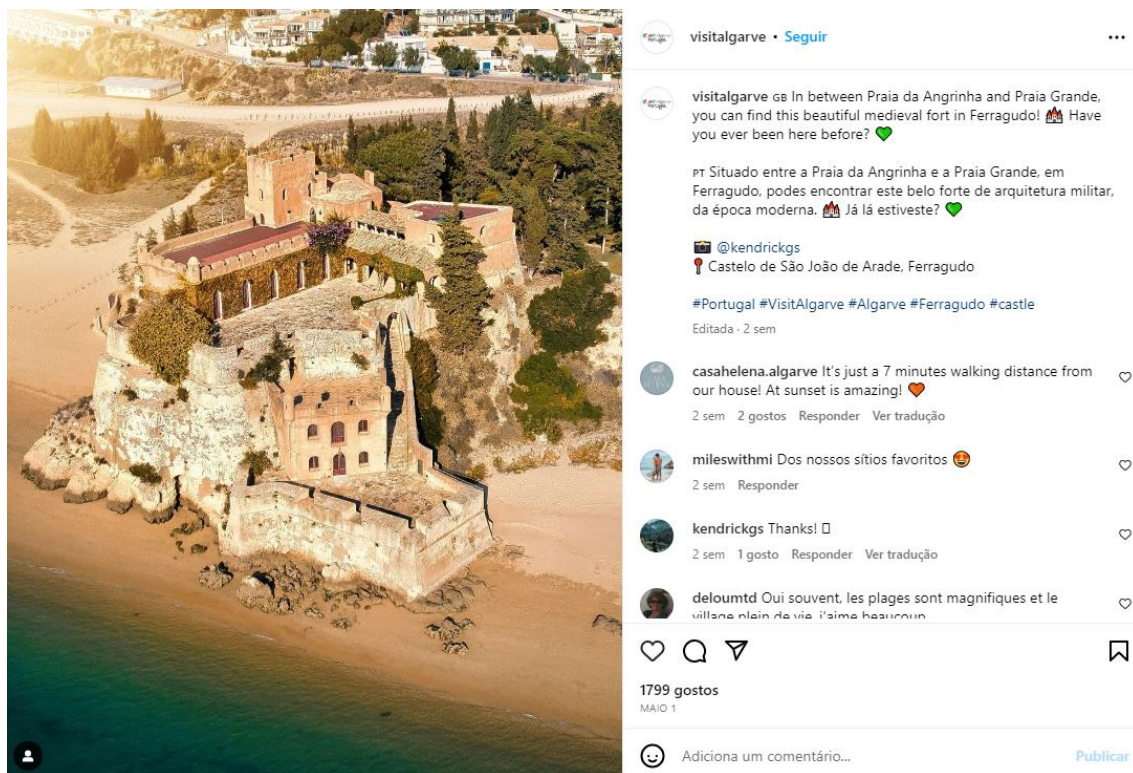


Image 29 – Promotion of its activities





Image 30 – Promotion of its activities

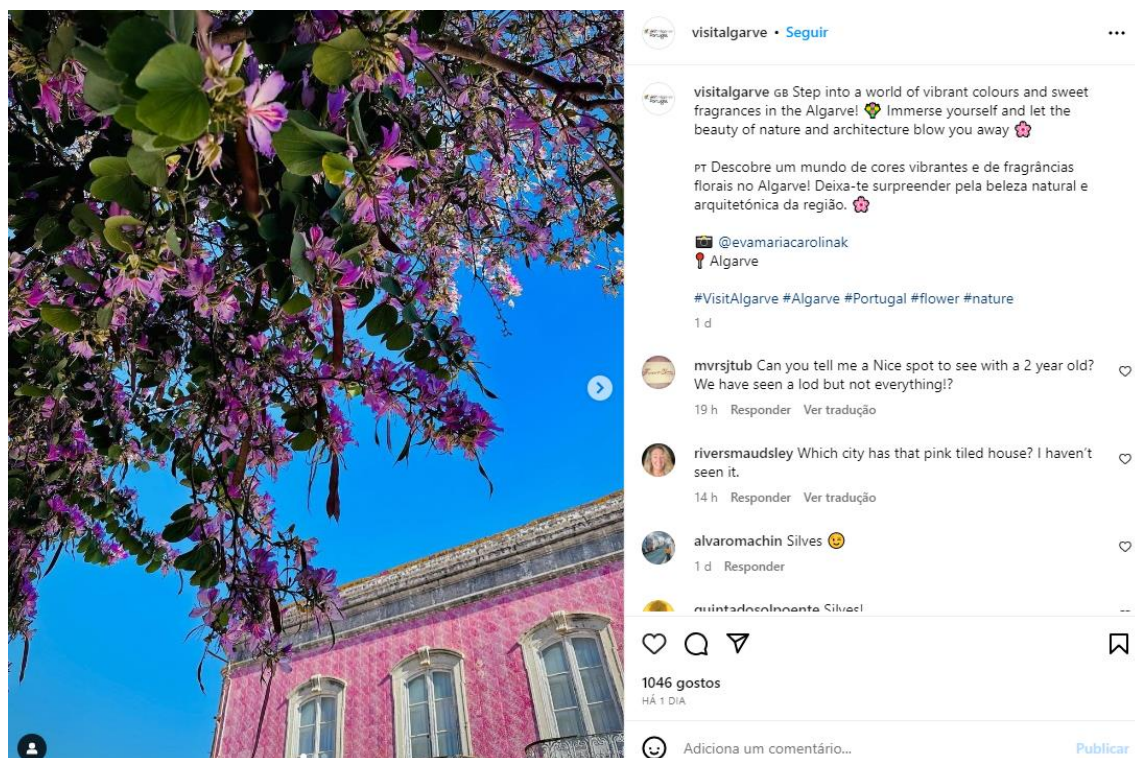


Image 31 – Promotion of its activities



## M. Visit Porto and North Online Presence on Instagram

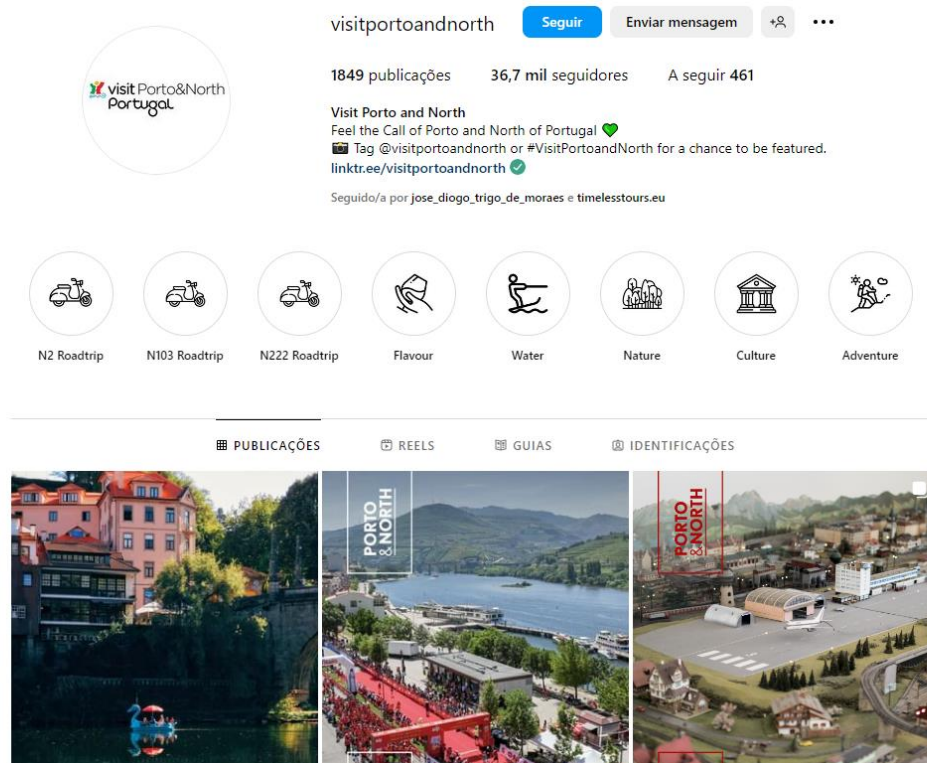


Image 32 – Total of Followers

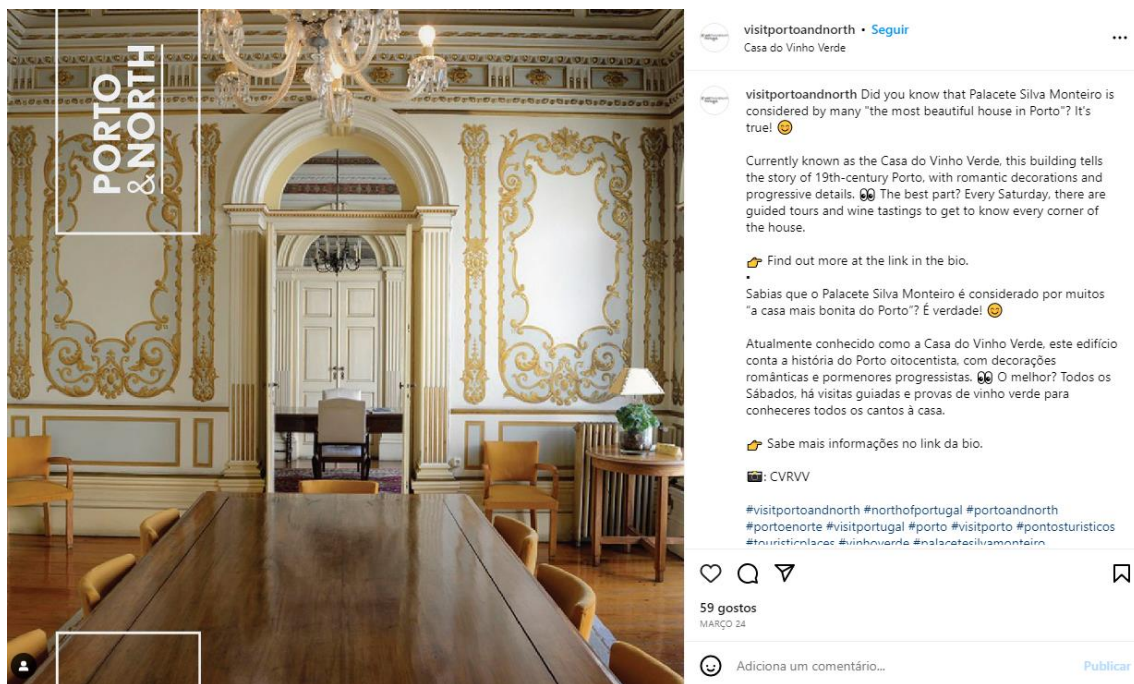


Image 33 – Promotion of its activities

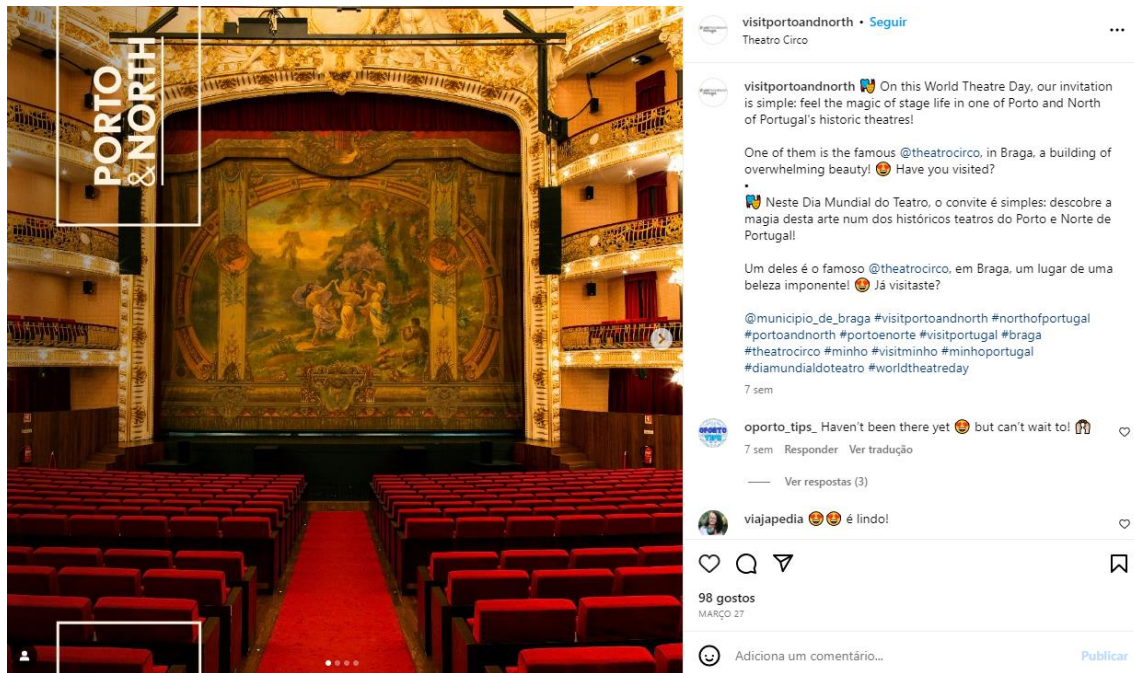


Image 34 – Promotion of its activities

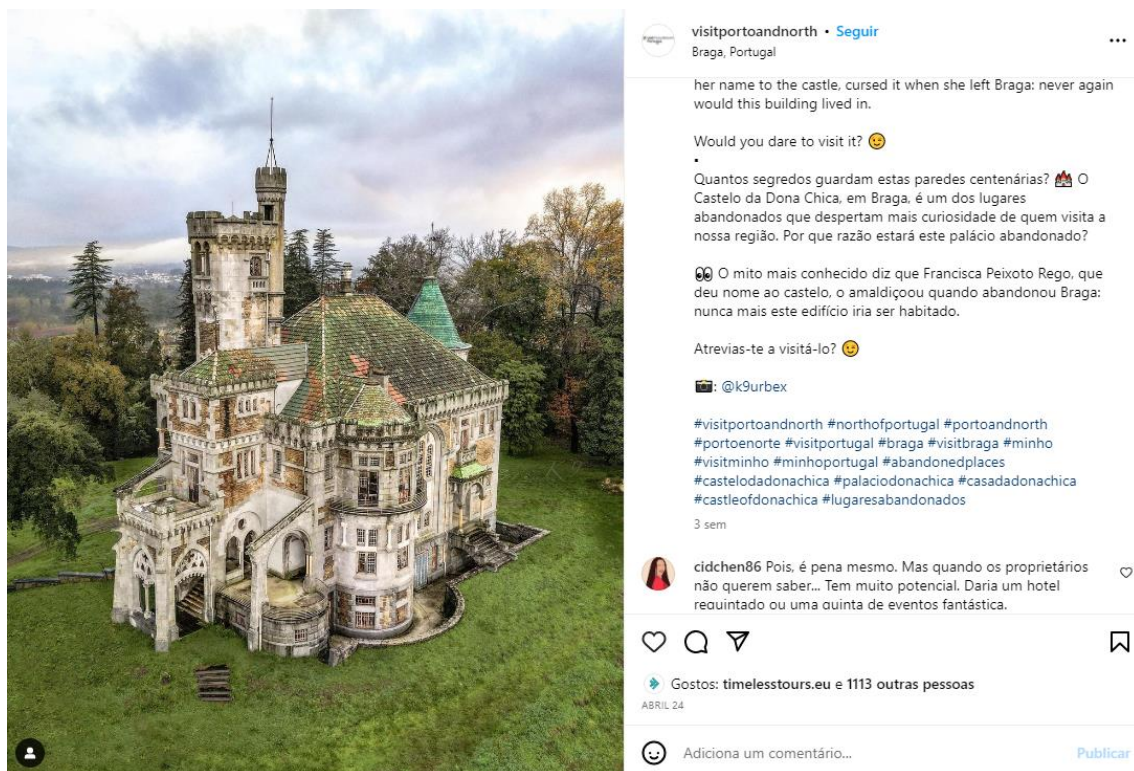


Image 35 – Promotion of its activities



## N. Lisbon Story Centre Museum Online Presence on Instagram

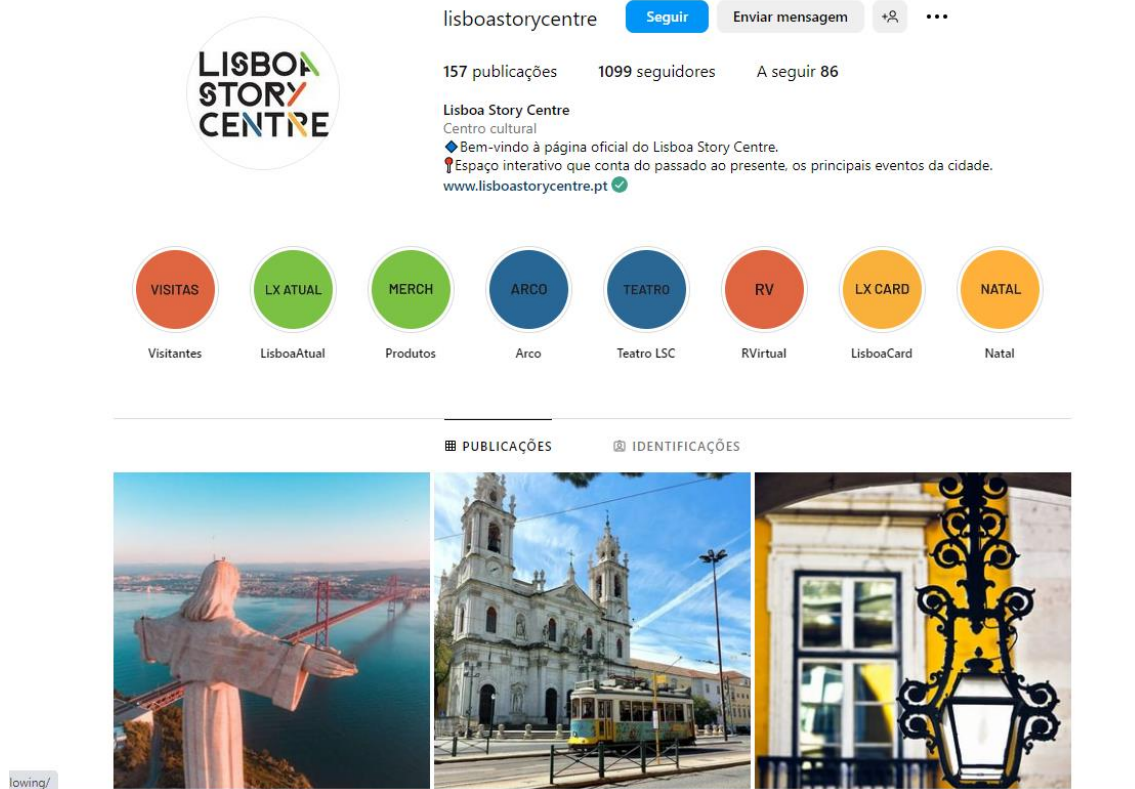


Image 36 – Total of Followers

## O. “Feira do Livro” event promotion on Instagram



Image 37 – Feira do Livro de Lisboa Event



Image 38 – Feira do Livro de Lisboa Event

## P. Jardins Abertos Event Profile on Instagram

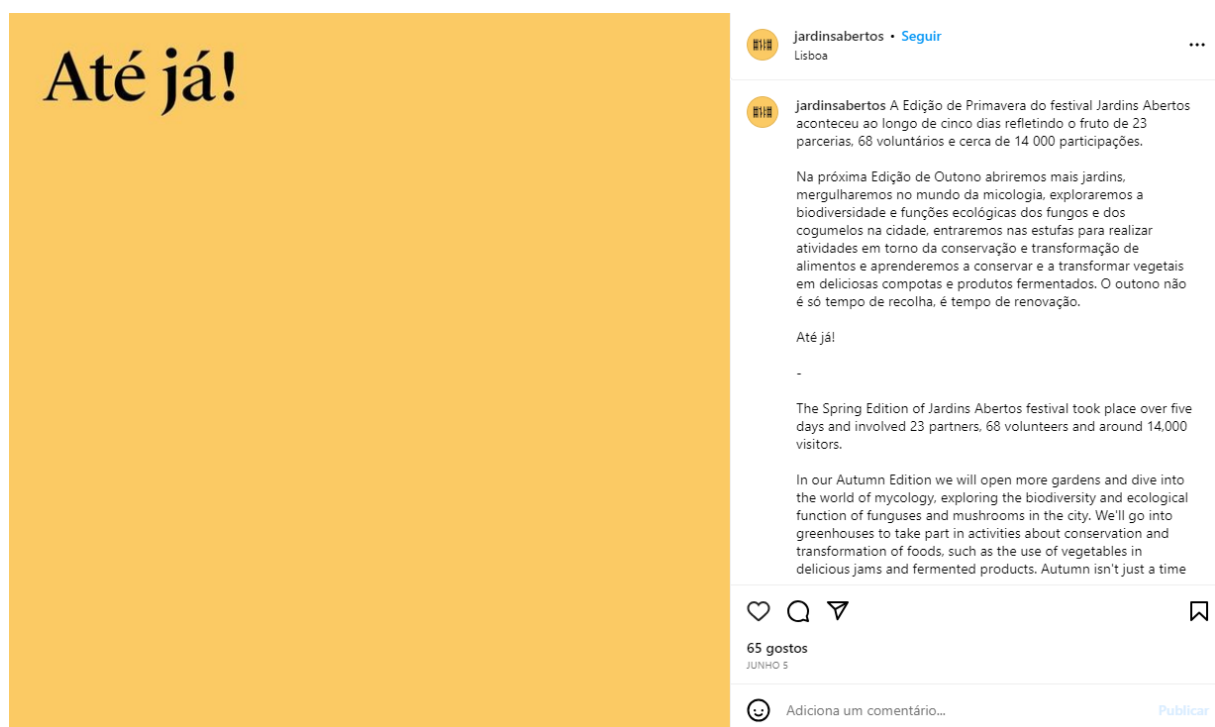
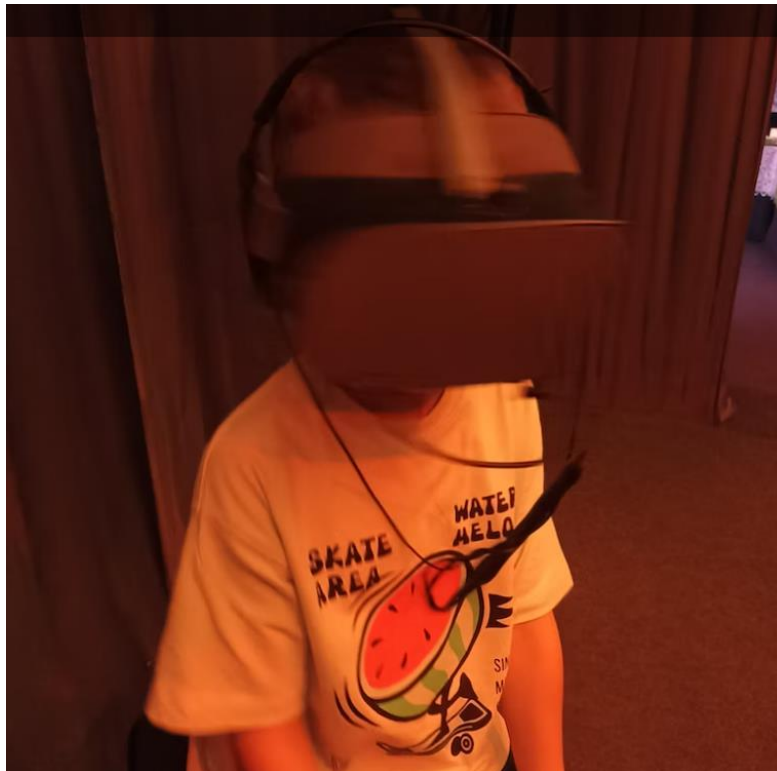


Image 39 – Promotion of the event “Jardins Abertos” on Instagram

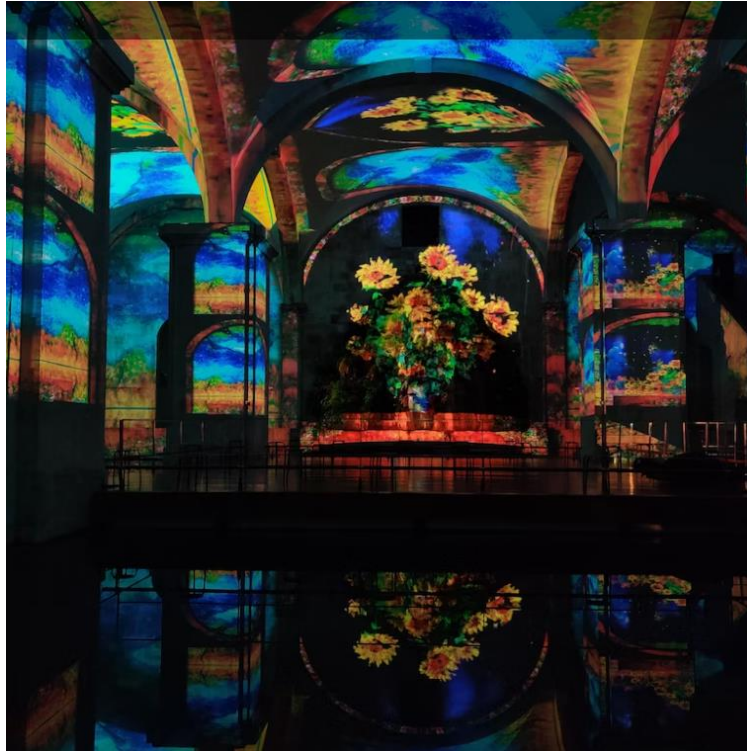
## Q. Frida Kahlo Immersive Exhibition



*Image 40 – Frida's Immersive Exhibition. Source: Tiqets*



*Image 41 – Frida's Immersive Exhibition. Source: Tiqets*



*Image 42 – Frida's Immersive Exhibition. Source: Tiqets*

**R. “Flying over Lisbon” Immersive Experience organized by Lisbon Story Centre**



*Image 43 – Flying over Lisbon. Source: Lisboa Secreta. Photography by @VRToursPT*