The Impact of COVID-19 on Cultural Tourism: Virtual Exhibitions, Technology and Innovation

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Abstract. This chapter approaches the COVID-19 crisis by arguing how cultural institutions can mobilize, transition and adapt to the decrease in cultural tourism, as well as mitigate the negative impact felt during the pandemic. An assessment will be carried out to analyse data related to a virtual exhibition of the Museum of International Sculpture of Santo Tirso (MIEC), curated by students and teachers at the Master’s Programme in Intercultural Studies for Business (MISB), on display at the Google Arts & Culture platform. In addition, the chapter intends to show the importance of both managing a strategic online presence and of incorporating technology and the Internet into creative businesses, which also encourage the development of niche cities.

Keywords: Cultural tourism · Creative tourism · Google Arts & Culture · Technology · COVID-19

1 Introduction

COVID-19 has brought museums and culture to the digital realm. In times of pandemic, with museums closed all around the world, culture and art had to resort to non-traditional strategies, in order to respond to and mitigate the negative economic and cultural impacts of prolonged inactivity. As some recent surveys have shown [1], more than 60% of museums worldwide have increased their online presence, using social media, online tours or virtual exhibitions. These institutions are looking out for “likes”, views and statistics, in order to assess the public’s response and level of engagement. Using high-resolution images and videos of artworks and cultural artifacts, together with the Google Street View, Google has partnered with over 2,000 cultural institutions from over 80 countries to make art worldwide available. One of those institutions is the Porto Accounting and Business School (ISCAP), which belongs to one of Portugal’s largest and most prestigious state-run Polytechnic Institutes, the Polytechnic Institute of Porto (IPP). This partnership between ISCAP and Google has provided an opportunity for our students to carry out a research project involving the creation of a virtual exhibition. In the years 2017–18 and 2018–2019, the Master’s Programme in Intercultural Studies for Business worked in collaboration with the Santo Tirso International Museum of Contemporary Sculpture (http://miec.cm-stirso.pt/en/). In times of quarantine, the virtual tour around this unusual museum in a small city in northern Portugal,
provides data allowing for an assessment of the increase in the number of visitors, as well as of MIEC’s growing visibility and potential to become a main cultural feature, by bringing cultural tourism to the digital domain. This capacity to adapt to new conditions becomes especially relevant when considering the public nature of MIEC, which relies on its being widely available to the public and the community to fulfil its cultural and social mission. In addition, virtual exhibitions and museums digital presence are also of great value in order to lessen the negative impact of COVID-19 on tourism and cultural activities. Culture, together with entertainment, has turned out to be a booming phenomenon during the confinement period and people have been demanding for travel experiences from their homes, visiting online heritage sites, museums and performance venues.

2 Virtual Exhibitions and Online Presence

Technological development and the widespread use of smartphones and tablets have contributed to the growth of virtual exhibitions, making it possible to overcome the limitations imposed by physical ones and to increase user interactivity, as they are very efficient solutions offering a number of economic advantages. As defined by Foo [2], a virtual exhibition (VE):

[…] is a Web-based hypermedia collection of captured or rendered multidimensional information objects, possibly stored in distributed networks, designed around a specific theme, topic concept or idea, and harnessed with state-of-art technology and architecture to deliver the user-centered and engaging experience of discovery, learning, contributing and being entertained through its nature of its dynamic product and service offerings.

If virtual exhibitions have in the past been criticized for their lack of “real experience”, today’s technological developments allow for immersion and interactivity solutions that should not be neglected. The potential for the virtualization of national and international heritage and treasures has already been highlighted [3], as museums and archive collections are thus no longer limited by temporal, spatial, or geographical constraints. Anyone, at any time, may access the contents on display, making the most of the artefacts shown to an increasingly large audience.

Virtual exhibitions have the advantage of providing free access to collections that would otherwise remain unknown or hidden from view. Several museums and institutions have therefore created digital collections and virtual visits, combining them with educational strategies for the advancement of these institutions. These strategies often work as encouragement for the actual visit or as reminders of previous physical visits, which may thus be completed through digitised information. In fact, the mission of museums has changed dramatically over the past few years – whereas formerly focused on the preservation and safekeeping of precious works of art, heritage or cultural heritage, museums have nowadays taken on an additional educational role [4].
To this end, institutions must focus on strengthening their image and branding through promotional and marketing campaigns, not only through the necessary use of more traditional means, such as publications, lectures and symposia, but also through the strategic organization of properly planned and executed virtual exhibitions. Such an approach may also contribute to highlight the institutional relevance and the social value of the organization, therefore creating a strong public profile. In turn, increasing the visibility and brand of institutions may improve their chances to ensure adequate funding and other resources, vital for their sustainability and future growth.

In fact, although the importance of virtual exhibitions was dismissed or neglected for several years, their current role has been increasingly pointed out, due to its multimodal character. As Foo explains:

While VEs have been critiqued in the past for their inability to provide the experience of the “real thing”, VEs can allow users to understand, discover, learn and do far more than physical exhibitions. By adopting a carefully researched user-centered design, VEs through hyper-linking supports both linear and non-linear discovery and learning pathways, creating learning opportunities that are difficult to replicate in physical exhibitions. The ability to engage in multiple forms of media (text, image, audio, sound, video, augmented reality and virtual reality components) on one page, having the ability to reverse, revisit, translate and read text tailored for different user groups, proficiencies and requirements, immersion in well-crafted theme games, etc., collective helps to establish a deeper sense of understanding, awareness, and learning of contents than physical exhibits. VEs are therefore no longer viewed as passing fads but an important logical companion and extension to physical exhibitions [sic].

The COVID-19 crisis has shown more than ever before that online presence is an important tool to empower audiences. Through the creation of virtual tours and the use of social media and hashtags to share and classify contents, audiences are given the opportunity to truly engage with the collections contained in museums and other cultural institutions. Of course, all these strategies must be coherently designed, assessed and monitored in order to be truly effective.

3 MIEC’s Online Virtual Exhibition: Results of an Ongoing Project

Today, it is undeniable that cultural heritage has the potential to encourage socio-economic development, as proved by the direct relationship found between the presence and promotion of that heritage and an increase in tourism. On the other hand, the advancement of cultural heritage has been incorporating more digital tools – virtual visits to museums and cities’ architectural treasures, digitalisation and online publication of images, documents and records, as well as the use of audio-guides, screens and apps for visit and narrative designs that may appeal to visitors, are just some examples of the role played by technology in the dissemination, democratisation and monetisation of culture.

The purpose of this ongoing project was to encourage our students’ critical analysis of these phenomena, by means of the construction of a virtual exhibition on the Google Arts & Culture platform. Using the artworks contained in the collection of the Santo Tirso International Museum of Contemporary Sculpture (MIEC), the exhibit was also
an opportunity to make the city of Santo Tirso and its artistic and architectural heritage better known, as well as to promote contemporary public art as part of the Portuguese cultural legacy.

MIEC is an open-air museum comprising 57 pieces by sculptors from different nationalities. Most of those pieces were built during ten sculpture symposia held between 1990 and 2015. Unlike what is usually the case for this type of initiative, the artworks are not found in a single sculpture park, but scattered all around the town and its surroundings, over a 15-square-mile radius. Opened in 2016, the museum’s head office is located in the former São Bento Monastery, a 17th-century building restored and renovated by architects Souto de Moura and Siza Vieira.

In the school years of 2017 and 2018, the students of French/German/Spanish Culture for Business III, and Technology for Intercultural Communication of ISCAP’s Master’s Programme in Intercultural Studies for Business (MISB) participated in a PBL strategy, and were invited to carry out the collection and treatment of graphic and documentary material, along with the creation of texts and individual presentations leading to the construction of a virtual exhibition in the Google Arts & Culture platform. For that purpose, a partnership was established between the three institutions involved – ISCAP, Google Arts & Culture and MIEC, which provided access to their archives.

The first stage of the project consisted in two field trips to Santo Tirso’s MIEC (one for each school year), made by both students and teachers, during which it was possible to observe the pieces up close, take in their relationship with the surrounding landscape and take photographs and video images of the piece to be dealt with by each student. The second stage involved the treatment of all the collected material, complemented by three workshops for the correct use of the necessary digital tools, such as the workshops on creative writing, Photoshop and Adobe Premiere.

As a result of the first group’s work, the virtual exhibition [5] featuring ten MIEC pieces was launched in October 2019. Another ten will soon be added. Other results include several academic papers and three master’s theses – one concluded and two in progress1 –, as well as a YouTube channel still under construction, comprising the students’ videos and presentations.

4 Statistical Data

In this section, visits to the virtual exhibition are analysed, considering the data retrieved from the Google Arts & Culture platform for the period between mid-October 2019 and April 2020. Particular attention is paid to the data concerning three different aspects, i.e. page views, number of page viewers, viewers’ geographical point of access. In addition, the analysis focuses on the number of page viewers before and during the confinement periods due to the current COVID-19 pandemic.

1 One of the theses reports the construction of a second phase of the exhibition, incorporating storytelling and transcreation techniques for text writing.
As shown in Fig. 1, over 300 page views were recorded in the first two weeks after the exhibit was launched on the Google Arts & Culture platform (approximately in mid-October 2019), with a tenfold increase in that number the following month.

![Fig. 1. Total number of page views (Oct. 2019 – Apr. 2020)](image)

The comparatively high number of page views recorded in October and November may be related to the novelty of the exhibition, which might have aroused the curiosity and interest of regular visitors to the Google Arts & Culture platform. It might as well have been the result of direct and indirect dissemination carried out by partner institutions and stakeholders taking part in the project. In any case, the graph also shows that those numbers plummeted in December, possibly due to factors related to the Christmas season, school holidays, etc. The number of page views starts to slightly rise in January 2020, only to drop again to less than half in February, when the world’s attention was beginning to focus on the COVID-19 outbreak and progress. March and April each register a number of page views that almost doubled the total of the three previous months combined. This significant increase coincided with the mandatory confinement of the population worldwide, in order to contain the spread of the COVID-19 outbreak, as well as with the compulsory closure of public and private institutions, including museums and art galleries, which turned online exhibitions as practically the only way of accessing artworks on public display.

As for the number of viewers during the period under analysis (see Fig. 2), November 2019 also shows a remarkable increase to almost ten times the number of the previous month:
At first glance, a similar evolution may be observed in the number of page views and the number of visitors, a fact probably tied to the same reasons as those used to interpret Fig. 1. More viewers visited the exhibition in November, followed by three months when the number of viewers fell considerably. Numbers began to go up again in March and April, with almost a tenfold increase in April, if compared to February, when the lowest number was recorded.

It is also worth pointing out that the virtual exhibition has been accessed from a wide variety of countries. According to the data retrieved from the Google Arts & Culture platform, the highest number of countries was reached in November, as shown in Fig. 3:

As seen in the chart above, viewers from more than 60 different countries have so far visited the MIEC online exhibition. In contrast with the previous two charts, however, April registered a slight decrease in the number of countries, which means that there was a higher number of visitors concentrated in a lower number of countries. These data confirm the international and intercultural nature of MIEC, as its collection in Santo Tirso is made up of pieces created by artists from all over the world and has been physically visited by a great number of international tourists. Figure 4 highlights the countries providing the highest number of online visitors to the MIEC virtual exhibition:

As expected, the highest number of visitors, almost 600, come from Portugal, followed by those from North and South America (particularly Brazil, Canada and the USA) with almost 300 visitors, other European countries (France, Germany, Great Britain, Italy, the Netherlands, and Spain) with almost 250 visitors, and the Asian continent (including India, Japan, Korea and The Russian Federation) with over 100 visitors.
In order to observe the possible influence of the two-month confinement period on the growth in the number of visitors to the MIEC online exhibition, Fig. 5 shows the variation in these numbers according to the main countries already mentioned, for the periods of December 2019 – February 2020 (before mandatory confinement) and March – April 2020 (during mandatory confinement):
An overall increase in the number of visitors may be observed during the confinement period, except those from Korea and India, where the numbers remained stable, and Italy and Japan, for which a slight decrease was recorded. When compared to the three-month period before mandatory confinement, the total number of visitors from most countries grew at an average rate of 3.9 in the two-month confinement period. The most striking differences, however, may be observed in the two Portuguese-speaking countries shown in Fig. 5 – in Brazil, the number of visitors rose approximately ten times, reaching almost 60 viewers, whereas in Portugal, the confinement period led more than 260 viewers to visit the MIEC online virtual exhibition.

5 Conclusions

The implementation of an interdisciplinary PBL approach, involving students, teachers and external institutions, such as MIEC, in the design of a virtual exhibition on the Google Arts & Culture platform, meets training requirements that respond to the demands of the market, by engaging students in the creation and management of a project combining cultural entrepreneurship and creative industries. Taking as a starting point MIEC’s exceptional collection, students were challenged to investigate the concept of public art in more depth, as well as its connection with the surrounding space and the target audience. They also had to create a narrative that would support the presentation and curation of a virtual exhibition, with the purpose of promoting and providing access to the collection of this Museum to a wider audience. Most especially, they experienced the sense of accomplishment provided by participating in a genuine project and carrying out a real task with measurable effects in publicizing the Museum [6]. In addition, the Google Arts & Culture platform has the advantage of providing gigapixel images, allowing for the creation of virtual exhibitions that are not limited to recreating the physical museum but work as an extension of the cultural and tourist experience [7].
In times of COVID-19, with every museum closed, it is even more interesting to assess the importance of virtual exhibitions and digital presence. We know that the novel coronavirus will be with us for a long time, but we do not know if and when another pandemic will strike. Museums and cultural institutions play a crucial role in preserving culture and heritage, educating audiences and promoting their enjoyment. It is therefore interesting to analyse their response to the crisis. Directly and heavily affected by the decrease in tourism [1], museums had to rely on their virtual presence. Two out of five museums worldwide have reported an increase in online visits, ranging from 10% to 150% [1]. The data obtained from the Google Arts & Culture platform are consistent with this tendency. Once the second phase of the exhibition currently under construction is online, additional data will provide a more comprehensive view of the long-term impacts of this type of initiative, which will certainly call for further research.

Furthermore, due to the prominence given by MIEC to the city, Santo Tirso is gradually building up a reputation as a niche city [8], which not only encourages local and regional development, but helps alleviate the pressure of mass tourism to the main urban centres, by diverting them to other, smaller destinations, without reaching the “point of excess”.

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