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ANALYSIS OF THE DIGITAL COMMUNICATION STRATEGIES OF WEBSITES OF THE MOST VISITED MUSEUMS IN EUROPE

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ABSTRACT

Introduction: The redefinition of museum communication strategies, especially at the digital level, has become an urgent challenge. This study presents descriptive, explanatory, and exploratory research on websites of the 20 most visited museums in Europe. **Methodology:** Conceiving websites as the nerve center of museums' communication strategies, this study applied an analysis sheet based on six variables and organized it into 62 thematic categories. **Results:** This research highlights the growth of sound and informative content while detecting a reduced commitment to immersive developments and "augmented" content. **Conclusions:** There is a tendency towards the mediatization of processes following routines typical of cybermedia.

Keywords: digital communication; digital platforms; digital culture; strategic communication; corporate communication; web design; user experience; web content; web metrics.

1. INTRODUCTION

The coronavirus pandemic has impacted all facets of our daily lives, from education and work to leisure, entertainment, and communication (Pérez-Escoda et al., 2020). Information regarding the pandemic has also become a focus of attention (Hantrais et al., 2020). In this context, where the World Health Organization (WHO) has warned of the risk of infodemic commitment to quality content is a decisive milestone. The corporate websites of companies, institutions, foundations, and all types of projects have had to adapt their communication strategies to the particularities of the new scenario, as established by the fundamentals of corporate communication (Romero-Rodríguez, 2020). In the context of the growing mediatization of society (Pérez-Tornero, 2020), various problems, such as fake news, clickbait, post-truth, and infoxication (Casero-Ripollés, 2020), have generated a climate of growing uncertainty and distrust. This uncertainty has been transferred to educational scenarios at both formal and informal levels.

These new demands occur in a setting marked by accelerated technological transformation (Salaverría, 2017), which is dominated by the growth of social networks and platforms. Corporate websites continue to play a leading and referential role in the communication strategies of businesses, governments, and corporate sectors. Studies on websites in diverse sectors, such as hospitals (Jha et al., 2008), hotels (Ali, 2016), tourism review pages (Fang et al., 2016; Xiang et al., 2017), and sports, among others, have impacted the validity and usefulness of these platforms. In addition, previous research on the evaluation and analysis of websites as specialized topics (Codina, 2000; Rodríguez-Martínez et al., 2012; Költringer & Dickinger, 2015; López et al., 2016; Dueñas et al., 2016; Nevado *et al.*, 2016; Cobos & Recoder, 2019) has identified a series of indicators for the systematic analysis of webpages.

The museum world has been affected by the COVID-19 crisis. In April 2020, almost all museums worldwide closed due to the pandemic. Throughout the year, the museum industry has experienced one of its most complex situations, facing significant declines in attendance, capacity constraints, staff layoffs, and severe funding problems. However, this stage led to a period of innovation, in which greater technological investment and professional training were undertaken to offer far-reaching virtual programming. Since then, the sector has experienced a growing trend towards virtualization and progressive commitment to the generation of online content to offer a more diversified service to its audience and even open new markets.

Different studies have been conducted on museums' communicative strategies. Some studies, such as Vacas-Guerero (2011), have focused on the role of communication in museum management. Li (2020) reviewed the role of marketing in museum management to balance the sustainable operation of museums with their original functions, such as education and preservation. Meanwhile, Zanibellato et al. (2018) investigated museum marketing based on a study of the influence of core and peripheral attributes on customer satisfaction and behavioral intentions based on reviews of the most commented museums on TripAdvisor.

Museums have become the object of study in research using different methodological approaches and perspectives. The pioneering work of Falk and Dierking (2013) on

visitors' vision of museums revolutionized the general communicative strategy of museums. Camarero et al. (2015) and Bitgood (2016) examined the main attributes of museums that attract visitors and the factors that affect their returns (Burton et al., 2009; Brida et al., 2017b). Studies have also been conducted on user learning after visiting museums (Brida et al. 2017a). Other studies, such as García-Madariaga et al. (2017), examined the influence of museum websites on user intentions. This study confirms that the characteristics of museum websites (especially content, personalization, ease of use, promotion, emotion, and aesthetics) positively and significantly influence users' intentions to return to the website and visit the museum physically.

However, the work, focused on the Museo del Prado and the Museo Reina Sofía, does not delve into the characteristics, content typology, or structure of museum websites. Its main objective, as in the case of Bai et al. (2008), was to determine the impact or receptivity of visitors. The application of technology and innovation in museums has been the subject of studies such as Camarero et al. (2015), who analyzed 491 European museums and advised against committing to their spectacularization. Chan and Yeoh (2010) investigated museum visitors' satisfactory experiences and explored their key dimensions. A study focusing on the Sabah Museum in Kota Kinabalu, Malaysia, found that visitors' museum visits were a combination of cognitive, educational, affective, and reflective processes.

This study analyzed the websites of the 20 most visited museums in Europe according to the TEA/AECOM 2020 Theme Index and Museum Index. The main objective of this research is to analyse the conception and characteristics of websites and their communicative resources

2. OBJECTIVE

This study analyzed the websites of the 20 most visited museums in Europe according to the TEA/AECOM 2020 Theme Index and Museum Index. The main objective of this research is to analyse the conception and characteristics of websites and their communicative resources

3. METHODOLOGY

This research, of a descriptive, explanatory and exploratory nature, aims to apply a diagnostic and, at the same time, functional analysis (Vilches, 2011) that offers guidelines, recommendations and concrete solutions to different sectors and areas of society. This study is based on content analysis, a research technique that allows the construction of categories and indicators to describe the values or messages of a content, platform, or process (Vourvachis and Woodvard, 2015). This study was structured around the following research questions (RQ):

> RQ1. What are the defining characteristics of the websites of the most visited museums in Europe in terms of content, access to information, visibility, and usability?
>
> RQ2. What structural or content strengths and weaknesses have been

identified on such websites?

RQ3. Which interactive resources play the most prominent roles?

RQ4. What types of connections exist with other types of platforms, especially social networks?

3.1. INSTRUMENT

To answer these Research Questions (RQ), this study reviews 1) specific literature of authors with prestige in the evaluation of websites and cybermedia; 2) analysis of the selected websites and their connections with other platforms; 3) adaptation of the SAAMD pattern (acronym for *Sistema Articulado de Análisis de Medios Digitales*) proposed by Codina and Pedraza-Jiménez (2016) to the thematic area of museum websites; 4) definition and design of a proprietary analysis table based on a specialized literature review, considering the particularities of the sector; and, finally, 5) application of the web analysis pattern to each website of the selected museums.

The research model was designed using six study variables defined and analyzed in different indicators for the study of each of them, including 65 items that could measure the main research variables. This study adopted a list of closed indicators that denote absence or presence in the application to the case study sample to reduce the subjectivity of the analysis. In this sense, the measurement score is binary (0/1), with 0 being "no" and 1 for "yes" (Table 1).

Table 1.

Variables and indicators of museum websites.

Research Variable	Indicators for each research variable	Value
Usability	1.Website download time less than 5 s with ADSL	0/1
	2.Keeps the main navigation menu open on all pages	0/1
	3.There is a content search tool on the website	0/1
	4.There are internal links to other sections of the museum website	0/1
	5.The links describe the URL or name of the linked website	0/1
	6.There is a site map	0/1
	7.The platform allows you to choose between different languages	0/1
	8.There is an email for consultation or request for general information	0/1
	9.They provide the telephone, postal address and/or fax number for general information	0/1
Interactivity and relationship with users and visitors	10.There is an e-mail for the request/consultation with the museum services	0/1
	11.They provide telephone, postal and/or fax information with the museum services	0/1
	12.They provide the telephone, postal address and/or fax number for general information	0/1
	13.There is an e-mail for the request/consultation with the museum services	0/1
	14.There is a suggestion box	0/1
	15.It is possible to make an appointment or schedule a visiting time through the website	0/1
Information offered	16.There is information on how to get to the museum (address and/or location map)	0/1
	17. Map of the museum appears (buildings, floors, office)	0/1
	18.There is a presentation of the museum (letter from the manager, vision, mission…)	0/1
	19.Identification of management personnel with organization chart and names	0/1
	20.Identification of staff with position and name	0/1
	21.Activity and visitors' data	0/1
	22.Data on museum general report	0/1
	23.Results data from epidemic/pandemic impact	0/1
	24.Epidemiological information of interest for visiting the museum	0/1
	25.There is a section dedicated to COVID-19	0/1
	26.There is a portfolio of museums services	0/1
	27.There is a general service portfolio of the museum	0/1
	28.There is information on waiting lists (if applicable)	0/1
	29.There is a section on visiting advice	0/1
	30.Information for the user about museum activities	0/1
	31.Section with news from the museum or of general interest	0/1
	32.Press or communication section of the museum	0/1
	33.There is a section dedicated to research and/or teaching-training	0/1
	34. Visitor's guide	0/1
	35.There is information on how to get to the museum (means of transport)	0/1
	36.There is information on visiting hours	0/1
	37.There is information on the rights and duties of the visitor	0/1
	38.There is information on the User Support Service	0/1
	39.There is information on cafeterias, opening hours and location	0/1
	40.There is information on how to make a complaint or suggestion	0/1
Typology and updating of contents	41.There is an update date	0/1
	42.Information updated less than one month from the review date	0/1
	43.Keywords are highlighted in bold	0/1
	44.The museum is present in some social networks and there are links to it from the web	0/1
	45.The museum has a Facebook account	0/1
	46.The museum has a Twitter account	0/1
	47.The museum has an Instagram account	0/1
	48.The museum has a YouTube account	0/1
	49.Textual content exists	0/1
	50.There is photographic content	0/1
	51.Audiovisual content exists	0/1
	52.There is sound content (podcast)	0/1
	53.Multimedia content is available	0/1
	54.There are videos or 360° photographs	0/1
	55.There are contents with Augmented Reality	0/1
	56.There are gamification-based contents	0/1
	57.There is a news section	0/1
	58.There are forums or chats	0/1
	59.There is a transmedia strategy	0/1
	60. Content can be promoted on social networks	0/1
	61. There is the option of comments	0/1
Accessibility	62. Web Accessibility Test (TAW)	0/1

Source: Elaborated by the authors from Codina (2000) and Cobos & Recoder (2019).

3.2. SAMPLE

The sample for this study was defined based on the annual report TEA/AECOM 2022 Theme Index and Museum Index Report, which lists the museums most visited in Europe during the year 2022. Since 2006, the companies AECOM and TEA (Themed Entertainment Association) have been publishing an annual thematic ranking focused on this field. The sample was chosen based on the attendance figures of the 20 most visited museums in Europe (Table 2).

Table 2.

Europe's most visited museums

Museum	Country	Website
1.Louvre	France	www.louvre.fr
2. Vatican Museums	Vatican City	www.museivaticani.va
3.British Museum	UK	www.britishmuseum.org
4.Tate Modern	UK	www.tate.org.uk
5. National Gallery	UK	www.nationalgallery.org.uk
6. Natural History Museum	UK	https://www.nhm.ac.uk/
7. State Hermitage	Russia	www.hermitagemuseum.org
8. Reina Sofia	Spain	www.museoreinasofia.es
9.Victoria & Albert Museum	UK	www.vam.ac.uk
10. Musée d'Orsay	France	www.musee-orsay.fr
11. Centre Pompidou	France	www.centrepompidou.fr
12. Science Museum	UK	www.sciencemuseum.org.uk
13. Museo Nacional del Prado	Spain	www.museodelprado.es
14. State Tretyakov Gallery	Russia	www.tretyakovgallery.ru
15. Rijksmuseum	The Netherlands	www.rijksmuseum.nl/nl
16. Cite des Sciences et de l'Industrie	France	www.cite-sciences.fr
17.Galleria degli Uffizi	Italy	www.uffizi.it
18. Auschwitz-Birkenau Museum	Poland	www.auschwitz.org
19. National Museum of Scotland	UK	www.nms.ac.uk
20. Van Gogh Museum	The Netherlands	www.vangoghmuseum.nl

Source: Elaborated by the authors from the TEA/AECOM 2022 Theme Index and Museum Index Report.

4. RESULTS

The results were organized into seven study variables: usability, interactivity and relationships with users, information presented, virtuality, content typology and updating, presence on social networks and transmedia content strategies, and accessibility.

4.1. USABILITY

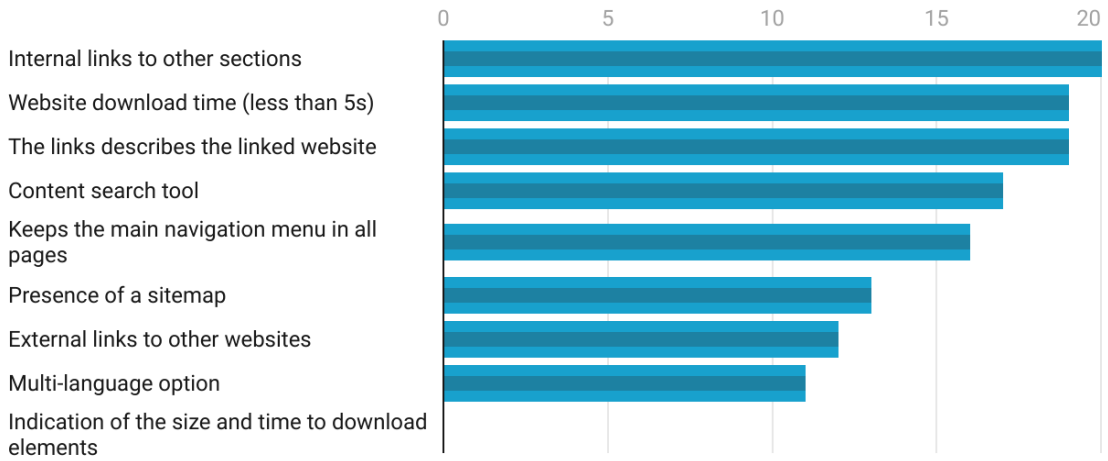
Usability focuses on displaying information and content as clearly and simply as possible to the general audience. Therefore, this study is crucial for analyzing museum websites. First, it is worth highlighting the high percentage of websites that include a content search tool (n=17), which is a very important section because the user may wish to search by work, artist, theme, or style. Likewise, 100% of the pages analyzed

included internal links to other sections of the museum's website. In terms of usability, a high percentage was observed in the majority of websites that had a download time of less than 5 s with ADSL (*n*=19) and in those that kept the main navigation menu open on all pages (*n*=16). A slightly lower percentage (*n*=13) of the websites offered a site map (Figure 1).

In this regard, it is important to note that just over half of the platforms analyzed (*n*=11) allow a choice between different languages (Figure 1), an aspect that should be vital since these are the websites of museums that receive the most tourists in Europe.

Figure 1.

Usability analysis. Source: Author's elaboration (2023).



Source: Elaborated by the authors.

4.2. INTERACTIVITY AND RELATIONSHIPS WITH USERS

Regarding the capacity of the websites analyzed to interact with their users, through either communication mechanisms or web resources, all the websites analyzed provided contact information. The results showed that museum websites have e-mail or telephone contacts as their preferred means of contact. Similarly, all museums offer online ticket sales.

All the websites analyzed include a section with the museum's press contact, which plays a key role in interactivity and media relations. Access to press officers indirectly affected the number of museum visits. Additionally, 19 of the 20 platforms feature an FAQ section, often addressing visit-related topics, such as hours, rates, accessibility, services, collections, exhibitions, restoration, public and educational activities, and space rental.

4.3. INFORMATION

This dimension evaluates the information available on museum websites and their structures in terms of information attributes, types of services, and museum origins. Of the websites analyzed, all of them presented information on museum access (address and map of the site) and visitor regulations.

All websites included a section with the museum's opening hours, services, and accessibility, serving as the user's first contact with the museum. This section includes the museum's description (origin, history, managing entity, and address), location details, contact information, images, and information on collections, exhibitions, services, hours, fees, and news. The accessibility section generally features a map of rooms, details of service areas (stores, restaurants, and parking), and an online booking tool for visit times.

Figure 2.

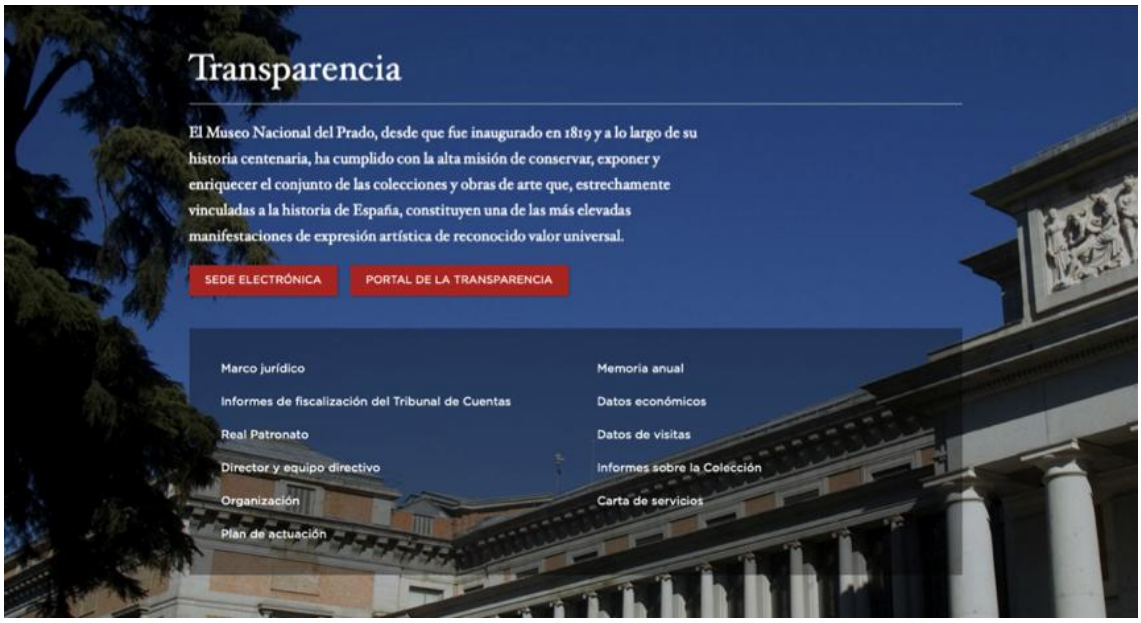
Analysis of Information. Source: Author's elaboration (2023).

Source: Elaborated by the authors.

The majority of websites (*n*=18) also provided information on management personnel with organizational charts and names to show the organizational structure. Similarly, 17 museums have annual activity reports (Figure 2). This aspect responds to the objectives of transparency linked to the visibility of museum management and performance. This high percentage demonstrates a willingness on the part of the institutions to develop codes of good governance and collection policies accessible through their websites. For example, as shown in Figure 3, the *Museo del Prado* includes different sections in its transparency portal.

Figure 3.

Transparency portal of Museo del Prado.



Source: www.museodelprado.es

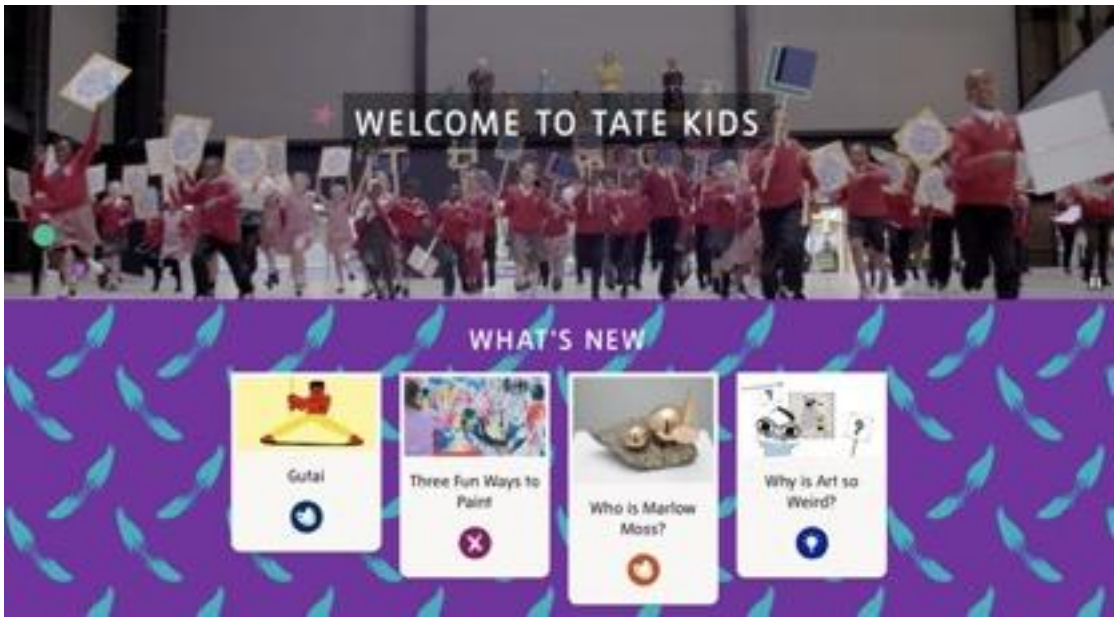
All websites offer an online catalog of the artwork. The offer of these catalogs responds to the desire to facilitate access to culture and to make known to the public the registry and inventory of the different cultural assets owned by the museum. Using this tool, users can search for specific artists or works and explore each work of art in detail.

Fifteen websites featured sections on restoration and conservation, providing details on research projects and academic publications. This section informs users of preventive conservation efforts in collections, storage, exhibition rooms, and restoration workshops. It also offers access to academic work and documentation, serving professionals, researchers, and the public with valuable cultural information. Therefore, museums play a key role in gathering, managing, and sharing cultural knowledge beyond their collections.

Figure 4 also shows that many websites (n=18) offer digital activities to children. These online resources include different educational levels and range from online games, video games, children's audio guides, visits to rooms, or educational cards. Figure 5 shows the 'Tate Kids' section of the *Tate Modern Museum* in London, which includes drawing activities, quizzes, didactic cards of paintings and an exhibition of drawings made by children.

Figure 4.

'Tate Kids' section of Tate Modern.



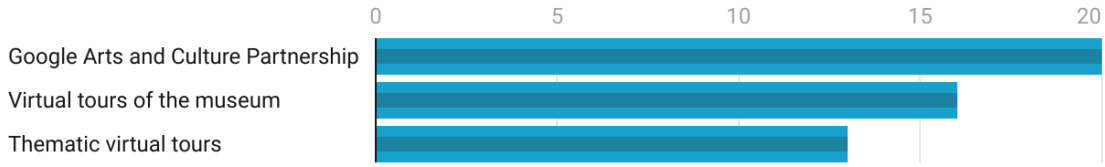
Source: www.tate.org.uk

4.4. VIRTUALITY

The arrival of ICTs in museums has meant a turning point in the way of communicating with the public and exhibiting works of art, both in their physical installations and in digital space (Figure 5). Its implementation has resulted in new narrative discourse. In this area, all the websites analyzed were part of Google Arts and Culture, a website of the Google Cultural Institute that presents a collection of high-resolution images of works exhibited in various museums around the world, as well as a virtual tour of the galleries in which they are located.

Figure 5.

Virtuality analysis.



Source: Elaborated by the authors.

Figure 6 shows the Google Arts and Culture page of the *Galleria Degli Uffizi Museum* in Florence, which includes links to the museum's social networks, reports on online exhibitions, various collections, a virtual tour of the museum, access to locations through Google Maps, and opening hours.

Figure 6.

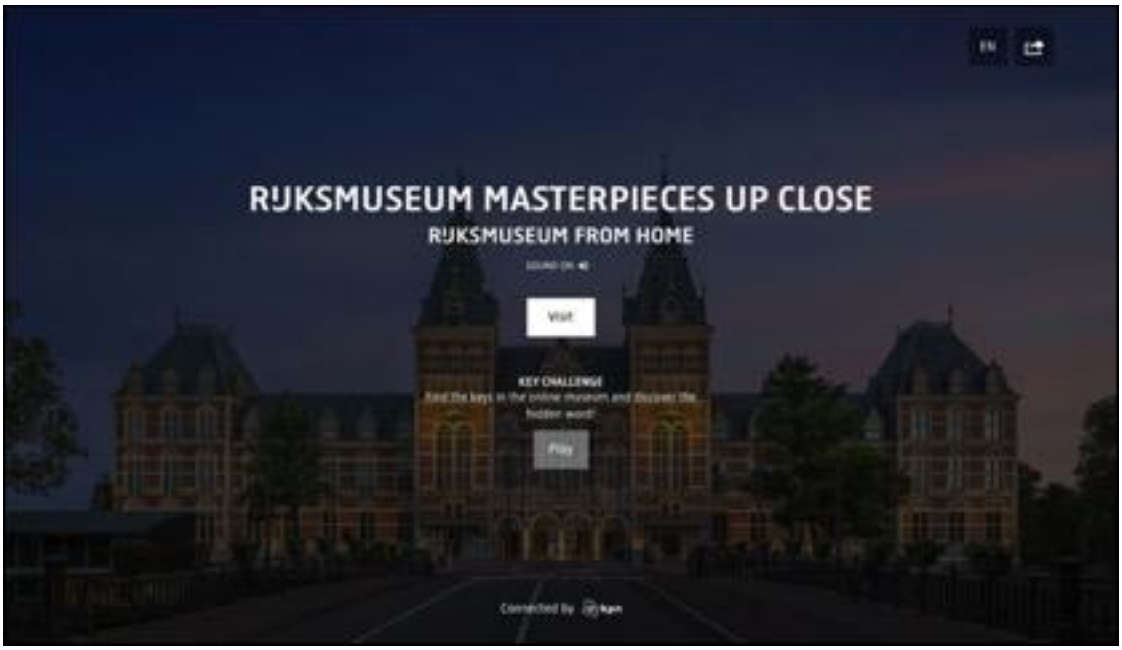
Google Arts and Culture page of Galleria degli Uffizi.

Source: https://artsandculture.google.com/partner/uffizi-gallery

Figure 7, which corresponds to the virtual tour of the *Rijksmuseum* in Amsterdam (The Netherlands), is an example of a museum institution with a large number of virtual tours. The virtual tour features an interactive map with challenge games and puzzles about the paintings. It also includes themed videos created during the confinement period.

Figure 7.

Virtual tour of Rijksmuseum, Amsterdam (Netherlands).



Source: www.rijksmuseum.nl

4.5. CONTENT TYPOLOGY AND UPDATING

The analysis of the websites in relation to the typology and updating of content (Figure 8) shows that 19 websites have updated information that is less than one month old, considering the date of revision. However, only 4 presented the dates on which the website was updated. It should also be noted that 18 museums used bold keywords in their content. As Figure 8 indicates, all the websites analyzed present textual, photographic, audiovisual, and multimedia content.

On the other hand, there is a significant trend in the use of sound content (such as podcasts) as an alternative to traditional audio guides, as their field of action can cover multiple areas of the museum. A vast majority (*n*=18) used this tool.

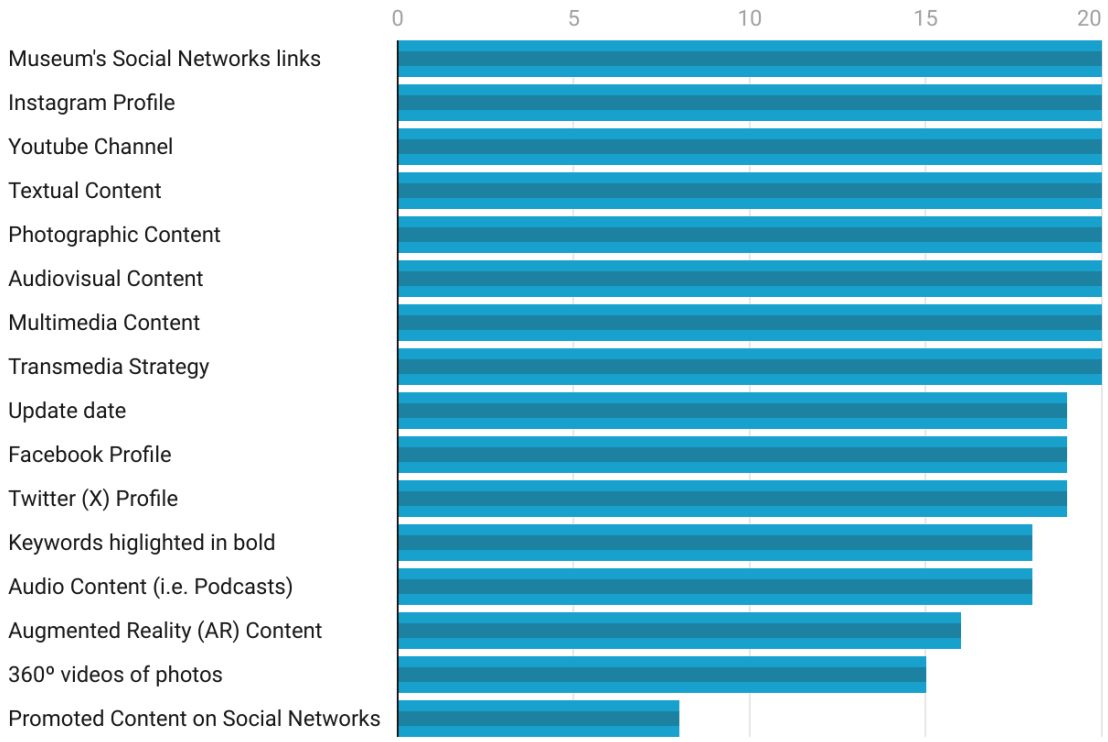
Podcasts feature descriptions of artwork, exhibition discourses, interviews with specialists, artists, staff, conference broadcasts, explanations of temporary exhibitions, recent archaeological discoveries, newly acquired pieces, and upcoming additions to permanent exhibitions. Some of these are tailored to children. These podcasts are typically available for downloading on museum websites or mobile apps such as AppStore and Google Play. Platforms, such as SoundCloud, YouTube, Spotify, Acast, Apple Podcast, and Google Podcast, are commonly used. Subscriptions allow users to receive updates regarding new episodes. Additionally, many museums (*n=16*) have

created virtual galleries using augmented reality, while 15 offer photographs, videos, and 360-degree virtual tours of museum rooms.

All analyzed websites are present on social networks and provide links to them, aligning with their transmedia strategies. Figure 8 also shows that 19 websites had Facebook and X (formerly Twitter) profiles. Among these networks, YouTube and Instagram stand out as channels used by all websites analyzed to create and disseminate content. However, less than half of these (*n*=8) allowed content promotion through social networks.

Figure 8.

Typology of Content.

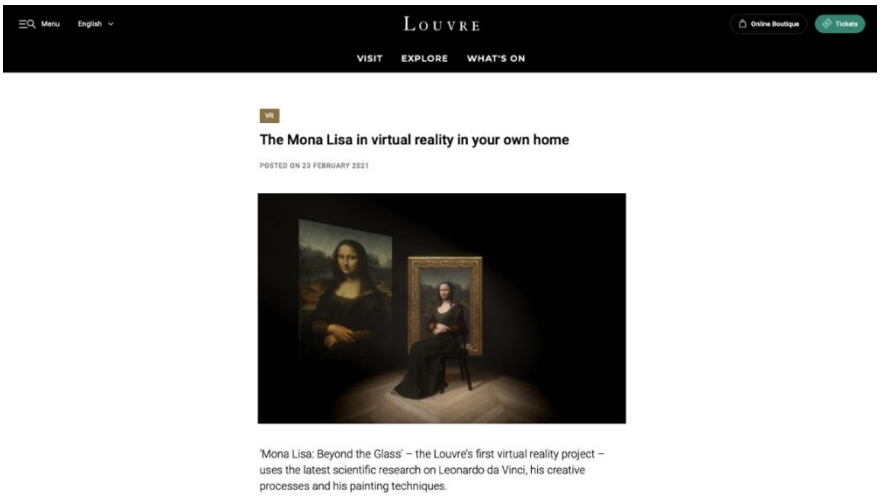


Source: Elaborated by the authors.

One of the most outstanding projects of immersive technologies is "Mona Lisa: Beyond the Glass," highlighted in Figure 9, a work developed by the *Louvre Museum* in collaboration with the HTC Vive Arts program. Also noteworthy is the *Prado Museum* (Figure 10), which offers virtual reproductions of different rooms that can be viewed on mobile devices and computers. It also allows the use of virtual reality (VR) glasses.

Figure 9.

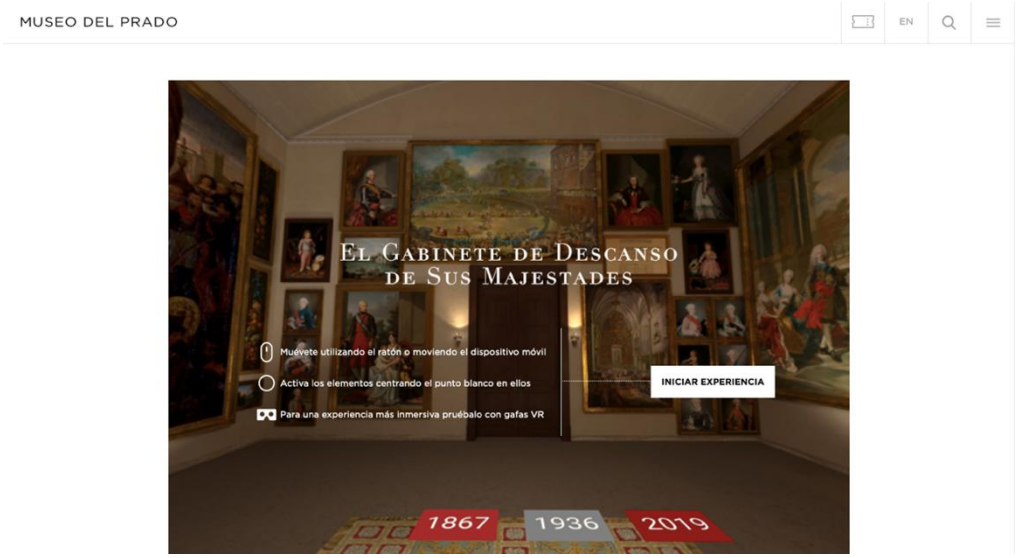
"Mona Lisa: Beyond the Glass" Louvre's project.



Source: www.louvre.fr

Figure 10.

Virtual Reality (VR) in Museo del Prado: Sala "El Gabinete de descanso de sus majestades".



Source: www.museodelprado.es

5. DISCUSSION AND CONCLUSIONS

Analysis of the websites of the 20 most visited museums in Europe allowed us to establish a series of conclusions of great value, both for the construction of a general diagnosis of the digital strategy of these platforms and to warn of possible trends in the communicative exploitation of websites. First, the study detects the great corporate, communicative, and functional value of the website in each museum, assuming functions ranging from informative to educational, social, and promotional. In this line, the study warns of a generalized exploitation of the website from a very similar logic and, except for the exceptions mentioned in the results section, museums converge in the type and way of offering the most important services through their websites. The navigation proposals continue to opt for a reading of the screen from general logic (Pérez-Tornero, 2020), and there is a commitment to the mediatization of the processes with the aim of connecting with the target public. The commitment to a permanent main navigation menu that appears available throughout the browsing process, a generalized trend in most of the cases studied, underlines the willingness to take advantage of the main frame of the screens with content, and allows the user to access from any section to another section of the website. The permanent updating of content anticipates a tendency to bring websites closer to the logic of cybermedia. Approximately 94.74% of the museums' information was less than one month old. However, some details distanced them from media routines (for example, as noted in the results, only four museums' webs present the date on which the website was updated).

The globalizing trend of enhancing access that has been imposed at the communicative level (i.e., Salaverría, 2017; Arencibia-Jiménez & Aibar-Remón, 2007; Jha et al., 2008; Ali, 2016; Fang, 2016; Xiang et al., 2017; Codina, 2000; Rodríguez-Martínez et al., 2012; Költringer & Dickinger, 2015; López et al., 2016; Dueñas et al., 2016; Nevado et al., 2016; Cobos & Recoder, 2019; Vacas-Guerero & Bonilla-Sánchez, 2011; Li, 2010; Zanibellato et al., 2018; Falk & Dierking, 2013; Camarero et al., 2015; Bitgood, 2016; Burton et al., 2009; Brida et al., 2017a; Brida et al., 2017b; García-Madariaga et al., 2017; Bai *et al*., 2008; Camarero et al., 2015; Chan & Yeoh, 2010; Vilches, 2011; Varnouvachis & Woodvard, 2015; Codina & Pedraza-Jiménez, 2016; Pedrero-Esteban & García-Lastra, 2019) has not been consolidated. Nevertheless, there is a dialogic will very typical of new social platforms seeking to promote permanent dialogue between the institution and community of visitors. Similarly, there is a clear tendency toward promoting transparency in human teams and processes. The large number of websites that provide details of their organization charts and annual reports reinforces generalized inertia to make internal aspects transparent to promote transparency, make management visible, and facilitate access to content that is not strictly related to the thematic focus of museums but to their operation.

Regarding the type of content and its organization, although all websites offer an online catalog of works and are part of Google Arts and Culture, commitment to immersive content or content supported by augmented reality or artificial intelligence is growing. This aspect invites new research on the possibilities of this type of technological development in museums and their exploitation on websites. There are

initiatives of great value, as in the case of "Mona Lisa: Beyond the Glass' of the Louvre Museum, but there is a lack of development in this area, where the technological, communicative, and informative converge. This is linked to the lack of commitment to the gamification of content in a context where Internet user profiles increasingly demand greater protagonism and yearns to be able to participate and immerse themselves in browsing experiences that give them a leading role. This aspect can be linked to the research of Camarero et al. (2015), who advise against commitment to spectacularization. However, in this case, the focus is on the use of multimedia resources that offer other types of browsing experience in the context of exclusive websites.

The growth of sound content has inaugurated an interesting area for monitoring experiences and studying the expansion of podcasting, which has grown exponentially in recent years. The commitment to this set of informative attributes inaugurates a line of development that reinforces the approaches of Brida et al. (2017b), Camarero et al. (2015), and Bitgood (2016), among others, regarding museum attributes that attract visitors or the factors that influence them to return to visit. Communication strategy, owing to its holistic nature, becomes crucial in achieving this milestone and places the corporate website as a pillar of informative, sensitizing, and communicative processes.

Linked to the previous point, the presence of museums on social networks, especially Facebook, YouTube, Instagram, and Twitter (now X), was total. However, the relevance of further studies on this type of platform and, in particular, their inclusion within a general strategy that connects them with the main corporate website is once again raised.

Less than half of museum websites (n=8) promoted content through social networks, suggesting a lack of a comprehensive communication strategy incorporating these platforms. However, most websites highlight restoration and conservation practices, research projects, and academic publications, aligning with Brida et al. (2017a) and emphasizing educational commitment, particularly through digital activities for children.

Finally, we can establish that, in light of the research conducted, museum communication through websites could be enhanced with the use of immersive technologies (such as virtual reality experiences, 360-degree videos), augmented reality (AR applications such as interactive exhibits or location-based AR games), as well as transmedia strategies (storytelling across multiple platforms like websites, mobile apps, social media, or podcasts).

The study reinforces the postulates of Vacas-Guerero (2011), Li (2020) or Zanibellato et al. (2018), who give communication and marketing a key role in museum management. This research underlines the importance of renewing the concept of communication in the field of museums by bringing them closer to new formats and new habits and interactions presented by today's users. In this way, it will be possible to project in the current context the proposals of Brida et al. (2017a) or García-Madariaga (2017) regarding the value and function of museum websites. In addition,

it is important to redefine the concept of communication by connecting it to aspects such as storytelling, inbound marketing, or communication based on emotions and human stories. In short, it is a matter of reconceptualizing the value of communication as a persuasive strategy and valuable content.

The study also focuses on how the quality of sound and educational content on museum websites has increased, which can be used to enhance user engagement and provide visitors with multiple options to engage with museum content. It also notes a decline in the focus on immersive and augmented reality (AR) content; through these, museums have the opportunity to be unique through the application of these technologies. Future research can also determine how well different types of audio materials can enhance visitors' participation and learning processes. They can also identify the problems encountered in the integration of immersive technologies in museums and find solutions.

Museums should continue to enhance their social media strategies and focus on creating high-quality, engaging content that is easily consumable and that can be shared across various digital platforms. Investing in innovative technologies, such as augmented reality and virtual reality, can create unique and engaging experiences for visitors, both in the physical and digital realms. Furthermore, increasing transparency by providing all the information about the management, functioning, and activities of the museum helps in developing a strong bond with the public and in gaining their trust. This is consistent with the findings of the study regarding the concept of mediatization and the need for museums to develop media strategies that are suitable for the present generation.

In view of post-pandemic digital transformation, these findings are particularly pertinent. Since the COVID-19 pandemic has accelerated the digital transformation of many industries, including museums, visitors now expect more digital content and virtual experience. Museums must meet these expectations by offering various digital engagement options and using digital channels for outreach. Using technological innovation and creating immersive digital experiences, museums may stand out and attract more visitors to remain relevant and engage in a post-pandemic society.

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