

Collective participation at the service of cultural heritage: user-generated content in Portuguese memory institutions

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ABSTRACT: The 2030 Agenda, set at the 2015 UN Summit, sets out the Sustainable Development Goals covering economic, cultural, environmental and social development. These goals set out a plan for all countries to actively engage in making the world better. These are a set of 17 objectives that have a universal ambition, are integrated and indivisible and require a global partnership between public and private institutions, governments and civil society. Sustainable development is a fundamental and overarching goal on which people are based and their ability to aggregate into common and community goals. Around the heritage, regarding GLAM institutions, calls for the intervention of the people of the community in the virtual platforms, with the help of Web 2.0 that introduced new ways of relationship between the information services and their users (real and potential), paving the way for user-generated content. At the same time, the emergence and development of the citizen science movement has consolidated this trend of openness, availability of collections and unmediated liaison with citizens (users and non-users), contributing to the evolution of new ways of conceiving the representation of information. This trend is visible all over the GLAM sector, especially in the West, on various platforms (wikis, blogs, Flickr, websites, etc.) with very interesting results. The aim of this paper is to identify and map these trends in Portugal and to verify if they are (or not) in line with their foreign counterparts. It is concluded by the still incipient but growing trend in Portugal, which can be partly explained by the fact that the coordinating services of the GLAM areas do not take position or develop projects within the web 2.0.

Keywords: Cultural heritage, Memory heritage, Collaborative heritage, GLAM, Citizen science.

INTRODUCTION

In September 2015, the United Nations held a summit at which the 2030 Agenda was drafted and approved (United Nations, 2015). This document is essential for all countries and presents the Sustainable Development Goals (SDGs) to be achieved during this decade (UNRIC, 2016). The 17 SDGs and 139 goals have a universal ambition and concern the economic, social, cultural and environmental areas. All objectives are integrated and indivisible and require local to global partnerships. Thus, states, the private and public sectors, institutions, citizens in general are invited to participate actively in improving the world, promoting prosperity, protecting the environment, etc. Countries were invited to develop policies, measures and actions to achieve the objectives (United Nations, 2019).

Sustainable development is the key word that unifies all these objectives, connecting three different elements, the environment, society and the economy. Previously, the European Union had expressed concerns about this purpose, having presented, in Article 3 of the Treaty on European Union, an appeal for the urgency of a common policy of economic and social cohesion, in the environmental, agricultural, fisheries and health fields, appealing to the general development of member states (European Union. Council of European Communities, 1992). Currently

in the European Union, Eurostat regularly reports on sustainability and monitoring compliance with the SDGs (European Union, 2016).

In view of the material and immaterial heritage, it is possible to reflect on its sustainability. The cultural plan is generally cited as one of the pillars of sustainability, but 2030 Agenda presents the economic, social and environmental plan as contributors and pillars interrelated with culture. GLAM (Galleries, Libraries, Archives and Museums) organizations that work and defend cultural heritage recognize that it involves social values, contributions from the community that come from democracy, social justice and the social technological practices. Culture and heritage refer to all spheres of life and their understanding goes beyond the work of institutions associated with heritage. There is an acceptance of the model of an open culture in which each citizen can have a primary and complementary role to GLAM organizations (Wiktor-Mach, 2019). The citizen is a vital actor who contributes and collaborates for social cohesion and for a strong heritage sustainability. Furthermore, it's about balancing public and private initiatives with citizen responsibility (Martins 2020, 47), and "to balance institutional expertise with the potential of collaborative online communities" (Phillips, 2014, 247).

With the recommendations of the 17 SDGs (UNRIC, 2016), especially in objectives 11 (Sustainable communities), 16 (Efficient Institutions) and 17 (Partners), global partnerships strengthen and revitalize the GLAM sector with an approach to heritage, which is no longer a thing of the past, with other interests and social and economic perspectives, where all cultures can contribute to sustainable development. For instances, "The publications, apps, websites and games developed will be brand-new uses of cultural heritage content, which can be fed back to the cultural heritage domains (galleries, libraries, archives, museums), bringing in new users and generate jobs and economic growth from which we all benefit" (Cousins 2014, 136).

UNESCO documents states that heritage is "our legacy from the past, what we live with today, and what we pass on to future generations." Its value makes it like something that should be passed from generation to generation.

Some of the SDGs try to prove the relevance of heritage for development, as a source of collective identity, defending cooperation with other partners involved in the cultural area, that is to say that this process includes institutional partners and ordinary citizens who have information and transformative capacity (Wiktor-Mach, 2019). "This new mode of knowledge-creation brought on by the open web has necessitated a shift in the way information is shaped and distributed." (Phillips, 2014, 255).

Like Martins stresses, it is important to remember the contribution of cultural heritage to society and human development, "in order to encourage intercultural dialogue, mutual respect and peace, and the improvement of quality of life and the adoption of criteria for the sustainable use of cultural resources in the world" (2020).

The Glam sector is an indispensable partner in this area, since preserves collective social memory and provides authentic evidence of human actions. Along with UNESCO, the International Federation of Library Associations (IFLA), the International Council on Archives (ICA), and the International Council of Museums (ICOM) work for the awareness and understanding of the importance for preservation, restoration and access of books, documents, and objects.

The aim of this paper is to identify and map these trends in Portugal and to verify if they are (or not) in line with their foreign counterparts.

1 COLLABORATIVE PARTICIPATION

Talking about heritage is also talking about shared moral responsibility about what heritage legacy we leave to the future generations, and about «responsible cooperation» of contemporary society, combining public power, economic world and volunteer solidarity (Martins 2020, 8).

"GLAM institutions are inherently public facing, and many have long traditions of volunteerism and public engagement." (Dunn & Hedges 2014, 235). And the "advantage of using social networks to disclose heritage collections is the fact that it reaches different kinds of public, not accustomed to consult these institutions for information" (Borges & Silva 2019, 546).

The possibility to allow public participation in the Glam sector (as in others), comes with the development of the Internet and the rise of Web 2.0 platforms. The notion of a participatory Web is based on an Internet that has platforms and services that enable the user to contribute to the development, classification, collaboration, content distribution and application customiza-

tion. Web 2.0, and the following versions, revealed an online space where individuals demonstrate their social, communicational and information skills (Del Fresno García, 2011).

Every single person has the right to implicate themselves and to participate in cultural heritage valorisation therefore the importance to promote citizen participation freely (Martins 2020, 40).

As the Internet grew, users resorted to new tools and applications to express themselves (Wunsch-Vincent & Vickery, 2007). The usual consumer of Internet content and services is now a prosumer, as (Toffler, 1980) defined, a producer and consumer of content, and creatively by individuals, on online platforms, outside the routine of professional practices in the media and social networks. Within the GLAM sector, Ridge (2012), Oomen & Aroyo (2011) and Matthews (2016) suggested different categories of participation that have in common contextualization, creating user-generated content, co-curation and corrections, to which Matthews adds citizen science. In fact, "Society is increasingly empowered by a social web that enables collaboration and connectivity" (Phillips, 2014, 247).

The urgency for digitally disclose historical heritage and the impossibility of describing it at the same pace as its availability are two fundamental problems in the GLAM sector (Borges & Silva 2019, 546). The call for citizen participation comes with the opinion that GLAM sector professionals can no longer work alone as content creators for researchers. Therefore, cooperation and multilateral cooperation have become new philosophies in the Information Science work (Paris Folch, 2017).

"In this new landscape, organisations are expected to be transparent and open – both in sharing research content and in community dialogue" (Phillips, 2014, 247) and in this paper we highlight two forms of citizen participation which were created and adapted for this purpose.

1.1 User-generated content

User-generated content (UGC), that is available in the form of text, audio, video and images and is disseminated as product reviews, comments in forums, discussions on various topics on websites, blogs, social networks, Wikis, etc. (Ahmed et al., 2013). The most common features of user-generated content are as follows: content is published in context, on a website, on a social network page, on a blog, on a content platform, etc. (emails, instant messages are excluded); content is a creative effort that involves building new work, adding value to something that has already been done; the content is created outside of professional routines and practices and often does not have an institutional or commercial context (Wunsch-Vincent & Vickery, 2007). Due to the existence of many content creators there is a great variety on offer, although the quality can be different and very diverse. More and more research is emerging on the quality, value and benefits of the UGC, investigating the relationships between users and content. Quality is fundamental to the success of content created by users (Kim et al., 2012), and has already proved its value in the GLAM sector.

The UGC chain value encompasses the supply, planning, production, distribution and consumption processes that always involve the participation of users (Wunsch-Vincent & Vickery, 2007). They are the prosumers who tend to share their creations with others. The value of these generated contents is not because of their volume, but because of their quality, which is a very rich opportunity in terms of social, emotional and functional value for companies and other media. Functional value refers to improving the quality of products or services. Social value refers to the positive contribution to a person's social image when he acts in a manner consistent with the social norms or expectations of others, and the emotional value points to notoriety and self-expression (Wunsch-Vincent & Vickery, 2007). Most of the activities created by users are carried out without the expectation of remuneration or profit.

The GLAM sector can embrace this new model collaborative "model to reconcile traditional notions of authority with the expectations of the digital era, using institutional expertise to facilitate and validate this new, user-generated content." (Phillips, 2014, 248).

1.2 Citizen science

Like the User-generated Content concept, Citizen Science develops mostly from and around the possibilities brought by web 2.0. At first, the term was used to identify "the amateur investigator

who in the past contributed substantially to the development of science through part-time dabbling" (Oberg, 1979). However, in the 1990s, US ornithologist Rick Bonney, refers "to public-participation engagement and science communication projects" (Riesch & Potter, 2014). Its definition still rises some discussion inside the scientific community (Follet & Strezov, 2015), (Robinson et al., 2018), (European Commission, 2013) due to its nature of flexible concept "that has been adapted and applied within diverse situations and disciplines (Robinson et al., 2018, 17).

Elliott & Rosenberg analysed thoroughly whether this discipline lives up to standards of good scientific practices, concluding that "in many cases, citizen science provides one of the best avenues for achieving scientific goals and moving scientific research forward" (2019).

Its use in the GLAM sector has had two variants: the re-use of collections for greater knowledge in different scientific areas (of which the Old Weather project is a good example) or the public engagement of memory institutions collections, through projects aiming to transcribe manuscripts and printed material, or even labels of museum pieces (the Manchester Museum Project), or even inventories.

The European Commission, recognizing its value on the analyse big data, sustainable projects and the linkage of citizens involvement has already aligned citizen science with the Europe 2020 strategy and the funding within Horizon 2020 activities (2013).

This trend is visible all over the GLAM sector, especially in the West, on various platforms (wikis, blogs, Flickr, websites, etc.) with very interesting results.

2 METHODOLOGY

It is a study of exploratory nature, with the following phases: First, a literature review about the SDG, the Glam sector, user generated content and citizen science movement. Seconded by the analysis of the websites and social networks of the three national institutions of archives, libraries and museums, carried out through an analysis grid. In the Museums sector, unlike libraries and archives, there is no single museum that is the repository of all mobile heritage. So, we chose not to look at the coordinating bodies that are not constituted as museums, but rather to choose the most representative and well-known Museum of Ancient Art in each country.

Data collection was carried out by observing the web pages and social networks of each institution, during the months of February and March 2020.

For the intended purposes, five countries were chosen: Portugal, Spain, United States of America, France and the United Kingdom. The selection criteria were based on geographical and cultural proximity, language knowledge of the authors, as well as on the history of using social networks to engage with citizens.

A content analysis grid was built to collect the observation data, which can be partially viewed in the tables in this article for the various institutions and countries.

3 RESULTS

In the library sector, websites and social networks of national libraries in the countries mentioned were analysed. These libraries are representative and depository of the bibliographic heritage of each country, meaning they are responsible for the set of bibliographic specimens that were gathered throughout the centuries and that serves the peoples cultural heritage, regardless their physical material (Faria & Pericão 2008, 945).

The National Library of Portugal has been present only on Facebook since 2011. It does not use other social resources, nor does it present collaborative projects (table 1). It has few followers on this platform (23,445) compared to other libraries (see table 1.)

The National Library of Spain (BNE) is present in the main social networks, with presence on seven platforms and has four applications for mobile phones that allow, from its collections, to explore works of art in high resolution. The applications feature old books, manuscripts, etc. They also have an application dedicated to the educational service with interactive games related to exhibitions. BNE has a platform for developing collaborative work projects on its digital heritage called Comunidad BNE. They have 11 collaborative projects, of the crowdsourcing type, in which the 295 active collaborators add value to the collections, deepening and reusing the open data, in a total of 5108 contributions. The projects are related to bibliographic and au-

thority catalogues and digital objects to improve research and information retrieval. For example, there are projects for transcription, identification and georeferencing, identification and labelling of individuals portrayed in monographs or of anonymous people in the photo collection, etc.

The National Library of France has a presence on five social networks, standing out on Twitter with 14,800 publications and 223,200 followers, occupying a third place in quantitative terms, after the Anglo-Saxon libraries.

The British Library has a presence on six of the most representative social networks and with 19 blogs. The themes of the different blogs are very specialized, e.g. on music, others on Asian and African studies, care for collections, on extinct archives, European studies, on medieval manuscripts, etc.

Twitter stands out, of all libraries and has the most followers (1,906,090), although it was only in 2009 that it started the account. But it is on Instagram that it has the highest values in comparison to other libraries, the number of followers 294,000, followed by the Library of Congress with 63,400.

The Library of Congress (LC) is the national library with the largest and oldest presence on the networks, with participation on eight platforms and with 19 blogs. On Facebook it has more followers (419,573) and likes (409,180) than any other library and has been present since 2009. On Twitter, despite having more followers than the others, it is surpassed in terms of publications (18,100) by the National Library of Spain (40,400). It stands out on YouTube with 28,200,322 video views, surpassing BL and BNE. On Flickr, with 71,500 followers, LC requests the participation of the community to tag and comment on old photographs, especially those that have no description of the content. It should be noted that the library's presence on Pinterest is one of the most representative in terms of quantity of digital images from books, manuscripts, photographs, maps. Also, on Pinterest there is a great commitment in terms of publications (24,700) with an average of 1,700 views per month. LC has a crowdsourcing program “By The People” in which it invites the community to carry out virtual volunteering by contributing transcripts, reviewing and tagging documents.

Table 1. National Libraries.

National Libraries	Portugal	Spain	France	United Kingdom	United States
	<u>Biblioteca Nacional de Portugal</u>	<u>Biblioteca Nacional de Espana</u>	<u>Bibliothèque Nationale de France</u>	<u>British Library</u>	<u>Library of Congress</u>
Number of Social Media	1	7 + 4 app	5	6	8
Which Social Media	Facebook	Facebook, Instagram, Twitter, Youtube, Flickr, Slideshare, blog (1)	Facebook, Instagram, Twitter, Youtube, Blog (1)	Facebook, Instagram, Twitter, Youtube, Flickr, Blog (19)	Facebook, Instagram, Pinterest, Twitter, Youtube, Flickr, Itunes, Blog (17)
Website with collaborative projects	n/a	Yes	n/a	n/a	Yes
Citizen Science Projects	n/a	n/a	n/a	n/a	n/a

In the Museum sector, websites and social networks of the most representative national museums with the greatest international projection for each country were analysed.

As can be seen in table 2., there is a strong adhesion to social networks as a way of disseminating and sharing knowledge.

The Portuguese Museum of Ancient Art has recently joined social networks (2009 and 2010), of which it uses only three (Facebook, Twitter and Instagram), with communities substantially smaller than their counterparts. It also does not develop collaborative projects.

The Spanish Museo del Prado is the one with presence on more social networks, in a total of 7, to which are added 3 apps with content related to its collection. With considerable communities on Facebook, Twitter, Instagram, and Pinterest, where the number of monthly visualizations reaches 673,100 is more than double of the US Smithsonian. On YouTube, its subscribers surpass those of the Louvre Museum, presenting twice as many views. Through a well-defined strategy at the level of audio-visual, they broadcast live videos on weekdays, with comments on the works of art of the Museum on Instagram and on YouTube with videos on works of art, exhibitions, conferences, monograph courses, seminars, etc. Also noteworthy is the “Mi Prado” projects, where visitors are invited to create and share their own visit and itinerary at the museum and “Oral History - Voces del Prado”, where individual employee experiences are reported.

French Musée National du Louvre started relatively early its presence on social media (2006), with its adherence to YouTube. However, it is in its communities on Facebook (2,495,142) and Instagram (3,798,285) that it surpasses more than half all other museums. On YouTube it develops a collaborative strategy, appealing to YouTubers adventures in the museum's rooms, which replicates on Instagram (“Share your photos using #museedulouvre or #louvre”), and where it stands out for the greater number of publications in relation to other museums. The presence on the four social media seems to be very articulated.

As for the British Museum, it is present in 5 social networks and a blog. Its community of subscribers on Facebook, Twitter and Instagram is only surpassed by the Louvre Museum. As for YouTube, in what seems to be the biggest bet in the Museum, it dominates on all fronts with 284 thousand subscribers, and 298,533.71 views (3 times more than Prado). In this network, it is assumed as an open forum where anyone is welcome to contribute. It is also in this Museum that, together with the Smithsonian, there is a presence on Flickr. With calls for collaboration and participation, the museum delivers an innovative, broad-ranging program of activities, collaborative projects and learning opportunities with, and for, local communities, expressing that “We aim to make the Museum a meeting place for cross-cultural exchange and engagement and to remove barriers to participation”.

As for the Smithsonian, with a presence on six social networks and 19 blogs, it is the only museum with a presence on all social networks for the dissemination of images (Instagram, Flickr and Pinterest). It is in fact on Pinterest that it has the largest number of followers: 60.6 thousand. It has numerous collaborative and citizen science projects, to which the fact that it has 19 very different museum centres in the scope contributes largely.

All museums call for participation and exchange of knowledge. Whether in their educational services, where they can develop specific programs, as well as appealing to digital volunteering or in person. The inclusive and community-serving museum underlies these options.

Table 2. Museums.

Museums	Portugal	Spain	France	United Kingdom	United States
	<u>Museu Nacional de Arte Antiga</u>	<u>Museo Nacional del Prado</u>	<u>Musée du Louvre</u>	<u>British Museum</u>	<u>Smithsonian</u>
Number of Social Media	3 + app	7 + app	4	5 + blog	6
Which Social Media	Facebook, Instagram e Twitter	Facebook, Instagram Pinterest, Twitter, YouTube, Spotify, iTunes	Facebook, Instagram, Twitter, YouTube	Flickr, Facebook, Instagram, Twitter, YouTube	Flickr, Facebook, Instagram, Pinterest, Twitter, YouTube
Website with collaborative projects	n/a	n/a	n/a	Yes	Yes

Citizen Science Projects	n/a	n/a	n/a	Yes	Yes
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The Archival heritage is the set of records and documents of a country that form its cultural, historical and administrative heritage. Furthermore, Common archival heritage is the set of archives of a nation or of several states that can't be divided, or they lost their administrative, legal or historical value (Faria & Pericão 2008, 945).

Regarding the National Archives sector, (see table 3.) we have two different realities: one of the Iberian countries, with no presence what so ever in the social web, and that of France, the UK and the USA with a strong social network activity, mainly from 2008 onwards.

The Archives Nationales de France registers membership on Facebook (2011), on Twitter (2009) with more than 30,000 followers, and more recently on Instagram as well (2017). The Archives Nationales share in their website a [link](#) to innovative and collaborative projects in the archival French sector, specially the link to the blog "[Archives Nationales Participatives](#)". Also, one must highlight that the centenary of the First World War was the motto for the national request for citizen participation, both nationally and locally: "[Mémoire des Hommes](#)" and "[Ponts et Chaussées](#)" are some of the collaborative projects developed.

The UK National Archives have a strong presence on social media. They have 6,9 thousand followers on Flickr and dispose more than 20,000 photos on Twitter for up to 6,000 followers. On Wikipedia one can find the "Glamwiki where you can contribute to and improve articles related to The National Archives on Wikipedia". Most importantly, UK National Archives have several collaborative projects, both on the Zooniverse platform and on self-websites, with a strong appeal to digital citizenship. Like in the French case, the First World War was the trigger. The ongoing projects "The war behind the wire: prisoner of war document display" and "Tag our record", or the already ended "[Operation War Diaries](#)" are three of the citizen science / collaborative projects to highlight. The ambitious strategic vision of UK National Archives for archives is seen on the funding program "[Archives Unlocked](#)" which "focuses on the needs and potential of the archives sector, and realises in practical and tangible terms their unique relevance in preserving the diversity of our nation's heritage." With the theme "[Collaborate and Innovate](#)" this new funding program encourages "innovative and collaborative practice across the sector".

NARA beats all the others together. With 16 blogs, 17 Instagram accounts, 11 channels on YouTube and 34 Twitter accounts, the USA National Archives also make great appeal to digital citizenship and encourages public input, even including a Citizen Archivist Dashboard on their site. On Flickr since 2009, and with more 13,000 followers, NARA wants to reach a new audience, interacting with visitors and researchers in a new way. As for YouTube, NARA contents have researched 23,326,660 visualizations. Videos are shared thinking about "Preserving the Past to Protect the Future". On Zooniverse, one can find the citizen science projects "[The American Soldier](#)" (with more than 4,000 volunteers and more than 10,000 classifications) and "[African American Civil War Soldiers](#)" (with almost 5,000 volunteers and up to 42,000 classifications).

Table 3. National Archives.

	Portugal	Spain	France	United Kingdom	USA
National Archives	<u>IAN/TT</u>	<u>Archivo Historico Nacional de España</u>	<u>Archives Nationales de France</u>	<u>National Archives</u>	<u>National Archives</u>
Number of Social Media	n/a	n/a	4 + blog	6 + blog + podcast	7 + blog + podcast
Which Social Media	n/a	n/a	Facebook, Instagram, Twitter, Daily.motion	Wiki, Flickr, Facebook, Instagram, Twitter,	Wiki, Flickr, Facebook, Instagram, Twitter, YouTube, Pinterest

				YouTube		
Website with collaborative projects	n/a	n/a	Yes	Yes	Yes	Yes
Citizen Science Projects	n/a	n/a	Yes	Yes	Yes	Yes

4 DISCUSSION

Cultural heritage value can also be based on what is important at a group or community level. Even if UNESCO defines and legislates what world heritage is on global terms, many national and state legislatures also define, with national legislation or based on international conventions, their own national, regional or state heritage. Furthermore, “Within our fast-paced, digital world, institutional authority should be leveraged to facilitate and validate user-generated content on digital platforms.” (Phillips, 2014, 247).

Some authors speak about “reluctance” (Nogueira, 2010), “scepticism” (Grayson, 2016) or even the need for up-skilling its professionals (Carvalho e Matos, 2018) in the GLAM sector because of the use of non-official or invalid applications from the web 2.0, meaning that information professionals may not be ready for a paradigm change (Silva, Borges & Marques, 2018, 13), when professional flexibility is seen nowadays as a “distinct advantage in LAM collaborations” (Zorich, Waibei & Erway, 2008, 27). Also, “The reliability of public-produced content on the web is often called into question without considering that this public-produced content is more accurate when there are higher levels of participation.” (Phillips, 2014, 255).

On one hand, cataloguing, indexing or describing documents is an expensive process for GLAM institutions, “and crowdsourcing this activity has been explored as a cost-effective means of accomplishing it” (Dunn & Hedges 2014, 241). On the other hand, without the help of volunteers, UGC or citizen science projects, the volume of digitised material would be to staff members of the GLAM sector to do it on its own, “reducing the benefits of having the material in digital form at all.” (Dunn & Hedges 2014, 240). That’s why “When cultural professionals adopt models of open authority, we are able to use the digital platforms at our disposal to work within communities and collaboratively improve the interpretation of our cultural heritage.” (Phillips, 2014, 248).

The results seem to indicate that images (photos or videos) are more appealing to UGC projects, and that’s probably why the National Libraries and Museums studied have more presence on social media. Differently, National Archives bet on citizen science projects, mainly collaborative transcriptions. There is also a cleavage between the Anglo-Saxon world and the European countries studied, therefore the first ones have massive presence on social media and citizen science projects.

CONCLUSION

Cultural heritage, tangible and intangible, natural or cultural, movable or immovable, is a valuable inherit from the past. Countries all over the world, supported by international and national public policies and programs, have engaged ways for cultural access and preservation, as culture is a basic need.

In this work it was demonstrated that the pillar of culture is one of the fundamental pillars of sustainability. Most of the GLAM institutions in the countries studied work and defend cultural heritage, recognizing that it involves the contributions of the community and citizens that come from democracy and from the closest and most social technological practices. As recommended by Agenda 2030, especially the SDGs on effective institutions, sustainable communities and partnerships, GLAM institutions reveal that they work along these lines and demonstrate that cultural heritage is at the forefront of sustainable development.

The National Library and the National Archives of Portugal, as well as the most representative national Museum in the country, have not yet designed a plan that contemplates

the contribution and participation of users in projects relevant to these institutions. User-generated content is not relevant because these institutions have not created profiles and pages on social networks. Except for the National Museum of Ancient Art, which, due to its characteristics, is exposed on Instagram, Twitter and Facebook and BNP on Facebook. The sites also do not allow or invite community participation, and Citizen Science projects are not available. The Portuguese situation compared to that of the Anglo-Saxon countries, and even the European ones, is at a low level of intensity regarding the involvement of the community and citizens with these cultural institutions.

The lack of motivation to work on these issues is likely to be stopped by the current circumstances that the world is experiencing, relating to the COVID-19 pandemic, the growth of digital life and the development in the implementation of the SDGs.

In the future, a broader and deeper research work on Portuguese GLAM institutions will take place on these themes.

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