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LOGICS HINDERING DIGITAL TRANSFORMATION IN CULTURAL HERITAGE STRATEGIC MANAGEMENT: AN EXPLORATORY CASE STUDY

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Museums play an important role in tourist flows, especially in cities that are famous for their cultural heritage. To valorize their role, these cultural institutions should open themselves to visitors as vectors of social, educational, and entertainment values. In particular, museums need to reinvent how they transmit information about their collections and how they engage visitors, keeping in mind the opportunities triggered by digitalization. Digital technologies could in fact be a powerful tool to assist in adopting a visitor-oriented approach and to stimulate a two-way communication. This article aims to analyze the extent of digitalization that should be integrated in museums' communication strategies, and to recognize the logics hindering digital transformation in cultural heritage strategic management. We developed an exploratory case study, focused on museums in Turin, Italy, gathering online data through institutional reports, museum websites, and social media, as well as onsite data mainly from semistructured interviews with museum managers. The research shows that most of the interviewees understand the strategic role of digitalization for museum development; however, the level of digital readiness remains low. Alongside the well-known systemic financial deficit of cultural institutions, there are other critical factors that hinder the integration of digitalization processes in the cultural heritage management. Common barriers include the presence of institutional pressures, and the lack of organizational and managerial coordination between different departments and functions that should be involved in the development of digital strategies and their integration in the strategic planning systems of museums. This research offers insights to tackle these challenges, allowing museums to compete in the international context of the cultural and heritage tourism.

Key words: Museum digitalization; Organizational transformation;
Cultural strategic management; Cultural tourism; Digital strategy

Introduction

Over the last years digital technologies have become increasingly pervasive in our society (Ferraris, Mazzoleni, Devalle, & Couturier, 2018; Trequattrini, Shams, Lardo, & Lombardi, 2016). The great possibilities triggered by new technologies have led cultural institutions to cultivate creative ways to adapt to digital transformation (Clough, 2013). Museums are one of the main institutions at the heart of this problem. Despite some interesting cases, the majority of museums are not yet familiar with new technologies, and their applicability is far from being systematically grafted into the overall strategy museum management. It is no coincidence that one of the guidelines of the Declaration of Funchal, issued by the European Regional Alliance of the International Council of Museums (ICOM Europe), and the World Federation of Friends of Museums (WFFM) on the occasion of the European Year of Cultural Heritage (2018), encourages a wider use of new technologies, especially in the domain of digitalization. Digital technologies in fact are supposed to drive cultural institutions to provide: 1) a democratic access to culture, 2) an open space for dialogue, and 3) a greater exchange of ideas and knowledge. Over the past decade, some museums around the world such as Tate, SFMOMA, the Smithsonian Museum, and Rijksmuseum have started considering digital innovation as part of their business model, introducing digital strategic plans. However, the adoption of digitalization in Italy is significantly scarce.

The aim of this article is to understand which factors inhibit digital innovation in museums, and how digitalization is inhibited in the light of the role played by this sector for tourism. The research question (RQ) is therefore the following: “How do organizational logics influence museums’ digital innovation through strategic management?” Despite its importance, to the best of the authors’ knowledge, this topic is still underinvestigated.

To answer the RQ, the authors developed an exploratory case study (Eisenhardt, 1989; Sirakaya-Turk & Uysal, 2017; Yin, 2017), focused on museums in Turin, Italy. Data were gathered through both online and on-site sources; online data came from museum websites, social media, online institutional communications, and online annual reports.

On-site data were based on in-depth semistructured interviews, mystery tours, internal documents, and publication reviews. This research is focused on Turin because this city has witnessed a postindustrial repositioning process (De Bernardi & Gilli, 2019; Galdini, 2008) and plays a primary role in terms of cultural heritage tourism development in Italy. This is highlighted by the city’s dramatic growth in the number of museums, which increased from 30 to 62 in two decades (De Bernardi, Gilli, & Colomba, 2018).

According to this research, even if digitalization is already adopted by museums, a systematic and holistic approach to digital innovation in museum organization and management systems is still missing. This is due not only to the lack of financial resources (Draper, Oh, & Harrill, 2012), but also to managerial and organizational failures. The remaining sections of the study are structured as follows. In section 2 a literature review is conducted to grasp both the state of the art and the emerging issues concerning the scientific debate on this topic. Section 3 is dedicated to the research design, with a description of the methods of data collection and analysis, while in section 4 we present and discuss our findings. Section 5 is dedicated to final conclusions and recommendations for further research development.

Theoretical Background

Museum Challenges in Visitor Experience: Toward an Audience-Centered Approach

In our current fast-paced environment, museums have to modify their role to maintain and attract new visitors, taking into consideration that their competition is not limited solely to other museums (Ritzer, 2010). To do so, they must understand emerging patterns involving potential audiences. As pointed out by Hooper-Greenhill (1999) and Lazzeretti, Sartori, and Innocenti (2015), the role of visitors is evolving from that of a passive receiver to active actor involved in processes of sharing and participation. Visitors are turning into prosumers (Pulh & Mencarelli, 2015; Toffler, 1984) and their expectations are no longer limited to learning aspects but also to recreational experiences (Black, 2016), resulting in the need for museums to find new ways of engaging the public by combining entertainment and education (Kotler,

2004; McPherson, 2007). Today, museums recognize and relish their duty to be truly relevant for a diverse audience, striving to increase not only their overall number of visitors, but also the demographic make-up of those engaging with their collections and offers (Simon, 2010). Audience development, first established in a commercial context, is a powerful tool for museums to identify and attract new long-term audiences, while retaining existing groups of patrons. In this regard, Kotler (2004) has argued that the museum of the future should combine the education aspect of wandering around galleries and viewing a huge number of objects with activities more oriented towards the entertainment, highlighting their hybrid nature. The introduction of digital technologies can be considered as a valuable and innovative way to improve visitor's engagement, "edutainment," interactivity, immersive experiences, and narrative environments (Bertacchini & Morando, 2013; Cerquetti, 2016). Furthermore, digitalization can enhance participation and two-way communication flows between museums and visitors in a dynamic relationship that is not limited to mere information exchange, but rather pursues coproduction of knowledge (Fletcher & Lee, 2012; Hellin-Hobbs, 2010; Pulh & Mencarelli, 2015). Unprecedented changes in the provision of digital museum resources, which are beginning to transform the experience of visiting museums, arise from more embedded, ubiquitous, and networked digital technologies, with enhanced capabilities to promote rich social interactions, context awareness, and connectivity (Bailey-Ross et al., 2017; Samis & Michaelson, 2017).

*Impact of Digital Transformation on
Museum Strategic Management: From
Social Media to Internet of Things (IoT)*

Digital technologies have had a huge impact on communication processes, making them faster, bidirectional, customizable according to specific targets, and subject to continuous evaluation by third parties (De Bernardi, Bertello, & Venuti, 2019). This has resulted in an interactive relationship between the provider and receiver of information, giving power to the recipient to change the medium or channel of communication, and to immediately express their level of satisfaction or dissatisfaction, upon their independent evaluation,

with the veracity of communication (De Bernardi & Gilli, 2019). The scientific debate regarding digital innovation in cultural institutions has been enriched with interesting contributions and empirical evidence that have deepened our knowledge of Information and Communications Technology's (ITC) impacts, benefits, and limitations. Over the past years, digital technologies and the Internet have gained a greater and more important role in communication and dissemination of knowledge by museums that are riding the wave of digital innovation to respond effectively to the changing needs of their patrons (Bonacini, 2012; Camarero & Garrido, 2008; Grinter et al., 2002; Proctor, 2010).

Digitalization can be seen as a powerful tool in terms of audience development (Cerquetti, 2016), but also a way for the cultural institution to be more competitive and sustainable, maximizing its value creation for stakeholders (Camarero & Garrido, 2012; Sibilio Parri, 2014). In their research, Camarero and Garrido (2008) analyzed the mediating role of technological and organizational innovation between market orientation and socioeconomic performance in Spanish, French, British, and Italian museums. They found a correlation between technological innovation and museums' economic performance, where the latter refers to their indirect economic effects, such as the increased attendance at the physical museums as identified by curators' self-evaluation. Currently, the use of information and communication technologies, the Internet, and social media are transforming museum's business models, broadening their traditional functions through the increasingly widespread use of IoT smart objects and technologies (Camarero & Garrido, 2012; Solima, 2016; Vicente, Camarero, & Garrido, 2012). Digital technologies such as the Internet and social media have played an important part in enabling the provision of more flexible and tailored forms of information, and in providing new forms of interactivity in museum spaces (Parry, 2010; Tallon & Walker, 2008). The Internet and social media enable museums to redesign traditional products and promote new cultural experiences by involving a worldwide network of potential visitors, who could take part in the production of the cultural service, both before and after visits (Marty, 2007). The drive towards museum digitalization has received a strong boost from the IoT. Thanks to the growing adoption of smartphones and context-aware technologies that provide increased

mobility, the user is potentially “always on” (Solima, 2016). GPS, tagging technologies such as Quick Response (QR) codes, Radio Frequency Identification (RFID) or iBeacons, and a multitude of specific “apps” have been used successfully to improve museum innovative experiences. A QR code is a barcode used to store smartphone-readable information after downloading an app. Unlike the QR code, the RFID code also allows museums to track visitor paths (McKercher & Lau, 2009), providing information about the behavior such as the under-or-overuse of the exhibition halls (Solima, 2013). The data gathered thanks to these technologies allows museums to rationalize the stream of people and therefore optimize itineraries (Yoshimura et al., 2014).

To summarize, digital technologies and communication become ever more relevant and central for the competitive success of museums as they have a strong impact on their positioning as providers of cultural knowledge, on their reputation and identity, and are critical factors for the achievement of the museums’ purpose, mission, and positive performances (Sibilio Parri, 2014; Solima, 2017). Accordingly, digital technologies should play a transversal role among all the museum activities in a long-term perspective, by strengthening the loyalty of the traditional audience and engaging those who are familiar with new technologies but not yet with museums.

Data Collection and Methods

Due to the novelty of the topic, the authors conducted a qualitative research based on an exploratory

case study (Eisenhardt, 1989; Sirakaya-Turk & Uysal, 2017) with the aim to explore the logics hindering digital transformation in cultural heritage strategic management of museums in Turin, Italy. This method is particularly suited to answering “how” questions about the contemporary phenomenon in its real-life context over which the researcher has little control (Yin, 2017). It appears appropriate to gain an in-depth understanding of “how” some organizational aspects affect museum decision makers in terms of digital innovation (Eisenhardt & Graebner, 2007). This study is based on multiple sources of online and on-site data. Online data were collected through the analysis of museum websites, social media, institutional communications, and online specialist magazines. On-site data were based on mystery tours (Richards & Munsters, 2010), in-depth semistructured interviews (Crouch & McKenzie, 2006), internal documents, and publication reviews (Fig. 1).

Data were collected from June 2017 to March 2018. The combination of diverse data sources reinforces result triangulation (Johnson, Onwuegbuzie, & Turner, 2007) and leads to more specific insights (Stake, 2013; Yin, 2017).

Within the whole universe of museums in Turin ($N = 62$) (www.comune.torino.it), the authors took into account only those museums that have their own website and fixed operating hours, reducing the sample to ($N = 42$) museums. In a first step the authors individuated a list of digital services according to the literature, then a framework of these technologies was created for each museum through an

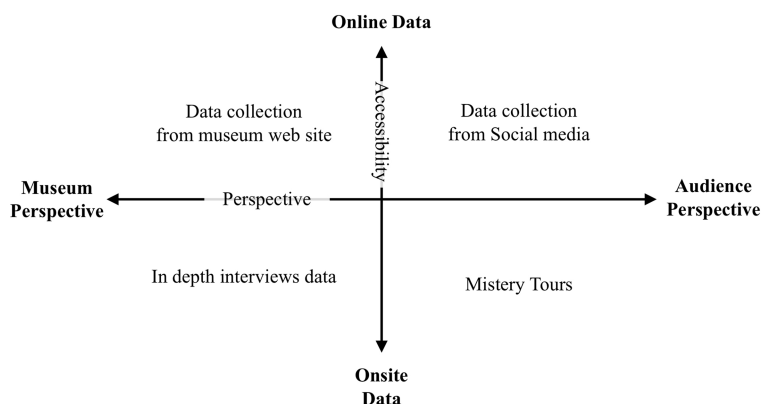


Figure 1. Research data collection. Source: own elaboration

online analysis and mystery tours (Fig. 2), grouping them into three phases of fruition (De Bernardi et al., 2018): antecedent, subsequent (online), and concurrent (on-site).

Thereafter, the framework was simplified by eliminating services not offered by any museum, or services considered obsolete—this resulted in 11 elements, 6 online services, and 5 onsite services¹. This preliminary phase allowed the authors to select the top 15 museums according to the number of digital technologies identified (Table 1). In a second step, only for the top 15 museums, in-depth semistructured interviews were conducted to the museum's management, according to the methods designed by Brinkmann and Kvale (2015). The total number of museums involved in the interviews was $N = 11$ (4 museums out of 15 did not declare themselves willing to collaborate), for a total of 13 interviews (Table 2), as two museums provided two interview responses instead of one. The interview protocol, aimed at understanding what role digitalization is currently playing in the modernization of museum industry and what role it will play in the future, was built on these issues: the competencies required of museums to be

competitive, the relevance of digital policies inside the organization, the role of museums in a long-term perspective, and the future intentions with regards to digital strategies. Findings from interviews were then systematized into three topics: (i) the use of digital technologies without developing a deliberated and specific strategy, (ii) the use of digital technologies according to a deliberated digital strategy, and (iii) the integration of the digital strategies within the overarching museum strategy. These three strategic management behaviors, which represent the three stages towards a complete realization and integration of a deliberated digital strategy, stemmed from an online benchmark analysis of international museums (e.g., Tate, SFMOMA, Smithsonian Museum, and Rijksmuseum) with a well-established digital strategy often formalized in a digital strategic plan. These three stages were then translated into a framework based on three approaches: (i) unstructured approach, (ii) partial approach, and (iii) integrated approach. The interviews were then recorded, transcribed, and interpreted through a thematic content analysis by using the software ATLAS.ti, to identify the issues aforementioned. The interviews lasted approximately

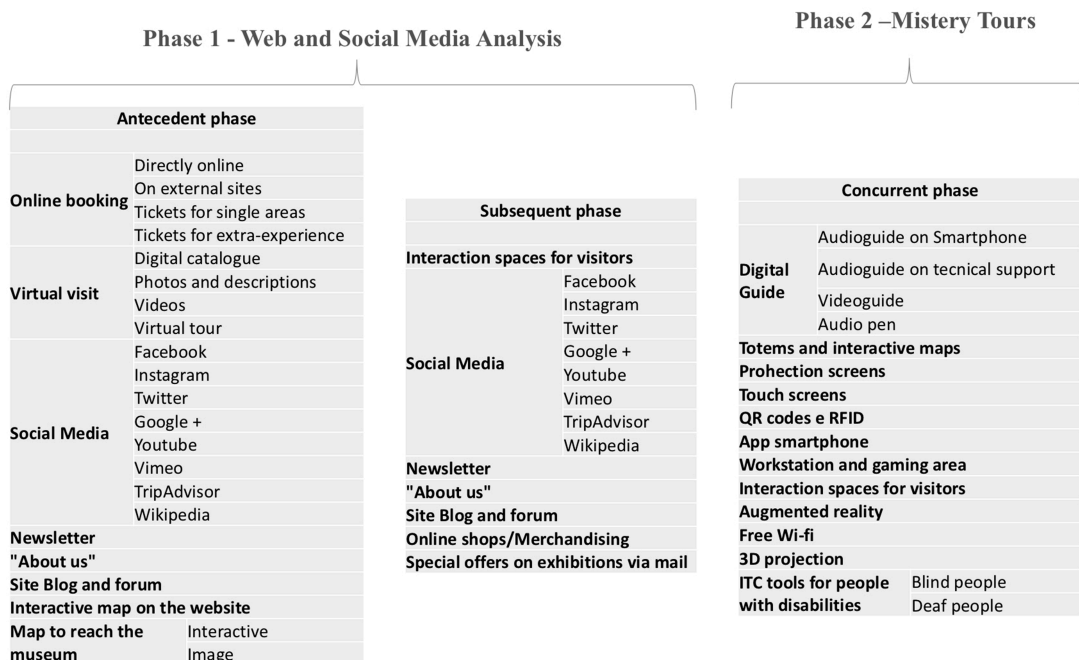


Figure 2. Digital technologies map. Source: own elaboration

Table 1
The Top 15 Digital Technologies in Turin Museums

Museum Name (Ownership)	Online						On-Site					Total
	Online Booking	Interactive Map	Digital Catalogue	Virtual Tour	Active on Social Media	Blog/Forum	Wi-Fi	App Smartphone	Digital Audio Guide	Touchscreen	QR Code and RFID	
Madama Palace (public)	x	x	x	x	x	x	x	x			x	9
MAUTO–Car Museum (private)		x	x	x	x		x	x		x	x	8
Venaria Reale (public)	x	x	x	x	x		x	x	x			8
Cinema Museum (private)	x	x	x		x		x			x	x	7
Giovanni e Marella Agnelli Gallery (private)	x	x	x		x		x				x	6
MAO – Arte Orientale Museum (public)	x	x	x	x	x							5
Risparmio Museum (private)	x	x		x	x					x		5
Royal Museum (public)	x	x	x		x						x	5
Egyptian Museum (public)	x	x			x		x		x			5
GAM – Arte Moderna Gallery (public)	x	x		x	x							4
Resistenza Museum (public)	x	x					x			x		4
Risorgimento Museum (private)	x						x	x		x		4
Borgo and Rocca Medievale (public)	x	x					x					3
Juventus Museum (private)	x						x			x		3
Spazio La Stampa (private)		x			x					x		3
		87%	87%	47%	40%	73%	7%	67%	27%	14%	47%	33%

Source: own elaboration.

1 hr each and were carried out in person. During the interviews, one of the researchers was leading the interview and the other was taking extensive notes; this allowed the researchers to adapt to the setting and pose follow-up questions, encouraging

interviewees to offer comments, stories, and associations (Cacciola & Marradi, 1988), making sure, at the same time, that all relevant areas were covered. During the analytical phase, using the software the recorded interviews were first transcribed into neat

Table 2
Museums and Managers Interviewed

Museum Name	Role of Interviewee
Madama Palace	Director
Venaria Reale	Communication and social media manager; Events and exhibit design manager
Cinema Museum	Marketing and communication manager
Giovanni e Marella Agnelli Gallery	Director
MAO–Oriental Art Museum	Director and curator
Risparmio Museum	Director and curator
Egyptian Museum	Marketing and communication manager
Resistenza Museum	Director and curator
Risorgimento Museum	Secretariat of Direction; Communication and exhibit design manager
Juventus Museum	Curator
Spazio La Stampa	Curator

Source: own elaboration.

textual data to create an objective database of the interview result (Gibbs, 2007). Data analysis was carried out by using open and axial coding techniques (Strauss & Corbin, 1998) for identifying and linking the qualitative data collected to research questions. Particular attention was paid to separately coding the categories of objective descriptive data on one hand, and of interpretative data based on perceptions and opinions on the other.

Findings and Discussion

According to the results of the preliminary phase, the top three adopted technologies are online booking, interactive maps, and social media. They correspond to two basic facilities: accessibility to information, and communication processes. However, the mere presence on social media is not an indicator of the degree of interactivity with customers, because it does not measure the dynamism of information flow. With regard to the online pre-visit phase, less than 50% of museums allowed visitors to make virtual tours and to access digital catalogues. Only 7% of museums manage a blog/forum. This is probably due to the fact that social media offers the same solution and provides access to a greater number of people. In relation to the on-site services, Wi-Fi service is surprisingly offered by only 67% of the sample, and in some museums it is offered with limitations (e.g., only for downloading the smartphone app, just for visiting the museum website, and/or only for a limited time).

Even though they adopted by a small percentage of museums, the most used technologies are the fixed ones: touch screens have been mapped in only the 47% of cases; this could suggest that visits still have a “passive” dimension, mainly based on sight and listening, with little interactive and multisensorial implications. Among the technological innovations adopted within the internal itineraries, the QR code and the RFID code services were found only in five museums (33%). The lowest percentages concern mobile technologies such as smartphone apps (27%) and digital audio-guide (7%), belonging to the “information centered” macroarea (La Rocca, 2014). Based on these findings it is clear that indeed, the traditional audio-guides prevail. On the whole, they are more fitting for visitors’ requirements,

shaping the visit in relation to their interests and time availability.

The interviews carried out with museums’ managers aimed to understand the current state of art and the prospective managers’ point of view on digitalization of museums in Turin (some summary extracts are shown in Table 3).

The results show that most of the museum managers interviewed (9 out of 11) are currently still adopting an “unstructured approach.” They adopt some digital solutions/technologies, but a formalized digital strategy has not yet been developed in a deliberate way. These museums mainly used digitalization to reach new segments of visitors, to create a continued contact with the visitor before, during, and after the visit, to create personalized offers and paths, and to provide visitors with additional information (Bertacchini & Morando, 2013); however, they limit their adoption to some sporadic initiatives not integrated in a digital strategy. Managers seem to not yet acknowledge the importance of digital innovation to create two-way communication flows between museums and their patrons in a dynamic relationship that is not limited to mere information exchange, but rather pursues learning objectives and coproduction of knowledge (Fletcher & Lee, 2012; Hellin-Hobbs, 2010; Pulh & Mencarelli, 2015). Specifically, even when managers mentioned concepts like “cocreation” or “crowdsourcing” they did not clearly express how they plan to achieve these targets.

Only two museums are going through the “partial approach” and one of them has relied on external experts to develop the digital strategy. Both museums recognize the necessity to move to the third steps in order to be competitive in the national and international context.

None of the museums interviewed have completed the process of integration of the digital strategy into the overall museum’s strategy.

When asking museum managers to project in the future their institutions, the majority of them (6 out of 11) highlighted the importance and their willingness to have a digital strategy integrated within the organization. Three museums have not acknowledged digitalization as a strategic resource, at least as far as themselves. According to them, the introduction of digitalization into the strategies is subversive because digital is not the traditional language

Table 3
Museums and Digital Strategies: A Three-Stage Framework

	Stage 1: Unstructured Approach (Adoption of Digital Technologies Without a Specific Strategy)	Stage 2: Partial Approach (Presence of a Digital Strategy Without Integration in the Overarching Museum Strategy)	Stage 3: Integrated Approach (Integration of Digital Strategy Within the Overarching Museum Strategy)
Museum 1	We implemented our online strategies in order to reach the segment of millennials, then we understood how important they are for every kind of public. . . . Digitalization process is mainly delegated to the marketing department.		<i>In our future we want to include in the corporate strategy all what concern digital innovation. Big efforts have to be done to unlocking digitalization potential for co-creation and two-way communication processes.</i>
Museum 2	To introduce a digital strategy we should recruit new workforce but we are state-owned with little power in terms of recruiting staff.	<i>Our aim is to adopt new technologies both inside and outside the museum in order to reach and educate women, migrants and those adults that otherwise wouldn't understand the topics addressed during the visit. . . . To do that efficiently, the development of a digital strategy is the only choice.</i>	
Museum 3	We are implementing our online strategies to reach new segment of public but a digital strategy has not been yet elaborated.		<i>The elaboration of a digital strategy will be followed by the integration within the overall museum's strategy.</i>
Museum 4	Digitalization cannot substitute human factor, we want to preserve our relationship with costumers offering them a unique and authentic experience, differentiated from the daily routine. <i>I don't know if developing a digital strategy could be a good idea. Digitalization introduces an APP but does not answer the questions "whom" or "why," using it.</i>		
Museum 5	Most of our workforce does not have enough skills in digitalization and it is not possible to hire new human resources because of costs. We just limit our effort to some technologies on-site and to a presence on the main social media but we don't have staff dedicated exclusively to digital aspects.	<i>We would like to develop a digital strategy but our organization does not have enough resources and competences at the moment.</i>	
Museum 6	People often use digitalization as synonymous of innovation, I think it is not the same, I mean, the latter does not imply necessarily the former. . . . We use some new technologies to get better the customer's experience but I prefer a cautious approach to not affect artworks' aura.		

(continued)

Table 3 (Continued)

	Stage 1: Unstructured Approach (Adoption of Digital Technologies Without a Specific Strategy)	Stage 2: Partial Approach (Presence of a Digital Strategy Without Integration in the Overarching Museum Strategy)	Stage 3: Integrated Approach (Integration of Digital Strategy Within the Overarching Museum Strategy)
	<i>Personally, I find digital language still too distant from museum traditional language. Despite my acknowledgement of the opportunities triggered by digital age, we are not planning to develop a digital strategy.</i>		
Museum 7		Over the last years the museum has developed a digital strategy supported by a local agency which provides services to innovation-based organizations.	<i>In few years all the operations concerning technology projects will be carried out involving all museum departments, strengthening digital strategy as a pillar to engage new audiences and to implement internal processes. The integration of a digital strategy within the corporate strategy will be absolutely essential in the next future, but it is a long-time process and we are just at the beginning.</i>
Museum 8	Digital helps us to renew our offer by making more usable captions, introducing audio and video descriptions, providing additional information through mobile phones: we still need to implement our technical and organizational skills to integrate the digital in our strategies.		
Museum 9	Every time we found interesting and feasible a digital solution, we adopt it. However our core activity is based on the artworks and we don't want that customers focus their attention more on the digital tools than on the exhibition. <i>Digital is just one tool in the toolbox. It may be the right way to fix the problem, or it might not.</i>		
Museum 10		We develop a digital strategy in the last two years. The aim of the next years is to implement and to integrate it in the overarching strategy of our museum.	<i>Digital strategies should be seen as a responsibility of everyone and not only of the digital department.</i> <i>Digital strategy should not be only a stand-alone document; it needs to be part of the overall strategy in order to use it on a daily basis.</i>
Museum 11	Our approach to digitalization does not yet pass through the elaboration of a strategy; every technological instrument is mainly oriented to simplify and to make more interactive the visit of our customers.		

Note. Quotations referring to the actual situation in regular font; quotations referring to the long-term perspective in italic font. Source: own elaboration (museums have been codified to ensure anonymity; the order of the list is not the same as the previous tables).

adopted by museums. Many interviewees also expressed their concern about the possible consequences of considering digital goals as ends and not means to achieve the museum's mission. Only two museums stated they would like to develop a digital strategy but without taking into account the opportunity to integrate it in the overall museum strategy.

In sort, it emerges that from a prospective point of view there are two main thoughts: on one side, museums that want to consider digitalization as part of their overarching strategy, and on the other side, museums that see digital aspects as something difficult to integrate with the typical museum mission. Regarding museums that are willing to become more digital, it is interesting to find out which factors are slowing down this process, and how.

Systemic financial deficit and institutional pressures especially hinder the transition from the first to the second stage, while lack of coordination/dialogue between departments that should share the implementation of digital choices is the main hindering factor to adopt an integrated approach.

Lack of financial resources (Draper et al., 2012) is the main aspect highlighted by managers; it is certainly a big issue but focusing only on this aspect risks to ignore other problems related to the cultural and organizational logics. Many managers in fact seem to be fixed in old mindsets and cultural paradigms, therefore displaying a low level of digital readiness. Even when they express a positive opinion on digitalization, a huge gap with reality can be perceived. Another problem is linked to the coordination mechanisms within the organization; people from different departments such as the curator, marketing, or digital experts have different backgrounds and one of the main challenges is igniting an open dialogue among them.

It is almost clear that these kind of problems have a deterrent effect on the digitalization process. One possible solution is to invest on human capital through programs of change management to grow a competent and innovation-oriented staff. Second, the introduction of a project manager who motivates the workforce with push and pull techniques could help to reach common goals. Third, museums should gather a taskforce constituted by subjects coming from different departments to reduce individual barriers and silo mentality (Cilliers & Greyvenstein, 2012).

Conclusion

Despite the pervasiveness of digitalization in our society (Bresciani, Ferraris, & Guidice, 2018) and the need for cultural heritage institutions to innovate themselves, many museums are still reluctant to implement deliberated digital strategies.

This article, based on a qualitative exploratory study, points out that the digital lag that some museums are witnessing in cultural heritage strategic management is not only due to the lack of financial resources (Draper et al., 2012), but also to institutional pressures (McLennan, Moyle, Ruhanen, & Ritchie, 2013), and lack of coordination between departments that should be involved in the implementation and integration of a digital strategy. This article contributes to the literature on tourism and on digitalization. First of all, it focuses on cultural heritage strategic management, a sector that is increasingly important for tourism flows. Second, it analyzes an underinvestigated topic such as organizational logics hindering digital development in cultural institutions, developing a framework based on three approaches to digitalization: (i) unstructured, (ii) partial, and (iii) integrated. The study also has practical implications because it should stimulate the Italian debate on digitalization in cultural heritage management, offering insights to bridge the gap between Italy and other countries.

The research has some limitations, mainly due to the size of the sample. A small sample facilitates a close association with the respondents and offers more detailed information (Crouch & McKenzie, 2006), but at the same time, it represents a limitation. A bigger sample would allow studying the influence of additional characteristics such as legal form, dimension, type of museum, and directors' country of origin.

Further research development should focus on involving other geographical areas and other cultures in the sample. Another interesting solution may be that of interviewing more than one person for each museum to detect differences and alignments inside every organization. Additional research could also be undertaken focusing on the role of open innovation (Santoro, Ferraris, Giacosa, & Giovando, 2018) as well as digitalization for branding (Ekinci, Sirakaya-Turk, & Prediado, 2013;

Gnoth, 2007; Shams, 2016a) and sustainable competitive advantages in cultural services (Shams, 2016b).

Note

¹The authors while considering the importance of augmented reality and virtual reality as digital on-site instruments, decided to exclude them from the framework because they were adopted by museums only for temporary exhibitions. Moreover, regarding the online museum presence, the social media sites taken into account include Facebook, Instagram, and Twitter. These three social media, thanks to their nature and notoriety, are the most suitable to enhance audience engagement (Baker, 2017; Budge, 2017; Camarero, Garrido, & San Jose, 2018; Osterman et al., 2012).

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