

# **The strategic governance of the digital accounting environment: insights from virtual museums**

## **Abstract**

**Purpose** – This paper aims to investigate the strategic governance of the digital transformation of the accounting environment in cultural organizations, with a specific focus on practices of social responsibility and stakeholder engagement in virtual museums.

**Design/methodology/approach** – By adopting a multiple case study approach, this study investigated five Italian virtual museums and their digitalization processes. Data were collected and triangulated from multiple sources, including documentary analysis and semi-structured interviews with 16 key informants.

**Findings** – Considering the digitalization of the accounting environment as a paradigmatic change, we identify three key transitions for its strategic governance: i) from the static, technical, and physical to the relational, emotional, and digital; ii) from bureaucratic managerialism to value cocreation; iii) from traditional CSR to integrated external engagement. Moreover, we found that social responsibility and stakeholder engagement practices are employed in a limited way and that the use of social media appears to be increasingly important and to be carried out through an emergent rather than a deliberate strategy.

**Research limitations/implications** – The paper draws from a limited sample of case studies in one country and is based on exploratory research. We call for more comparative studies using a longitudinal approach to investigate the impacts of digitalization on the accounting environment of cultural organizations.

**Originality/value** – This study is one of only a few studies concentrating on the effects of digitalization on the accounting environment of cultural organizations.

**Keywords** – Cultural Heritage, Digitalization, Emotions, Accounting Environment, Accounting Culture, Social Media, Value Cocreation

## 1. Introduction

An increasing number of museums have recently adopted digitalization processes and applied new technologies to enhance their cultural service offerings. The COVID-19 pandemic has further accelerated this digital transformation (Agostino *et al.*, 2020), pushing museums to digitalize their art collections and to use virtual reality (e.g., see Lloyd-Baynes, 2019; Atkinson, 2020; Grant, 2020).

Despite the increasing relevance of the phenomenon, few studies have investigated how cultural organizations and their accounting environments are influenced by digitalization processes (e.g., Guimarães-Costa and Pina Cunha, 2006; Tagesson *et al.*, 2009; Hao *et al.*, 2018; Lamboglia *et al.* 2018; Agostino *et al.*, 2020; Vollero *et al.*, 2020).

This is a relevant issue because, as Parker and Saker (2020) argued, digitalization and the advent of new technologies create a different kind of spatial and social relationship between people and cultural organizations, with implications for sustainability and accountability issues (Packalén, 2010; Mancini *et al.*, 2016).

In this paper, we aim to contribute to filling this gap by exploring the key issues for strategic governance of digitalization processes in the accounting environment, with a focus on practices of social responsibility and stakeholder engagement. Specifically, by adopting a multiple case study approach, we analyze the digital accounting environment of five virtual Italian museums.

It is important to note that we use the generic term “digitalization” to include the concept of “digital transformation.” According to the literature, “digitalization” refers to the process in which organizations use digital technologies with the intention of establishing a connection between various activities (or services or processes) and their customers (see, for example, Feldman, 1997; Van Dijk, 2012). “Digital transformation” is, thus, characterized by a customer-driven strategic business transformation, which entails wider and cross-cutting organizational change through the adoption of digital technologies (e.g., Cochoy *et al.*, 2017). We use “accounting environment” to refer to all aspects of the external environment that affect the organization’s accounting choices and outcomes. According to Naser (1993, p. 1), “the environment of accounting consists of social-economic-political-legal conditions, restraints, and influences that vary over time,” whereby accounting is not only a product of the environment but also contributes to reshaping the environment itself in a coevolutionary and osmotic relationship.

This paper is organized as follows: the second section provides the theoretical backdrop; the third section highlights the methodology adopted; the fourth section describes the main findings, which are discussed in the fifth section; and the sixth and last section contains some concluding remarks and describe the limitations of our study, while also offering some insights for future research.

## 2. Theoretical backdrop

Digitalization affects public services and their accounting environments in two main ways. First, digitalization may guarantee a remote and secure point-of-access for public services (e.g., Lindgren *et al.*, 2019; Mergel *et al.*, 2019, 2021). Second,

through data analytics, digitalization can provide organizations with data that can be used for decision-making processes (e.g., see Maciejewski, 2017; Sheng *et al.*, 2020).

Clearly, digitalization is a paradigmatic change in the governance of any type of organization, and, as such, it requires strategic governance. Strategic governance refers to making decisions and controlling their effects on the achievement of the organizational mission (e.g., Ratnatunga and Alam, 2011; Bryson, 2018). The issues relating to the strategic governance of public organizations such as virtual museums belong to two main dimensions: i) strategic formulation and planning, which in public organizations includes considerations of organizational mission in terms of public value, public values, and social responsibility (Bozeman, 2007; Ferlie and Ongaro, 2015); ii) strategic implementation, which is about stakeholder management and user orientation (Osborne *et al.* 2021). Summing up, issues of what (organizational mission), how (stakeholder management and user orientation), and why (public value, public values, and social responsibility) are central in the public value theory (e.g., Moore, 1995) and in the strategic management of public services organizations.

In this respect, Mancini *et al.* (2016) explained that the advent of digital technologies provides new opportunities for all organizations to be accountable to stakeholders and society. Specifically, they pointed out that organizations should shift “from integration to synergy between accounting and ICT” (Mancini *et al.*, 2016, p. 2). Digital technologies clearly affect accounting models, accounting information systems, and other relevant mechanisms within the accounting environment (Mancini, 2016, pp. 13–14). According to Lombardi and Secundo (2020, pp. 23, 25), “smart technology and data analytics may potentially transform the corporate reporting process to make it more effective, resulting in greater accountability and transparency for shareholders and stakeholders.” In this regard, Guzov *et al.* (2018) claimed that digital technologies help in the accounting environment by reducing information costs and producing social value, and by enhancing transparency (Lombardi and Secundo, 2020) and public confidence (Guzov *et al.*, 2018). Nonetheless, negative consequences may still arise from both internal and external contexts. For example, complex digitalization technologies, new regulatory compliance, and new standards may not fit with the accounting environment (Guzov *et al.*, 2018).

Among the new and emerging technologies in the area of cultural heritage, virtual reality (VR) is one of the most noteworthy among those adopted by cultural organizations (Galdieri and Carrozzino, 2019). Many scholars have investigated the use of VR by cultural organizations (e.g., Lepouras and Vassilakis, 2004; Zouboula *et al.*, 2008; Griffon *et al.*, 2011; Han *et al.*, 2020), with the aim of understanding the opportunities it offers for creating a digital space for new forms of socializing (e.g., Jones, 2008; Liritzis *et al.*, 2015; Monti and Aglioti, 2018). Other scholars have focused on how VR can develop user-centered tools that allow interactions with and contributions from users (Mancini, 2016; Mancini and Corsi, 2016). In this regard,

scholars have tried to analyze how advances in technologies are re-directing the role and mission of museums as distributors of cultural heritage (Lazzeretti and Sartori, 2016; Navarrete, 2013).

Virtual museums have emerged as complex entities that raise new issues and challenges (Liritzis *et al.*, 2015). A virtual museum can be considered as a model of cultural communication based on connectivity and openness of information that uses a wide range of communication and technological tools (Nisiotis *et al.*, 2019). In a virtual museum, artworks and data are integral parts of a connective system in which users are free to cocreate their cultural experiences (Vollero *et al.*, 2020). As the involvement of visitors takes place at different levels (rational, logical, and symbolic), a virtual museum can be regarded as an ideal museum model.

### **3. Research design and methodology**

This paper is based on exploratory research conducted through a research strategy that uses a multiple case study method (Yin, 1994). From a methodological point of view, the development of a case study represents a “research strategy which focuses on understanding the dynamics present within single settings” (Eisenhardt, 1989, p. 534).

Because of its characteristics, the use of case studies seemed to us to be a valuable tool for capturing the different dimensions of digitalization in cultural organizations (e.g., Packalén, 2010; Vollero *et al.*, 2020).

Specifically, we aimed to answer the following main research question (RQ):

RQ: How are digitalization processes influencing the accounting environment of cultural heritage organizations?

This paper analyzed the digitalization process and its implications for the accounting environment in five case studies of virtual Italian museums. The identification of the case studies was guided by a theoretically informed sampling and by pragmatic considerations of data accessibility and the willingness of participants to take part in the study.

The five virtual museums investigated in this study are cultural organizations within the Italian cultural heritage field. Our selection criteria were the following. First, the virtual museums were selected to include a variety of institutional governance types. One is a complex of museums controlled by the city council (VM1); one is run by a local foundation (VM2); one is controlled by a local foundation in partnership with other local authorities (VM3); and one is a complex of 11 thematic museums, all run by an entirely private foundation (VM4). VM5 is controlled by a foundation in partnership with both local public authorities and the Ministry of Tourism. Second, the museums selected are all at the forefront of the cultural heritage sector in Italy with regard to the digitalization process. Information on this criterion was gathered by observing their participation at national cultural sector conferences and their presence in bulletins and journals related to cultural heritage and in interviews in national newspapers.

The data collection was conducted in two distinctive moments (from February 2019

to September 2019; December 2020). The documentary analysis considered multiple sources of documents. The last 10 years of non-financial reports were analyzed. Hence, social network pages (Facebook, Instagram, and Twitter), as well as the websites of the five virtual museums, were consulted in order to triangulate the data (see Flick, 2018). In particular, the virtual museums' websites were scrutinized by exploring the sections related to the history of the museums, governance, and digital projects/tours/collections. Hence, citizens' charts were considered as supplementary materials (when available).

A total of 16 key informants were engaged for the semi-structured interviews. These people were managers responsible for the accountability, stakeholder management, and/or digitalization processes in the five virtual museums. Two managers were interviewed twice to refine and gather additional information that became more relevant during the process of data collection. In order to gain a deeper understanding of the policy settings and trajectories of development toward digitalization processes in the Italian cultural sector, one of the top managers of the Italian Ministry of Tourism was also interviewed. Each interview lasted from 20 minutes to one hour. The main topics covered during the interviews were the following: a) digitalization practices in cultural services and their role in practices of accountability; b) the contribution of digitalization to stakeholder engagement; and c) digitalization and the coproduction of cultural services. Detailed information about the different profiles of the managers interviewed, dates, and types of interviews is given in Table 1. In keeping with the exploratory nature of this research, we stopped interviewing when we considered that we had reached the first saturation in the patterns of findings observed.

**Table 1. Interviews**

Stakeholders/ Manager interviewed	Date	Type of interview
Manager 1: Accountancy Manager (VM1) (2 interviews)	May, 2018; February, 2019	Phone
<b>Manager 2: Accountancy Manager (VM2)</b>	<b>June, 2019</b>	<b>Phone</b>
Manager 3: Accountancy Manager (VM3)	June, 2019	In-person
<b>Manager 4: Accountancy Manager (VM4)</b>	<b>May, 2018</b>	<b>Phone</b>
Manager 5: Accountancy Manager (VM5)	May, 2019	In-person
<b>Manager 6: Digitalization Manager (VM3)</b>	<b>May, 2019</b>	<b>In-person</b>
Manager 7: Top Public Manager of the Italian Ministry of Tourism (2 interviews)	May, 2019; September 2019	Phone
<b>Manager 8: Environmental Manager (VM1)</b>	<b>May, 2019</b>	<b>In-person</b>
Manager 9: Environmental Manager (VM2)	February, 2019	In-person
<b>Manager 10: Environmental Manager (VM3)</b>	<b>May, 2019</b>	<b>In-person</b>
Manager 11: Digitalization Manager (VM5)	February, 2019	In-person
<b>Manager 12: Accountancy Manager (VM3)</b>	<b>April, 2019</b>	<b>Phone</b>
Manager 13: Digitalization Manager (VM1)	March, 2019	In-person
<b>Manager 14: Digitalization Manager (VM4)</b>	<b>February, 2019</b>	<b>In-person</b>
Manager 15: Culture Manager (VM1)	December 2020	Skype
<b>Manager 16: CEO (VM3)</b>	<b>December 2020</b>	<b>Phone</b>

*Source: Authors' elaboration*

Two co-authors of the paper took part in the processes of coding and interpreting the data and the main themes, which were then refined and discussed among all four co-authors. To analyze the qualitative data collected from the interviews, we applied a qualitative thematic analysis (Braun and Clarke, 2006; Gavin, 2008) approach, using a reflexive and abductive process (Alvesson and Sköldbberg, 2018).

For confidentiality reasons, the data collected about the virtual museums have been anonymized, and we will refer to them as VM1, VM2, VM3, VM4, and VM5 when presenting the detailed information.

#### **4. Description of case studies: Documentary analysis**

The documentary analysis included various sources, such as websites and social media platforms, sustainability reports (non-financial), and other documents (such as citizens' charts). The analysis focused on three particular dimensions: mission statements; stakeholder engagement through digitalization; and internet and social media strategies.

Starting with the mission statements, the importance of the clarity of the mission has been widely discussed in the literature (e.g., Weiss and Piderit, 1999; Bart *et al.*, 2001) and is particularly relevant to organizations that address cultural heritage.

In the mission statements of our sample of virtual museums, there are limited references to issues related to stakeholder engagement and social responsibility practices. The exception is VM5, where reference is made to the intention "to promote, develop, and disseminate cultural and artistic activities that raise public awareness of our national heritage".

In terms of digitally engaging with stakeholders, most of the virtual museums seem to mainly implement this strategic activity with schools and for proposing different itineraries to users. For example, VM1 organizes educational visits and workshops dedicated to both schools (at all levels) and non-school groups in different languages. VM4 is particularly committed to the practices of stakeholder engagement. This is quite clear from an analysis of the non-financial reporting, with stakeholders being identified, selected, and clustered according to their degrees of interest and level of influence. Furthermore, the non-financial reporting showed how VM4 is trying to promote citizen engagement with several different groups of people, such as the Arabic-speaking community.

In general, virtual museums are making significant efforts to create specific itineraries and projects for different groups of stakeholders. Although the majority of the museums identify their stakeholders, segmental reporting (see, for example, Grossi *et al.*, 2014 on this) is rarely adopted.

As far as internet and social media strategies are concerned, our analysis presents a picture in which at least three out of the five museums make extensive use of social media to engage with different stakeholders. VM4 defines its social strategy as an effort "towards continuous engagement with the audience through interaction with the public and with other museum institutions" (source: 2019 non-financial reporting). Social media are used to promote and host events as well as to build a

community around the virtual museum. The virtual museums all seem to have understood the importance of social media and the need to take a strategic approach toward their use. This strategic approach seems emergent rather than deliberate (Mintzberg and Waters, 1985), but it is present, whereas the use of data analytics generated by social media engagement for taking managerial decisions is less common.

To sum up, our analysis of mission statements shows that even the mission statements of virtual museums do not include, or make only limited reference to, social responsibility issues and different categories of stakeholders. Some of them mention the social role of museums in disseminating knowledge and sharing the national cultural heritage. However, mission statements are often vague. Moreover, stakeholder engagement tends to be limited to a single group of stakeholders (schools). In terms of social media usage, the virtual museums analyzed, except VM2, have quite a strong social media presence.

## **5. Analysis of case studies: Discussing the main themes**

*Theme no. 1: From the static, technical, and physical to the relational, emotional, and digital*

The first theme concerns the way in which the adoption of digital media transforms the accounting environment, bringing in a new logic (i.e., relational, emotional, and digital). Some quotes from the interviews conducted illustrate this point:

*“The digital transformation does not require only translating materials and physical experiences into the digital reality. It requires a new digital design based on a different logic.” (Manager 9)*

*“Digitalization has strongly impacted the quality of the services/products offered by the Museum, integrating and adding another dimension as the only possibility of use, especially during the COVID-19 pandemic. We do not know from an epistemic and ontological point of view what awaits us. It is a big question mark. It is still to be understood whether digitalization offers only emotions instead of cultural proposals or knowledge. This is the risk. Another dimension is added to the services.” (Manager 16)*

One manager, in particular, suggested the need to consider emotions as part of the accounting environment:

*“Digital transformations and the accounting environment are completely transformed into emotions. Digitalization increases, but there are obstacles and barriers to access, because participation, importance, and centrality of museum cultural services are not favored.” (Manager 8)*

It is interesting to note that the references to emotions made by our interviewees were linked to references to the user experience and storytelling, as comes out clearly in the excerpt below:

*“Storytelling is important for the digital experience of users. It is all about telling stories and opening up opportunities for the user experience, which goes beyond time and space.” (Manager 11)*

However, the concept of emotions is not necessarily synonymous with storytelling and the user experience. The emphasis on the importance of emotions in services is not new in the literature, as emotions are key to understanding customer satisfaction (Del Chiappa *et al.*, 2014). De Rojas and Camarero wrote that “the inclusion of emotions in the concept of satisfaction is particularly relevant given that the majority of services are based upon consumers’ participation and experiences” (2008, p. 526). This issue is also confirmed by Gadsby (2011). She pointed out that museums belong to the category of the “experience business.” Indeed, visitors want to feel connections between themselves and the environment they are experiencing, and these connections take the form of both intellectual and emotional experiences (Bedigan, 2016). In this respect, museums can gain great advantages from pursuing digital transformation because digital technologies can offer higher levels of personal engagement through the use of media and tools.

The importance of digitally enabled emotions and the role of social media, therefore, seem to assume a new relevance from an accounting and accountability perspective. Indeed, Etter *et al.* (2019) wrote that “positive and negative emotional responses play an important role in the production and diffusion of evaluations through social media” (p. 29). In particular, Manager 2 specified that storytelling is about “opening up opportunities for the user experience, which goes beyond time and space.” The role of storytelling in accounting has become more relevant nowadays because technology has democratized the possibility of sharing stories in time and space, and stories help people make sense of events (Weick, 1995; Gabriel, 2000). This also has implications from a future research perspective because narrative source materials have “previously been relatively or entirely neglected” (Beattie and Davison, 2015, p. 655) in accounting research.

Finally, the digitization of Italian virtual museums has also fundamentally impacted their business models and management accounting practices, resulting in the possibility of generating new revenues from new products and services, such as, for example, online guided visits and workshops, podcasts, and apps with free and pay-per-view content. Some museums have also implemented crowdfunding campaigns for small restoration and maintenance interventions. Moreover, the dematerialization of information has promoted its sharing and exchange, which has spurred partnerships.

### *Theme no. 2: From bureaucratic managerialism to value cocreation*

The second key theme emerging from our interviews is the bureaucratization of the management of virtual Italian museums. In the Italian context, the adoption of new practices for social responsibility and stakeholder engagement is often the consequence of a rule. Our findings show that most of the managerial policies introduced by the central government in Italy for improving the management of virtual museums have primarily been used by these museums to comply with the law.

An excerpt from our interviews can be used to illustrate this theme:

*“We adopt tools which are required by the law. For example, we do not engage in any CSR process because this is not a mandatory document for our museums (...). If non-financial documents do not assess the managerial planning, they are useless; or they are only useful for paying external consultants (...) or for a good reputation. A statutory obligation has now been introduced by the Minister and the General Manager.”* (Manager 7)

Panozzo (2000) used the expression “management by decree” highlighting that Italy is a civil law country that has always relied on laws and administrative acts to adopt reforms. The rationale here is that “when management and managerial instruments are introduced into the public sector ‘by decree,’ a new problem of translation emerges” (Panozzo, 2000, p. 362). In a context in which legal accountability and procedural conformity are more important than management itself, greater attention is, thus, reserved to what the law requires rather than to what the organization (or a specific public service) needs. Hence, Panozzo explained that a translation paradox exists. Indeed, “the adoption of contingent, flexible, and goal-driven managerial instruments and structures in public sector organizations is promoted by formal, centralized, and bureaucratic enforcement. Such a situation accounts for the contradictory demands that are imposed on managerial accounting within the reform of the Italian public sector.” (Panozzo, 2000, p. 372)

On another note, other interviews disclosed the general attitude toward the constant postponement of other digitally enabled practices of social responsibility and stakeholder management that are not mandated by law. There is a tendency to adopt digitalization processes slowly, rather than to exploit fully the opportunities offered by virtual museums and virtual reality as a change of paradigm and disruptive innovation (e.g., Bloom and Sancino, 2019); this is the case even though social media and digitalization actually offer enormous opportunities for reshaping the role in society of the actors and processes involved in accounting (e.g., Bellucci *et al.*, 2017, 2019).

In this respect, a value approach in public services requires taking an ecosystemic perspective: both Osborne (2018) and Alford and Yates (2014) have explained with two different examples the importance of considering ecosystems in and for public services. For example, Osborne (2018) elaborated how the social care and welfare of the elderly depends on many actors and processes, including not only public service professionals and volunteers but also family relatives and/or neighbors. Alford and Yates (2014) mapped out all of the public value processes relevant to preventing fires and highlighted how vast and diverse this ecosystem was, in which value may (or may not be) cocreated and coproduced by a vast range of actors.

### *Theme no. 3: From traditional CSR to integrated external engagement*

The third theme of our research reveals that social responsibility practices should evolve into integrated external engagement with the relevant stakeholders so that they are not understood either as a management fashion or as rhetoric. Indeed, different

interviewees explained how digital transformations should require a different and more comprehensive and integrative approach toward stakeholders.

For example, one of the managers we interviewed pointed out the importance of understanding that the relationship with the user lasts longer than the visit itself:

*“The relationship with users does not start from the physical visit. It starts earlier and if we do well it does not stop, because we keep those relationships, which become of value to us.”* (Manager 13)

Therefore, cultivating that relationship over time becomes important. The more stakeholders are properly engaged, the longer that relationship will last and produce value for the organization itself.

*“Virtual museums should invest more in social responsibility practices, but those need to bring a strong social, active, and constant involvement of stakeholders and citizens.”* (Manager 7)

*“The digitalization of museums can bring benefits in terms of stakeholder involvement, but it requires a change in the management style”* (Manager 8)

Other managers (Managers 1 and 2) pointed out the relevance of creating active publics (e.g., see Moore and Fung, 2012; Sancino *et al.*, 2020) for cocreating value, but also mentioned the issue of the digital divide for those people who do not use digital media:

*“So far, we have just promoted our events to the general public, but this is a limitation, as there are actually multiple publics. Think, for example, about those who do not use social media—how do we reach them? There is a digital divide issue here.”* (Manager 1)

*“Another transformation that digitalization brings is that those publics could be active publics and so coproducing value with and for us. Think about big and open data, for example, and how we could make those available to society.”* (Manager 2)

Indeed, digital technology “may potentially transform the corporate reporting process to make it more effective, resulting in greater transparency for stakeholders and shareholders” (Lombardi and Secundo, 2020, p. 21). However, traditional CSR practices do not seem to be enough to activate the public and generate value over time because they separate external engagement from everyday business (Browne and Nuttall, 2013). Instead, collaborating strategically to cocreate value in public services requires strategy planning and implementation exercises to consider public services as complex adaptive systems, where the accounting environment becomes an open platform where different actors (e.g., managers, politicians, citizens, auditors) contribute to interactive and dialogic accounting with different logics, depending on their perspectives and roles.

## 6. Concluding remarks

This paper focused on the digitalization of cultural organizations and its implications for the accounting environment in terms of strategic governance. On the one hand, our study highlighted the fact that the strategic governance of the digitalization of cultural organizations seems to be strongly influenced by the prevalent accounting and institutional culture, in what we described as the “management by decree” approach, which is typical of the Neo-Weberian State model (Pollitt and Bouckaert, 2004). On the other hand, our case studies revealed the increasing relevance for accounting and accountability purposes of emotions and storytelling practices in the digital sphere. This is related to another theme that emerged from our interviews, which is the importance of shifting from the traditional monodirectional CSR toward an integrated external engagement as an essential function of modern management. In this regard, putting external engagement at the center of the strategy may, indeed, help organizations to institutionalize arenas for cocreating value with different stakeholders (e.g., Esposito and Ricci, 2015; Bryson *et al.*, 2017; Osborne, 2020) and to go beyond CSR as a form of impression management and managerial fashion (e.g., Abrahamson, 1996; Esposito *et al.*, 2020). In general, it seems to us that the possibilities of virtual museums to create active publics by digitally leveraging their historical and value-laden links with the community have not been fully developed, which has implications for the public and the generation of shared value (e.g., Moore, 1995; Høvring, 2017). In this respect, Meijer (2011) has provided examples of how virtual communities may shift public services from a government-centric to a community approach. According to him, “digital communities form an important addition to the government-centric form of public service provision since they foster both an exchange of experiential information and social-emotional support” (Meijer, 2011, p. 598).

This paper has several limitations. First, our study only focused on one country. Both longitudinal and comparative studies are, thus, required to take into account the effects of digitalization in other administrative systems. Second, it reported on preliminary and exploratory research based on a limited amount of qualitative data. Third, the paper used non-financial reporting as one of the sources for collecting data. Non-financial reporting may not necessarily provide higher quality information, as it may share euphemistically positive aspects of sustainability performance while disregarding some negative effects (La Cour and Kromann, 2011).

Nevertheless, this study opens up some interesting perspectives for future research. A growing number of scholars are recognizing the importance of new technologies (e.g., Mancini, 2016; Roszkowska-Menkes, 2018). Advances in technology can be decisive for generating, sharing, and refining information (Mancini, 2016). Future research is particularly needed in exactly this domain to gain a better understanding of the new technologies that can be adopted to manage accounting information in supporting decision-making processes. In this respect, it would be interesting to study the way in which cybernetic tools (e.g., see Ashby, 1960; Krippendorff, 1989; Jackson, 2015) may be applied in the context of digitalization in cultural organizations and their implications in and for the accounting environment.

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