

Meeting Sustainable Development Goals (SDGs) in museum evaluation systems. The case of the Italian National Museum System (NMS)

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Abstract

Purpose of the paper: This paper aims to investigate if, how and to what extent the Italian National Museum System (NMS) currently includes sustainability in its evaluation system.

Methodology: After discussing the scientific literature on sustainability in management and museum studies, the research performs a quali-quantitative comparative analysis to verify the degree of inclusion of the Sustainable Development Goals (SDGs) approved by the General Assembly of the United Nations in 2015 in the Uniform Quality Levels for Museums (UQLMs) set up in Italy to implement the NMS.

Findings: The research results show that some sustainability dimensions are more relevant in the Italian museum evaluation system than others, highlighting the importance of relationships with external stakeholders and the local context.

Practical implications: The research identifies possible areas for improvement so that the principles and objectives of sustainability can be incorporated in the NMS. It also provides policymakers and museum managers with suggestions for implementing them.

Research limitation: The research only examines UQLMs. Further investigation should verify the current level of the sustainable approach in museum management by analyzing the best practices and activities of museums participating in the NMS.

Originality of the paper: Adding to the scientific literature on museum sustainability, this paper investigates the relationship between culture and sustainability beyond the triple bottom line approach, by considering sustainability to be an integral component of quality and performance measurement in museums. The research also highlights the need for a more holistic approach involving external stakeholders and integrating other measurement tools.

Key words: sustainability; museum management; quality levels; evaluation system; partnership

1. Introduction

As argued by Adams, “museums are inextricably linked to sustainability principles” (2010, p. 11). On the one hand, the concept of ‘permanence’ stands out not only in relation to the institution, whose organizational form can change through time, but also with regard to the life of its collections (Sandahl, 2019, p. 6). On the other hand, the practice of maintaining collections in perpetuity highlights the need to serve both current and

future generations, by displaying and interpreting museum objects now and passing them and their value on to the future. Thus, the question of cultural heritage conservation for intergenerational equity is raised. Moreover, the meaning of cultural heritage itself evokes sustainability. Given that the cultural items preserved in museums are not fungible - unique and not interchangeable - resources, their preservation for the future contributes to protecting and promoting cultural diversity.

These ideas are consistent with the recent paradigm shift in heritage studies - from preservation *per se* to purposeful preservation, sustainable use and development (Loulanski, 2006). By moving beyond the false dichotomy between protection and enhancement and recognizing a virtuous relationship between these two functions (Golinelli, 2015; Saviano *et al.*, 2018), the current cultural change affirms that enhancement can help protection, not only by attracting more resources for safeguard, but also by increasing awareness of the value of cultural heritage among a wider audience. This, in turn, increases people's wellbeing and boosts local development (Cerquetti *et al.*, 2019). When applied to museum management, this approach goes beyond the distinction between custodial management and marketing management (Gilmore and Rentschler, 2002) and suggests they might cross-fertilize.

Following Worts (2016), nowadays we can agree that sustainability is "a holistic concept that applies to the ability of a larger, living system to change/adapt - even to *flourish* - over the long term" (p. 210). Aware of the need to adapt to complex, contradictory and uneven societal changes, ICOM has recently started to rethink the 2007 museum definition¹. In implementing this process, ICOM has sought guidance not only from the Universal Declaration of Human Rights (1948) and the UNESCO Universal Declaration on Cultural Diversity (2001), but also from the UNESCO Recommendation concerning the Protection and Promotion of Museums and Collections, their Diversity and their Role in Society (2015). Eventually, in the recommendations adopted in December 2018, the ICOM Executive Board recognized the need to meet present urgent challenges, such as "the crises in nature and the imperative to develop and implement sustainable solutions" and "deep societal inequalities and asymmetries of power and wealth" (Sandahl, 2019, p. 2), and also called for accountability and transparency in the acquisition and use of material, financial, social and intellectual resources. The revision process involved members, committees, partners and other interested stakeholders and collected over 250 proposals². Finally, at its 139th session in Paris on July 21-22, 2019, the Executive Board of ICOM selected a new alternative museum definition for a vote to be included in the ICOM Statutes at ICOM's Extraordinary General Assembly, which took place in Kyoto on September 7, 2019³.

Although the final proposal is still under discussion, the new approach extends the museum's mission and its relationship with sustainability,

¹ <https://icom.museum/en/news/watch-the-2nd-episode-of-seeking-change-a-new-museum-definition/>.

² <https://icom.museum/en/news/the-museum-definition-the-backbone-of-icom/>.

³ See: <https://icom.museum/en/news/icom-announces-the-alternative-museum-definition-that-will-be-subject-to-a-vote/>.

and explicitly mentions future generations, clearly recognizing the role of participatory processes and partnerships with diverse communities, and, finally, addressing equality and wellbeing at a global level. In this framework, sustainability becomes a management issue that goes beyond displaying and caring for collections (Merriman, 2008).

Starting from this reasoning, the following paper focuses on *museum management for sustainability*, exploring if and how museum evaluation systems currently take into account sustainability, an aspect which, so far, has not been investigated and measured sufficiently in scientific research. We analyzed the level of inclusion of the Sustainable Development Goals (SDGs), approved by the General Assembly of the United Nations in 2015, in the Uniform Minimum Quality Levels for Museums (UQLMs), established by the Ministerial Decree of February 21, 2018 to activate the Italian National Museum System⁴ (NMS).

More specifically, after analyzing the scientific approach to sustainability and its importance in museum management research and practice, the paper aims to verify:

- 1) if, how and to what extent the UQLMs meet the SDGs;
- 2) how sustainability is understood and addressed by the Italian museum evaluation system;
- 3) how best to incorporate and implement the principles and objectives of sustainability in the NMS.

In particular, the research results show that the promotion of social and economic inclusion is the most significant sustainability dimension in museum management. To optimize the achievement of this objective, museums are required to strengthen their relationships with the external context and stakeholders by adopting a more holistic and systemic approach.

The paper is structured as follows. Section 2 critically discusses scientific literature on sustainability in management and museum studies, highlighting the importance of sustainability as a component of museum management. Section 3 presents the research methodology and section 4 the research results; section 5 discusses the main findings and their impact on museum management. Conclusions are drawn in section 6, which points out policy and managerial implications, research limitations, and suggests further research.

2. Literature review

2.1 Sustainability in management studies

The notion of sustainability has, for decades, become part of the basic principles that guide the management of organizations, influencing consumer behavior and business models (Barile, Saviano, 2018; Russo *et al.*, 2018). This approach followed the notion of sustainability provided by the Brundtland Commission in 1987 and also adopted by the UN World Commission on Environment and Development (WCED). This

4 <http://musei.beniculturali.it/en/notizie/notifies/italys-national-museum-system-has-kicked-off>.

means, first and foremost, improving the quality of human life, delivering basic environmental, social and economic services to all residents of a community within the carrying capacity of supporting eco-systems (IUCN *et al.*, 1991; ICLEI, 1994). Therefore, it is first necessary to avoid threatening the viability of natural, built and social systems upon which the delivery of those systems depends (ICLEI, 1994) and, consequently, avoiding the impoverishment of the territory: not endangering the quality of the environment; not changing the social and cultural equilibrium; not generating costs for structures and infrastructures that cannot be recovered through revenues; not consuming (e.g., energy, water, etc.) more than is acceptable. It would be even better if the behaviors of manufacturing organizations, and those of users/consumers, were not only directed at balancing economic effects with social and eco-environmental ones; they should also generate economic benefits for stakeholders (economic effectiveness), to ensure individuals and the entire social body are respected and their needs and expectations are met (social effectiveness). This should be achieved while taking care of the environment, starting with the rational use of resources (environmental effectiveness).

Organizations would thus become decisive for the sustainable development of both local and national systems. In short, the concept of sustainability drives organizations toward a “broad strategy-making perspective that incorporates the needs and demands of multiple stakeholder groups” (Harrison *et al.*, 2010, p. 58). The areas into which the impacts of sustainability fall, therefore, are closely intertwined and finely balanced.

In the last twenty years, numerous contributions on the subject of sustainability have been put forward not only by economics and business management scholars, but also by policymakers, often considering ‘sustainability science’ to be a distinct field (Kates *et al.*, 2001). However, multiple interpretations of the concept of sustainability rely on a specific temporal and/or geographical context.

Originally limited to the environmental dimension (ecology and the conservation of natural resources), the sustainability paradigm has expanded to encompass the notion of ‘economic development’, which includes not only economic growth (increase in material wellbeing and distribution of wealth), but also environmental and social outcomes. This expansion led to the concept of ‘sustainable development’, thus to the publication of the WCED report (1987) and to recognition in Agenda 21 (1992) of the three distinct ‘pillars’ of sustainable development: economic, environmental and social (Purvis *et al.*, 2019).

In 2001, the idea of sustainability took on an even broader dimension following the new UNESCO Declaration on Cultural Diversity (Articles 1 and 3). Since then, culture has been recognized as a key element of the concept of sustainability, and, in recent years, has become part of the emerging sustainable development model (Throsby, 2005; Stubbs, 2004; Cubeles, Baro, 2006; Roders, van Oers, 2011; Duxbury *et al.*, 2012; Sazonova, 2014; Soini, Dessein, 2016; Nocca, 2017; Saviano *et al.*, 2018).

However, there are still few contributions from scholars and policymakers attempting to bring ‘sustainability’ and ‘culture’ together

analytically and systematically, with a focus on the different roles of culture in sustainable development. This is mainly because of the difficulty involved in this process, especially given the transdisciplinary approach required. Indeed, the concept of culture is broad and complex and can be considered both a foundation and a result of sustainable development. Furthermore, its inclusion within the field of sustainability would change things in sustainability research and policy, adding values, behaviors, knowledge and the ways of life of human beings to traditional areas of analysis; all this without considering that an analysis of culture's contribution to sustainable development requires different methodologies from those used for the 'three pillars'.

To date, there have been three main interpretations of the relationship between culture and sustainable development in the scientific literature: culture as the fourth pillar of sustainability (Culture *in* Sustainability); culture as a point of convergence, mediating between the three traditional pillars (Culture *for* Sustainability); culture as a center point for the other pillars of sustainability and, therefore, "an overarching dimension of sustainability" (Soini, Dessein, 2016, p. 3) (Culture *as* Sustainability).

2.2 Sustainability in museum studies

If the concept of sustainability is difficult to pin down, it is even harder to conceptualize its relationship with museums. A common and shared framework for investigating how museums and sustainability can interact is still missing. First, the dimensions of sustainability are not yet standardized. Second, few systems and indicators have been put into practice; a few reports have only measured the effects of certain actions started by museums, but not yet the impact of the institution's behavior (Hedges, 2020).

Although three specific sustainability dimensions have been identified for cultural institutions in frameworks - financial, intellectual, and social - (Friedman, 2007), the triple bottom line approach based on economic viability, environmental responsibility and social equity still prevails (Pencarelli *et al.*, 2016). Sometimes, the discussion also includes cultural sustainability (Errichiello, Micera, 2018; Pop *et al.*, 2019), which recognizes the need to protect cultural heritage and strengthen cultural vitality (Loach *et al.*, 2017). However, as argued by Loach *et al.* (2017), "cultural sustainability is rarely considered as a definitive outcome within sustainability research and policy within the sector" (p. 193), but is valued according to its ancillary benefits. Reversing the traditional approach, the authors suggest using sustainability models to consider how social, economic and environmental sustainability can help cultural institutions, and support their cultural contribution.

Therefore, following Pop and Borza (2015) and Pop *et al.* (2019), we can distinguish at least two different instrumental approaches:

- 1) *museums for sustainability*, that is, how museums can contribute to the achievement of the three pillars of sustainable development by being or becoming culturally sustainable;
- 2) *sustainability for museums*, that is, how sustainable social, economic

and environmental measures taken by museums can contribute to the fulfillment of their cultural mission, and thus of cultural sustainability.

These two approaches can be considered complementary and both are related to a museum's mission. On the one hand, museum management can promote sustainable development; on the other hand, social, economic and environmental sustainability can support museum development.

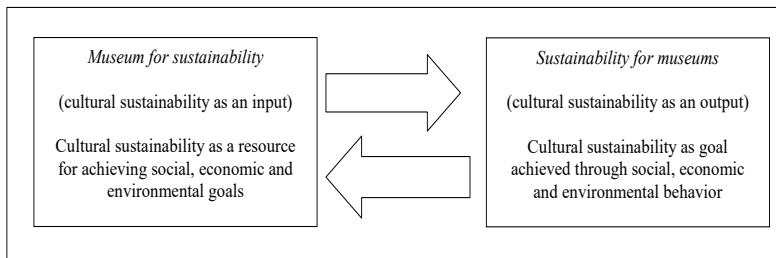
The former approach (*museums for sustainability*) is linked to the role of cultural heritage and museums in quality of life and economic growth (Logan, Sutter, 2012; Pop, Borza, 2016a; Mendoza *et al.*, 2017) and, as already discussed in the introduction, is one of the main topics in the current debate on museums. In 2018, the OECD and ICOM published the Guide for Local Governments, Communities and Museums, which states that museums and cultural heritage can contribute to local development by inspiring creativity, boosting cultural diversity, helping regenerate local economies and improving social cohesion, civic engagement, health and wellbeing (ICOM, OECD, 2018). Drawing from previous studies on the value and benefits of the arts (McCarthy *et al.*, 2004; Crossick, Kaszynska, 2016), the Guide recognizes that museums play a crucial role in addressing contemporary societal challenges and tackling issues such as globalization, migration, polarization, inequality, populism, gender equality, aging societies, decolonization, and climate change. It investigates five different themes: economic development and innovation; urban design and community development; cultural and educational development; inclusion, health and wellbeing; managing the relationship between local government and museums to maximize the impact on local development. As stated by Brown (2019), "think global, act local" has become an important ability for museums.

The second approach (*sustainability for museums*) focuses on how museums approach sustainability, how they perceive its dimensions and what measures they are implementing, given that "the degree in which museums contribute to the sustainable development depends on their management" (Pop, Borza, 2015, p. 122). Even though some studies have demonstrated that museum managers do not care about sustainability (Chitima, 2015; Swarbrooke, 2015) and that sustainable behaviors need to be improved (Özer Sari, Nazli, 2018), some institutions have become aware that "as long as museums are unable to ensure their own survival and development, they cannot contribute to the sustainable development of their respective communities" (Pop, Borza, 2016a, p. 5). Sustainability is first approached as a way of using limited resources to maximum efficiency, including by exploring the competitive advantages of 'being green', such as better productivity, increased public confidence, new beneficiaries, more financial resources, and brand consolidation (Pop, Borza, 2014; Pop *et al.*, 2018). To appreciate this, we only need to look at the covers of books on museum sustainability displaying an explosion of green leaves and blue water, or windows open onto gardens and aquariums (Brophy, Wylie, 2013; Newell *et al.*, 2016; Rota, 2019). As confirmed by the vast array of practices for going green, climate change and resource depletion are gaining ground in the museum management debate, but green consumption, waste management, energy and water efficiency,

and carbon footprint measurement are still an option, rather than a responsibility (Sutton *et al.*, 2017). Even though the 3Rs, that is, *reducing* consumption of natural resources, *re-utilizing* resources and *recycling*, are becoming more important in museum studies, and not just in research on sustainable building design and engineering (Lambert, Henderson, 2011; Brophy, Wylie, 2013; Newell *et al.*, 2016), caring for the environment is not the only focus of the debate on museum management and sustainability. Social issues are becoming urgent as well, such as attracting new clusters of visitors and engaging with stakeholders and different communities (Di Pietro *et al.*, 2014; Stylianou-Lambert, 2014; Sutter *et al.*, 2016; Recuero Virto *et al.*, 2017; Wang, Chiou, 2018; Brown *et al.*, 2019). “Just, verdant and peaceful” can finally be considered the motto for museums in the 21st century (Sutton *et al.*, 2017).

To sum up, cultural sustainability can be considered both an input and an output: a resource for achieving social, economic and environmental goals, and a goal achieved through social, economic and environmental behavior. The two approaches mentioned above are not contradictory, rather they help each other: their cross-fertilization can generate mutual benefits, by helping museums to achieve their mission and by generating positive externalities (fig. 1).

Fig. 1: Cross-fertilization between the “museums for sustainability” and “sustainability for museums” approaches



Source: own elaboration

The two approaches confirm that, as they change their role in societies, museums are called upon to take on new social responsibilities (Janes, Conaty, 2005). While, in the past, value creation was only measured by counting visitors, revenues and employees, today, museums are being asked to make broader social and economic impacts. They are beginning to contribute to Corporate Social Responsibility (CSR) - e.g., through volunteer programs (Edwards, 2007) or technology-based eco-innovation (Chung *et al.*, 2019). However, as argued in a recent study on a blend of museums and art galleries in Victoria, Australia, an explicit CSR policy is still missing (Zutshi *et al.*, 2020). Finally, even though it is not yet incorporated into institutional policies (Hedges, 2020), sustainability is emerging as a component of museum management, encompassing “a range of criteria moving on from a purely environmental perspective of sustainability” (Wickham, Lehman, 2015, p. 6).

In this scenario, UNESCO has recently published Thematic Indicators for Culture in the 2030 Agenda (UNESCO, 2019), a framework covering four different areas: environment and resilience, prosperity and livelihoods, knowledge and skills, and inclusion and participation. UNESCO's set of indicators aims to measure and monitor the progress of the enabling contribution of culture to national and local implementation of the Goals and Targets of the 2030 Agenda for Sustainable Development. When assessing the role of culture as a sector of activity as well as its transversal contribution across different policy areas, the 2030 indicators will help cultural institutions to include SDGs in their organization as some museums have already started to do (MUSE, 2018).

3. Research methodology

In the framework of the 2030 Agenda, the research is based on two premises: on the one hand, the role of public policy in boosting sustainability culture and implementing sustainability programs in cultural organizations (Montella, Dragoni, 2010); on the other hand, the need to consider sustainability dimensions as a component of quality and performance measurement in order to pursue effective sustainable behaviors over the long term (Pop, Borza, 2016b).

For this reason, with the focus on Italy's NMS, the unit of analysis adopted in the study was the national museum evaluation system. We compared the UQLMs with the SDGs in order to understand if, how and to what extent the system incorporates sustainability.

To this end, after critically examining the two original documents, we conducted a quali-quantitative comparative analysis. We compiled a table presenting the two identified data sets, namely the 17 SDGs (further divided in 169 targets) and the 142 entries provided by the UQLMs. Then, we proceeded by recording the cases in which a specific UQLM corresponds to a specific SDG entry, by placing the value 1 or 0 in each cell at the intersection of each row and each column (for verified and unverified presence respectively). Thus, the analysis of the correspondences allowed us to verify, through algebraic calculations (sums) and percentage assessments, whether indeed there was a qualitative-quantitative correspondence between the two documents.

3.1 *The 2030 Agenda for Sustainable Development*⁵

The 2030 Agenda, adopted by the General Assembly of the United Nations on September 25, 2015, represents a call to change our world for the benefit of all present and future generations (Colglazier, 2018).

It includes 17 SDGs and 169 targets, integrated and indivisible, which balance the three dimensions of sustainable development and concern areas of primary importance for humanity and the planet. Of particular importance is the fact that they aim to balance universal principles and national and regional realities. As underlined in several points, the objectives and targets are universal and global, that is, applicable to all the

⁵ https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E.

countries in the world. However, their application within each country and at the regional level will take “into account different national realities, capacities and levels of development and respecting national policies and priorities” (Agenda 2030, p. 7), as each country faces specific challenges in the struggle to achieve sustainable development. The guidelines contained in the Agenda are the result of careful public consultation and contact with civil society and with other subjects in the world, and are based on previously developed documents of fundamental importance. The goals and targets, which came into effect on January 1, 2016, will, until 2030, be the guide for pursuing a wide range of social, economic and environmental objectives and more peaceful and inclusive societies, in addition to already known priorities (such as poverty eradication, health, education, and food security and nutrition).

The Agenda also refers to culture in:

- 1) point 36: “We acknowledge the natural and cultural diversity of the world and recognize that all cultures and civilizations can contribute to, and are crucial enablers of, sustainable development”;
- 2) goal 4.7: “ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through [...] appreciation of cultural diversity and of culture’s contribution to sustainable development”;
- 3) goals 8.9 and 12.b: “devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products” and “tools to monitor sustainable development impacts for sustainable tourism”;
- 4) goal 11.4: “strengthen efforts to protect and safeguard the world’s cultural and natural heritage”.

In short, the 2030 Agenda recognizes the considerable role of culture in the current context (Petti *et al.*, 2020), characterized by a constant blend of globalization and localism. In particular, two main aspects seem to emerge: on the one hand, the need to respect, safeguard and enhance cultural diversity and the multiple forms it expresses at local level (local culture, cultural heritage) for the benefit of current and future generations; on the other hand, the contribution that culture can make to promoting sustainable development, starting with sustainable tourism.

3.2 *The UQLMs (Decree of the Italian Ministry of Cultural Heritage, February 21, 2018)*⁶

The Decree of the Italian Ministry of Cultural Heritage of February 21, 2018, establishing the “Adoption of Uniform Minimum Quality Levels for Public Museums and Places of Culture and Activation of the National Museum System”, implemented Article 114 of the Cultural Heritage and Landscape Code, Legislative Decree no. 42 of January 22, 2004, as amended. This document stemmed from the same Ministry’s Decree of May 10, 2001, setting out “Guidelines on technical-scientific criteria and operating standards for museums”, which divided the management, conservation,

⁶ http://musei.beniculturali.it/wp-content/uploads/2018/04/Allegato_I-Livelli-uniformi-di-qualit%C3%A0-per-i-musei_English.pdf.

and enhancement of museums into eight areas. It also considered the work and the concluding proposals of the “Ministerial committee for defining the minimum quality levels for enhancement”, set up on December 1, 2006, and chaired by Massimo Montella, which identified certain minimum requirements for each area, as well as other codes and recommendations (e.g., ICOM and UNESCO).

The document identifies three important areas arranged into multiple sections and entries that include minimum standards (S) and improvement objectives (IO). These reflect the museums’ organization and activities and represent a matrix for verifying each institution’s equipment and performance.

In particular, Area A (*Organization*) concerns the elements that constitute the fundamental premise of the museum as a cultural institute engaged in public service for the conservation and enhancement of heritage (as established by ICOM and consistent with the Ministerial Decree of December 23, 2014). Area B (*Collections*) refers to the most important task of every museum, which is the management of its collections. It must harmonize the two primary requirements of taking care of the collections’ integrity and making them available for public enjoyment, ensuring full physical and intellectual accessibility. Area C (*Communication and relations with the context*) concerns the institutional goal (mission) of a museum, which is to offer the public a cultural service based on the conservation and enhancement of its collections. This area includes, on the one hand, the activities and initiatives aimed at attracting visitors and, on the other, the activities and tools used by a museum to communicate the cultural value of its artifacts and to disseminate knowledge about them effectively, including by relating them to other cultural assets within the local context.

4. Research results

Seven of the 17 SDGs set by the 2030 Agenda are confirmed in the Ministerial Decree of February 21, 2018, addressing minimum standards and improvement objectives (tab. 1).

Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Specifically, SDG 4.7 (§ 3.1) is confirmed in Area C. Here, museums are required to present elements that link the collections to their historical, cultural and environmental contexts. Also, it is important to put on temporary exhibitions that are directly relevant to the collections and the cultural values of the area and to carry out studies and research on the tangible and intangible heritage of the region in question.

The need to “build and upgrade education facilities that are child, disability and gender sensitive and provide safe, [...] inclusive and effective learning environments for all” (SDG 4.a) mirrors, in particular, Areas A and C. Area A concerns the availability in museums of suitable spaces and public services and comfort in exhibition spaces, in terms of environmental conditions (lighting and cleanliness) and safety (for structures, people and objects). Museums are also required to grant disabled access to buildings and

identify short routes. Furthermore, they are expected to provide alternative ways for the disabled to enjoy the exhibits in the museum (e.g., virtual visits, dedicated routes). Regarding access, museums are expected to be open at least 24 hours a week and 100 days a year. It is also hoped that e-payment systems, online booking and ticket sales are available, along with guided visits and workshop activities for individuals and groups, discounts, family rates, conventions, integrated tickets, cards, annual subscriptions, and free tickets. Finally, suitable professional figures are required. Area C provides for on-site and online availability of information material (including catalogs and/or short guides) about the museum - its collections, services and activities (also aimed at people with sensory or cognitive disabilities) - and the region. It is hoped that this information is also available in a foreign language and in the form of an audio guide and a multimedia guide. As for the physical tools used to deliver the communication service, captions and information panels or mobile cards are required with clear, legible information, including in foreign languages. It is also preferable for museums to provide multimedia tools, downloadable software and apps for mobile devices about the museum, its collection and temporary exhibitions, and the region, as well as tools for facilitating disabled access to the collections. Also, museums could provide educational activities and workshops for different visitor groups, guided visits and themed routes, possibly in other languages. Furthermore, training sessions for teachers, educational staff or other users, and seminars on specialist content could be organized. Finally, museums could develop offerings for the disabled and establish systematic relationships with the training, artisanal and industrial sectors, whereby they promote the institution as a hub of culture and history in the region (including for the development of creativity, design and know-how).

Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

This orientation is first reflected in Area A; it requires museums to have qualified professional figures performing the main functions in the organization's value chain.

Also, SDG 8.9 (§ 3.1) echoes Area C particularly and Area A episodically. In addition to the points described in SDG 4 about the contribution of museums to proper enhancement of local heritage, including the landscape, museums are also required to indicate how their tasks and functions relate to the regional context in their planning documents. They can also organize events to promote the collections, the museum and the region, integrate cultural services and museum networks and prepare and promote tourist and cultural itineraries.

Goal 10. Reduce inequality within and among countries

In particular, the invitation to “empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status” (SDG 10.2) corresponds to several points in Areas A and C described in SDG 4.a, relating to the role of public museums in ensuring inclusive and equitable quality education.

Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable

Specifically, SDG 11.4 (§ 3.1) is in line with Areas B and C. Here reference is made to periodic monitoring of the state of conservation of the artifacts and to recording, documenting and cataloging the collections. Furthermore, the points described in SDG 4, concerning the contribution of museums to proper enhancement of both their collections and local heritage, including the landscape, must be considered.

The guideline to “support positive economic, social and environmental links between urban, periurban and rural areas by strengthening national and regional development planning” (SDG 11.a) is in keeping with certain points in Area C, already described for SDG 8, and with one point in Area A, previously illustrated in SDG 4.a.

Goal 12. Ensure sustainable consumption and production patterns

This recommendation is first confirmed in Area C and episodically in Area A, with several points mentioned for SDGs 4 and 8.9, about the implementation of policies to support the development of cultural tourism and, therefore, to the museum’s contribution to sustainable tourism.

The encouragement to organizations “to integrate sustainability information into their reporting cycle” (SDG 12.6) is reflected in Area A, where museums are invited to adopt social reporting methods for their activities such as annual reports, social budget, impact analyses.

The SDG 12.b (§ 3.1) agrees with area C and episodically with area A. In particular, museums are asked to record the number of visitors, preferably using electronic systems. Also, museums are invited to perform periodic staff audits and satisfaction assessments, to maintain and monitor a register (on paper or online) of visitor observations and suggestions, to carry out a customer satisfaction survey and analysis at least once a year, specifying the tools used, and surveys of non-visitors, including to verify their needs and expectations. Moreover, museums are encouraged to implement accountability procedures and publish reports of the expected results in the annual program and the objectives reached, as well as verifying the effectiveness and impact of activities, including collaborations, concerning cultural, economic and social policies via periodic reports and public sharing initiatives.

Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Reference to this goal is found in several points of Areas A and C indicated in SDGs 4.a and 10.2, regarding public museums as institutions that must promote inclusive education.

Goal 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

In particular, the willingness to “encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships” (SDG 17.17) is seen particularly in Area C and episodically in Areas A and B. Museums are

invited to participate in network projects, formalize relations with other research bodies and institutions, agree on projects with schools, jointly develop shared educational programs and training offerings with the Ministry responsible for regional education/school offices and schools of various types and levels, enter into cooperation agreements when carrying out common functions, integrate cultural services and museum networks, implement co-produced or co-planned initiatives, devise discount schemes, including with the hospitality sector and transport companies, establish relationships with the training, artisanal and industrial sectors and promote the institution as a hub of culture and history in the region.

Finally, the need “to increase significantly the availability of high-quality, timely and reliable data” (SDG 17.18) is echoed in several points of Areas A and C, described in SDG 12.b.

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Tab. 1: Correspondence between 2030 Agenda and UQLMs⁷

SDGs		UQLMs			
		Area	S	IO	S+IO
4	4.7	C	1	2	3
	4.a	A	14	14	28
		C	7	17	24
Tot. SDG 4			22	33	55
8	8.9	A	7	1	8
		A	0	1	1
		C	3	7	10
Tot. SDG 8			10	9	19
10	10.2	A	2	2	4
		C	7	16	23
Tot. SDG 10			9	18	27
11	11.4	B	6	6	12
		C	5	10	15
	11.a	A	0	1	1
		C	0	3	3
Tot. SDG 11			11	20	31
12	12.6	A	0	1	1
		C	2	3	5
		A	0	1	1
	12.b	A	1	2	3
		C	0	6	6
Tot. SDG 12			3	13	16
16		A	2	2	4
		C	7	16	23
Tot. SDG 16			9	18	27
17	17.17	A	0	2	2
		B	0	1	1
		C	0	8	8
	17.18	A	1	2	3
		C	0	5	5
Tot. SDG 17			1	18	19

Source: our elaboration

⁷ In the left columns, the list of SDGs for which we found a correspondence with UQLMs; in the center column, the areas of the UQLMs where a correspondence is found; in the right columns, the number of minimum standards and improvement objectives for each area.

5. Discussion

The research results support Hedges' (2020) findings and confirm that sustainability is not yet an institutionalized process in the museum context. Moreover, as argued by Wickham and Lehman (2015), some sustainability issues "are not specifically relevant to the ongoing operations" (p. 11) of museums and should be evaluated through other voluntary tools (e.g., environmental actions). Even though there is still not enough attention on SDGs, some important management issues are emerging.

First of all, the area of the Decree of the Italian Ministry of Cultural Heritage of February 21, 2018 that is most responsive to SDGs is Area C (which meets all 7 SDGs with 125 entries: 32 S and 93 IO), followed by Area A (7 SDGs with 56 entries: 27 S and 29 IO) and Area B (2 SDGs with 13 entries: 6 S and 7 IO) (tab. 2). In all areas, the affected entries mainly relate to improvement objectives.

Tab. 2: Correspondence by area between UQLMs and Agenda 2030 (number of minimum standards and improvement objectives for areas A, B, C)

	UQLMs		
	S	IO	S+IO
2030 SDG	Area A		
SDG 4	14	14	28
SDG 8	7	2	9
SDG 10	2	2	4
SDG 11	0	1	1
SDG 12	1	4	5
SDG 16	2	2	4
SDG 17	1	4	5
7	27	29	56
	Area B		
SDG 11	6	6	12
SDG 17	0	1	1
2	6	7	13
	Area C		
SDG 4	8	19	27
SDG 8	3	7	10
SDG 10	7	16	23
SDG 11	5	13	18
SDG 12	2	9	11
SDG 16	7	16	23
SDG 17	0	13	13
7	32	93	125

Source: our elaboration

The most widely accepted SDG is no. 4 (55 entries out of 194, i.e. 28%) (tab. 3; fig. 2).

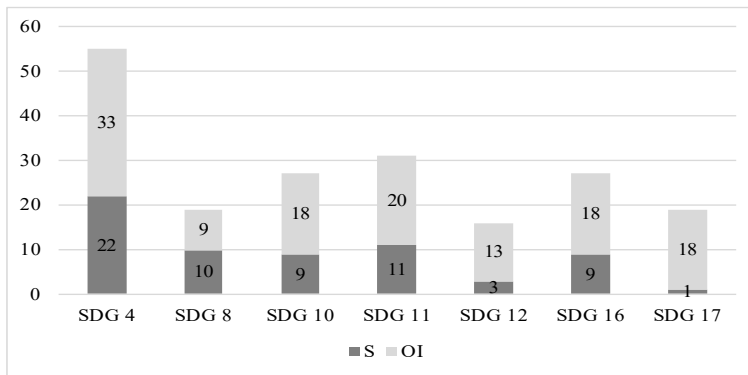
The aspect that is most closely represented in the UQLMs is strengthening and promotion of social and economic inclusion as a key element for sustainable development (to which SDGs 4, 8, 10 and 16 refer). This is justified by the mission of these institutions, which consists in creating social value that is multidimensional and involves multiple stakeholders.

Tab. 3: Correspondence in terms of accepted SDGs, between UQLMs and Agenda 2030

2030 SDG	UQLMs			
	Entries		S	IO
	Absolute value	%		
SDG 4	55	28%	22	33
SDG 8	19	10%	10	9
SDG 10	27	14%	9	18
SDG 11	31	16%	11	20
SDG 12	16	8%	3	13
SDG 16	27	14%	9	18
SDG 17	19	10%	1	18
7	194	100%	65	129

Source: our elaboration

Fig. 2: Correspondence in terms of accepted SDGs, between Decree of the Italian Ministry of Cultural Heritage, February 21, 2018 and Agenda 2030: absolute values



Source: our elaboration

One of the main objectives emerging from the national museum evaluation system is the democratization of culture (Montella, 2012). In line with the SDGs, museum offerings should ensure the rights of citizens to culture (Pinna, 2017), as established in Articles 3 and 9 of the Italian Constitution. According to the multidimensional and multi-stakeholder approach (Cerquetti, 2017), this is the starting point for a virtuous cycle and for creating multiple social and economic benefits for different categories of users.

First, UQLMs confirm the need to create 'presentation value' (Montella, 2009) by providing effective information, communication and educational services. To this end, museums are asked to guarantee full accessibility to all clusters of visitors - including the most vulnerable members of society, such as people with disabilities and children (SDG 4.a). Indeed, accessibility concerns not only physical aspects (such as opening hours and economic and architectural entry barriers), but also intellectual ones, through offerings that meet current cultural demand, its needs, interests and capabilities. Therefore, the approach envisaged by the UQLMs meets the objectives set by SDG 4 for inclusive and equitable quality education. This is achieved by enhancing local culture and expressions, thereby promoting cultural diversity, contributing to sustainable development (SDG 4.7), and leading to further benefits considered in the 2030 Agenda.

The Ministerial Decree also designs the museum offer as a global service, including the core product (i.e., the communication service), its staff, its physical environment and its interaction with users. The communication service should not only show the exhibited objects' artistic characteristics, but above all their connection to their original historical and geographical context. Furthermore, museums should have suitable professional figures, with the proper knowledge and skills, not only in the field of cultural heritage, but also in management and organization. Similarly, the physical environment (including the physical equipment used to deliver the service) should be pleasant, functional and should conform to applicable standards. Finally, the communication content, strategies and tools should be differentiated, with the aim of achieving the widest customer satisfaction.

The Italian museum evaluation system also implicitly meets the benefits related to the promotion of sustained, inclusive and sustainable economic growth (SDG 8), especially "sustainable tourism, that creates jobs and promotes local culture and products" (SDG 8.9). Indeed, the intangible value generated by museum services, which consists in increasing the cultural capital of visitors, can cause multiple socio-economic effects, thereby creating 'production value' (Montella, 2009) and contributing significantly to local development. Among these effects are the strengthening of the community's identity and the contribution these services make to territorial marketing, destination management, local branding - ranging from attracting tourist flows and promoting local products to attracting exogenous investments and new businesses - and, therefore, to sustainable tourism. These benefits are fully material-economic, since they generate an increase in the income for the entire territorial economic-production system. At the same time, other economic impacts generated by museums must be considered (Solima, 2018). First of all is the flow of wealth that museums transfer to the people who work there and the benefits generated for external suppliers of products and services (direct and indirect impacts). In addition, there is the multiplicative impact of the museum's additional remuneration on consumption processes, which triggers the Keynesian multiplier mechanism and has positive repercussions on the entire local economic context. On the other hand, there are the tax effects generated when part of the wealth produced by the cultural institutions returns to

the public sector through taxation of workers' incomes and indirect taxes related to consumption (derived impacts). Finally, there is the previously mentioned impact of increased demand for local goods and services generated as a result of a museum's activities, such as on goods with brands reflecting their regional identity, and on companies in the tourist industry (induced impacts).

At the same time, it is important to consider the benefits regarding support for sustainable consumption models (SDG 12), related both to sustainable tourism (SDG 8.9) and the protection and safeguard of cultural heritage (SDG 11.4). The implementation of the aspects emerging from the UQLMs (Area C) and from the SDGs would lead museums to present local cultural resources in an organizationally widespread and culturally holistic perspective, consistent with the systemic-vital approach (Barile *et al.*, 2019). This would favor the space-time distribution of tourist flows, preventing excessive crowds beyond the physical and cultural carrying capacities of places and cultural sites, and the efficiency thresholds of the various services. Furthermore, this would revitalize peripheral areas: the increase in demand for goods and services generated would lead to additional remuneration, would support the mitigation of the demographic landslide, which often consumes peripheral areas, and would contribute to the protection of local heritage (Ruozi *et al.*, 2005; Quattrociochi, Montella, 2013).

Likewise, Area C of the Ministerial Decree recognizes that museums can be part of an integrated process to promote a place, by acting as the beginning of a story that continues beyond their doors, into the city and the territory; and they can achieve this by arranging activities in collaboration with other local organizations (SDG 11.a) (Stylianou-Lambert, 2014). Rather than limiting themselves to traditional approaches and tools (e.g., public-private partnerships), they would, therefore, contribute to implementing systemic governance of the territory (Hall, 2011) based on cooperation between local actors (public administration, tourism, culture, food and wine, craftsmanship, etc.) and between them and the local community, as well as on decision-making processes based on consultation and stakeholder participation. Strong support for innovation and a significant contribution to the competitiveness of tourist destinations and, ultimately, to sustainable development can arise from this approach (Mazanec *et al.*, 2007).

Finally, the implementation of enhancement activities extending from museum collections to the territory and the landscape is essential for safeguarding local cultural heritage (SDG 11.4). Museums are expected to contribute to this not only through the conservation of their collections. The prerequisite for guaranteeing the self-driven and legally required safeguard of cultural heritage is implementation of social reporting methods and accountability procedures that include sustainability information (SDG 12) and ensure that communities perceive the multiple tangible and intangible benefits (therefore directly and indirectly economic) they can derive from using cultural assets (Quattrociochi *et al.*, 2012).

6. Conclusions

Aiming to make a theoretical contribution to the debate on museum sustainability, this paper has investigated the relationship between culture and sustainability beyond the triple bottom line approach, by considering sustainability to be an integral component of quality and performance measurement in museums.

From a managerial point of view, the comparative analysis of the SDGs of the 2030 Agenda and the UQLMs of the Ministerial Decree of February 21, 2018 has allowed us to understand if, how and to what extent the current national evaluation system for museums incorporates the theme of sustainability (*RQ1*). The research results show that the UQLMs include sustainability principles and objectives, especially in the area that analyzes communication and relations with the public, the region and stakeholders. As already argued (§ 5), the standards and objectives set out in this area are consistent with the goals for social and economic inclusion (SDGs 4, 8, 10 and 16), which are a key component of sustainable development and the museum mission alike.

In reply to *RQ2*, we can also argue that the Italian museum evaluation system only incorporates the social and economic dimensions of sustainability, but is not yet aware of the importance of environmental challenges. Moreover, as already mentioned (§ 5), sustainability has not been institutionalized as a process, and many references to SDGs are only implicit in the UQLMs.

Given that the NMS was established only two years ago, and its implementation is an ongoing process, some policy and managerial implications can be drawn from the analysis, to ensure better application of the principles and objectives of sustainability in Italian museum management (*RQ3*). The research highlighted the need for a more holistic approach involving external stakeholders and integrating different strategies and measures to promote both *sustainability in museums* and *museums for sustainability*. In order to bring the Italian legislation and managerial practices closer to the principles of sustainability, two routes can be suggested. On the one hand, museum managers should implement UQLMs both as a periodic and a continual activity, and as a component of CSR. If the process becomes part of the museum's ordinary management and responsibility, it can help to trigger the abovementioned virtuous cycle of value creation. Otherwise, the contribution to sustainability remains on a museum's wish list. On the other hand, the research suggests that policymakers should provide other measurement tools to museums to boost environmental sustainability. Specifically, museum managers should be supported in starting social reporting and implementing accountability procedures (e.g., annual reports, strategic plans, etc.), and including external stakeholders in the process.

The research only examined the UQLMs. Further investigation should verify the current level of the sustainable approach in museum management by analyzing the initiatives and activities of museums participating in the NMS. For example, it would be interesting to investigate how the NMS is implementing the MuSST project (Museums and development

of territorial systems), which facilitates partnerships between public and private museums and organizations in the cultural, educational and private sectors for planning good practices addressing cultural development and tourism. From a theoretical and practical perspective, best practices should be analyzed, and the actual implementation of sustainability measures in museums should be investigated through qualitative research. Finally, future studies on this topic could report comparisons between different national evaluation systems at international level.

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