# DIGITAL CONVERGENCE IN CULTURAL INSTITUTIONS: PERFORMANCE AND IMPACT EVALUATION MODELS

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## ABSTRACT

This paper reports on an extensive study that investigated how libraries, archives and museums' performance and impact evaluation models can contribute to digital convergence impact in cultural institutions, with particular reference to the International Organization for Standardization's standards and Europeana Impact Playbook. Other models were also considered like MOI! Museums of Impact, IPA Road map and CSIRO. Data was collected through intensive research about library, archive and museum standards and the constitution of a focus group with professionals, educators, and representatives of professional bodies. The findings identify the need of a common impact agenda to address organizational alignment, suggesting that digital convergence substantially change the outcomes and impacts to evaluate due to the importance, complexity and dynamism of individual and collective informational behaviours, creating interest for collaboration, interdisciplinarity, awareness, communication, trust and innovations in the cultural sector, as well as a strong commitment to listen to audiences and stakeholders.

Digital Convergence, Cultural heritage institutions, Impact management models, Performance evaluation

## INTRODUCTION

Throughout the 20th century, libraries, archives and museums (which for convenience one may call cultural heritage institutions or memory institutions) followed their course at different paces, while the silos that shaped traditional curricular models and professional practices tended persist, making collaboration between these different types of institution difficult. Constant and progressive challenges generated by the development of the Information Society forced libraries, archives, and museums to rethink their services and revisit their management strategies considering significant changes in consumer behaviour, namely in the way information is provided and accessed on-line.

This focus on the digital environment brought commonalties to light, valuing the gains of a convergent and trans-institutional approach, despite several barriers (ways of thinking, organizational cultures, differences in descriptive standards, access, preservation, user perceptions and engagement with collections, staff training divergences) and risks (capacity risk, strategy risk, commitment risk and compatibility risk). The transition towards open evaluation systems requires cultural and institutional changes, development of public infrastructure and specific organizational capabilities.

Digital maturity implies the development of a management strategy to deal with complexity and a hybrid thinking to create the digital future of cultural heritage institutions – being critical and crucial for the long-term sustainability besides national agendas. The digital transformation is turning archives, libraries, and museums' collections into linked data and the role of evaluation is thus transformed.

Evaluation methodologies are scientific constructions that act on value judgements to transform them into useful judgements (Barbier, 1990). Although the intrinsic characteristics of the evaluation object matter, these constructions are mainly dependent on the needs of evaluation stakeholders, as well as on the analytical tools used by evaluators.

Experiences developed by MLA (the British Museums, Libraries and Archives Council) concerning recording experiences of engagement, such as Generic Learning Outcomes (GLO) and Generic Social

Outcomes (GSO,) attempted to widen the agenda in terms of measuring performance and success, with a focus on the impact of engagement with museum, library or archive collections using qualitative measures of success and quantitative indicators. This dual approach provided a broader expression of the impact of this sector: the impact activities or collections had on individuals or groups was illustrated through users and visitors indicators numbers and other types of robust data, and communication plans with strategic stakeholders looking for the development of value evaluation and return on investment methodologies (MLA, 2008).

This paper aims to contribute to the ongoing debate on the digital convergence of cultural institutions, namely, libraries, archives, and museums, through an exploratory research study on performance and impact management models and tools for improving cultural heritage institutions accountability, transparency and visibility (Pacios, Núñez and Ramos Simón, 2022). Most studies focus on the implementation of technologies, collections digitalisation and their impact on organisational processes and strategy, providing measurement frameworks of a specific dimension of the digital transformation (digital awareness, digital enquirement, digital collaboration and digital transformation, Digital Maturity model), or of a specific organisational function or need (digital literacy measurement) (Agostino and Costantini, 2022). So, the central objectives of this paper are to depict and illustrate the importance of discussing performance and evaluation models in European cultural institutions. In particular, we intend to answer the research question: *How can evaluation and impact models contribute to digital convergence management*?

Our paper presents a broad and multifaceted literature review, which revealed several initiatives that can enable the development of an impact evaluation agenda for libraries, archives and museums.


## RESEARCH BACKGROUND AND METHODS

Since 2012, the Faculty of Social and Human Sciences at the University Nova de Lisboa (Portugal) has an ongoing research, teaching and training research strategy in Information Science that, valuing interdisciplinarity, intersects performance evaluation, sustainable development and digital transition. Several learning experiences, involvement and development of competencies focused on evaluation competences emerged from this strategy and has been documented in articles and papers namely:

- Co-creation of a Sustainability Assessment Structure, linking sustainability metrics to quality management.
- Co-creation of sustainability indicators for the measurement of impacts on cultural organizations.
- Co-creation of an open assessment skills taxonomy.
- PLS Project - Public Libraries contribution to Sustainable Development Goals.

From 2017 onwards, research on participatory evaluation and co-evaluation competences also explored the interconnections with Open Science and Open Evaluation.

Sustainability competencies linked to performance strategies in heritage cultural organizations were operationalised as specific learning objectives in two inter-disciplinary team-teaching course units - *Performance Evaluation & Sustainability of Information Services* and *Organizational Management and Organizational Behaviour*.

This research path gives the possibility to elaborate on the challenges posed by the integration of library, archive and museum services' conceptual and practical contributions in future research agendas, especially regarding the need for better methodological assessment of these transdisciplinary topics. In line with Coryn et al. (2016)'s conceptual definition, we consider that Evaluation Research (or Research on Evaluation) is "Any purposeful, systematic, empirical inquiry intended to test existing knowledge, contribute to existing knowledge, or generate new knowledge related to some aspect of evaluation processes or products, or evaluation theories, methods, or practices" (p. 161).

To develop an alignment model adequate for heritage cultural institutions, this study followed a two-phase approach that comprises a theoretical development of the framework and a discussion in a focus group with national experts in impact assessments. In 2023, we conducted an extensive literature research about ISO Standards. We also looked for documents and research projects that include

performance and impact evaluation criteria or indicators, as well as documents that address criticisms or new conceptual aspects. In 2024, a focus group was created to identify gaps and needs that are perceived to affect the implementation of impact assessment indicators within the field of cultural management.

The methodology used for this study was a desk based critical review of literature of impact evaluation in all types of museums, archives, and libraries over a retrospective period of 10 years.

The main concepts discussed are presented in Table 1.

| | |
|---|---|
| *Co-evaluation* | Collaborative approach to evaluation that emphasises partnership, knowledge sharing and co-creation features, as well as the active engagement of stakeholders throughout the evaluation process - from the evaluation design to data gathering, analysis and to final reporting. |
| *Evaluation* | The process of determining the merit, worth and value of some object. Evaluations are the essential products of that process (Scriven, 1991).<br>- *Inputs:* Resources applied to deliver activities, such as people, equipment, funding, etc.<br>- *Activities*: Actions taken, or work performed through which inputs, technical assistance and other types of resources are mobilised with the intention of achieving specific outputs (e.g. technology development, education, engagement).<br>- *Outputs*: The results, services, and/or capacities that result from the completion of activities within a research portfolio or project (e.g. publications, patents, prototypes, training packages, students trained, reports).<br>- *Outcomes*: The intended or desired medium-term (CSIRO, 2020) |
| *Evaluation Research* | "Any purposeful, systematic, empirical inquiry intended to test existing knowledge, contribute to existing knowledge, or generate new knowledge related to some aspect of evaluation processes or products, or evaluation theories, methods, or practices" (Coryn et al., 2016, p. 161). |
| *Meta-evaluation* | The evaluation of an evaluation or cluster of interconnected evaluations (Scriven, 1991). It corresponds to a specific approach/type of Evaluation Research. |
| *Strategic alignment* | Organizational performance is the consequence of the adjustment between two or more factors such as strategy, structure, technology, culture and environment, keeping the focus on IT (Bergeron et al., 2004). |
| *Open evaluation* | Collaborative approach that integrates external stakeholders outside the usual group of decision-makers into the assessment (Haller, 2013). |
| *Impact evaluation* | Impact is any effect of the service, event or initiative of an individual or group, may be short or long term, positive or negative, intentional or accidental, critical or trivial, resulting in changes in attitudes, behaviours, results. Change is the essence of impact (Markless and Streatfield, 2006).<br>Five types of impact evaluation design are identified encompassing a range of evaluation methods and approaches: i) experimental and statistical methods; ii) textual, oral and arts-based methods; iii) systems analysis methods; iv) indicator-based approaches; and v) evidence synthesis approaches.<br>An Impact Agenda should be demonstrable, identifying benefits to individuals, groups, organisations, and society (including human and non-human entities) and evidencing cause-effect linked. |

**Table 1 – Main Concepts**

## LITERATURE REVIEW

In the last 40 years, library, archive, and museum assessment have experienced a great period of theory building, conceptualization, and model development to be presented to different stakeholder, but with considerable differences in the options for assessment (Poll, 2018).

The 1990s are considered to be the rise of performance, with measurements becoming more intensive, extensive, external (Bouckaert and Halligan, 2006), professionalized and institutionalized, Quality criteria and quality evaluation were the priorities for the organizations.

There have been many debates over the value of performance, measurement and its management, specifications of its components and their relationships and applications in different countries, characterized by a constructive period of consolidation and refinement of measurement approaches and instruments. Several performance issues have been researched – performance appraisal, policy planning, external reporting, performance-based budgeting and audit – and the crucial question has been how to develop performance measurement in a usable and functional way as a tool for cultural policy and management (Ochôa and Pinto, 2015, 2017; Streatfield and Markless, 2009, 2010). Special attention has also been paid to the way in which decision makers use performance measurement information vis-à-vis their prior understanding, experience, and evidence, aligning performance models and evidence of institutional uses, namely "good practices", recognizing the political nature of performance management and assuming that high quality dialogue will lead to improved judgment and decision-making (Bill & Melinda Gates Foundation 2015).

Evaluation approaches and methods are usually categorized according to:

- Participants' type and role (external/internal).
- Nature of evaluation objects (*ex-ante*, on-going, *ex-post*, *ex-ante + ex-post*, interactive).
- Evaluation focus (performance/results, process, systemic and process, prospective).
- Principal beneficiaries.
- Type of data (descriptive/evaluative, quantitative/qualitative, extensive/intensive, models and typologies).
- Methods and technics (documental analysis, interviews, focus groups, observation, questionnaires, statistics, diaries).
- Methodological strategies (case-by-case analysis, comparative analysis, prospective analysis, longitudinal analysis, observation panels, testing).

Frequently, these categories are combined, producing mixed evaluation systems.

It is also useful to compare frameworks of cultural domains/statistics with a focus on creative industries (UNESCO Culture for Development Indicators - CDIS, United Nations Trade and development Statistics - UNCTAD, European Statistics - Eurostat, European Statistical System Network on Culture - ESSnet Culture, OECD), considering data collection, contextualization, data aggregation and data reporting and analysis.

The definition of impact is the cornerstone of methodological proposals for evaluation and "How impact is defined will necessarily determine the scope and content of the study because different definitions prioritize different aspects of 'impact`, imply different concepts of causality (what produces the impact); and how to estimate the impact (evaluation designs)" (Stern et al, 2012, p. 5). Associated with the concept and practice(s) of impact assessment, we have several subcategorizations relating to the temporal arc (immediate or long-term), degree of depth (from superficial to profound changes), intentionality (intentional or accidental), type of beneficiary (individuals, the organization that oversees the information service or community or society) and generic type of impact (economic, social, political, environmental, etc.).

In this field, UNESCO framework (CDIS) is useful for understanding the impact of the cultural sector in seven interconnected policy dimensions (economy, education, heritage, communication, governance and institutions, social participation, gender equality).

One strategy developed in the European Union has been related to the building of evaluation indicators on public policies forf culture and the construction of an index of cultural participation of European citizens to promote excellence in the field of heritage and creativity. We can find other examples in several impact frameworks, like for instance the MOI! Museums of Impact (2020-2021). This framework which is specifically designed to reflect current issues in the societal impact of museums and presents two modules: *Enabler* and *Impact*.

The first one can evaluate:

What we do – Impact goals and strategy
How we work – Organisational culture and competences
How our organisation functions – Resources and service development
How we embed digital into services and processes – Digital engagement

The second one evaluates different key areas:

Communities and shared heritage
Relevant and reliable knowledge
Societal relevance
Sustainable organisations and societies

Other examples can also be found in two Horizon 2020 projects:

- SoPHIA – Social Platform for Holistic Impact Heritage Assessment" (2020-2021), which aims to promote collective reflection within the cultural and political sector in Europe on the impact assessment and quality of interventions.
- inDICEs – measure the impact of digital culture (2020-2022), which considers new forms of creative production and cultural engagement.

Substantial research on evaluation models (Wavell et al, 2002; Puttick and Ludlow, 2012; Town and Stein, 2015; Partal and Dunph, 2016; Streatfield and Markless, 2019) have shown that different approaches to impact assessment respond to different organizational circumstances, since they tend to be labour intensive and time-consuming. Nevertheless, the use of metrics can capture and measure different types of outcomes and direct and indirect impacts, resorting to new methods that articulate different levels and types of change and emphases the use of the Theory of Change. This theory was developed in the decade 1990 by the Aspen Institute Roundtable on Community Change as a model for evaluation of community initiatives, in which the description of desired results has a strong component. Focused on change and the ability to adapt in response to emerging issues and collaborative decisions, between partners and stakeholders, it proves to be particularly useful to learn from impact assessment (Rogers, 2014). Theory of Change is useful to measure projects, organizations, policies, and strategies impacts describing how we believe that change could be made to happen and outlining the main elements and interactions for that change.

Impact assessment must reflect all situations of change, especially in data collection, analysis, and evaluation methodologies, relying on qualitative and quantitative data, generally in mixed methodologies. When considering the dynamics of impact approaches and models integration, we must pay attention to the Global Learning (GL) Impact Planning and Assessment (IPA) Road Map. The model IPA Road Map was created by D. Streatfield and S. Markless (2009) to evaluate performance and impact of programs (Global Libraries Initiative, 2008). It was adopted by the Global Libraries Initiative of Bill & Melinda Gates Foundation to support grant beneficiaries in the planning process and assessment of impacts, which was reflected in an itinerary (road map) composed of four stages. Through a planning cycle, the IPA model Road Map establishes a balance between the different levels and types of impacts, as well as between impacts short and long term, being structured on five levels:

1. Changes in knowledge and skills

2. Changes in perceptions and confidence

3. Changes in specific behaviours

4. Changes in quality of life

5. Changes in society and economy

Another proposal is the CSIRO impact evaluation (Fig. 1) that distinguish between inputs, activities, outputs, outcomes, and impact, presenting a critical approach of the existing models. CSIRO emphasised the importance of planning impact considering all the phases of planned work, direct/indirect influence, engagement and feedback.
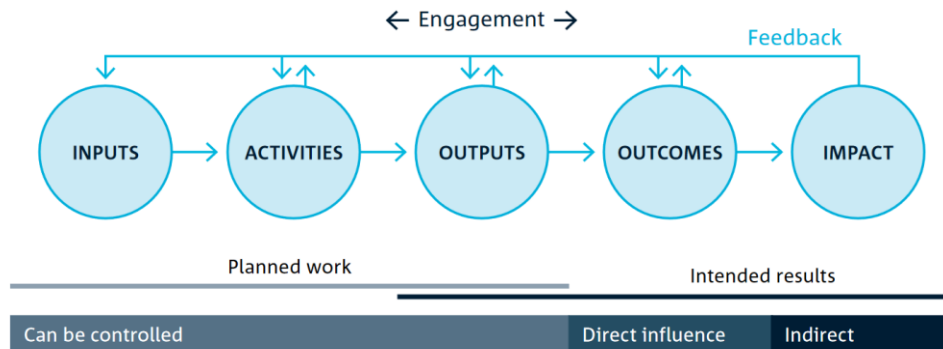


**Fig. 1 - CSIRO impact evaluation (2020, p. 20)**

Another theory must be highlighted, that of Collective Impact (Kania and Kramer, 2011). It can be defined as "the commitment of an important group of actors from different sectors face a common agenda to solve a problem specific". This theory is based on five principles: a common agenda, a shared assessment, enriching collective activities, continuous communication, support back-office around impact assessment, in which an independent team dedicated to guiding the achievement of vision and strategy, the alignment of activities and the establishment of common assessment practices. As a pillar of this theory, the authors highlight the relationships established between multiple organizations for the solving complex problems, developing rapid learning through continuous feedback and coordination of responses between participants, alongside data and evidence necessary for collective impact assessment. However, it seems to be consensual that most of the members of these partnerships are still at a stage of preliminary development, not having sufficient skills to assess.

Cultural impact assessment is difficult and results in a commensurate challenge of understanding impacts on and of culture (Partal and Dunph, 2016). This phase of interdisciplinary convergence and strategic alignment allows contact with multiple influences and perspectives (government, NGOs, companies, universities, 2030 Agenda, Digital transition policies) and values the vision of new complementary assessment structures and collaborative processes that include sectoral or global impact indicators cross-sectoral and focused on new dynamics.

The focus group highlighted two performance and impact evaluation models with high adequacy to the convergent perspective and an evidence-based policy/practice: (1) ISO - International Organization for Standardization's model and (2) Europeana's impact assessment model for the cultural heritage sector (*Europeana Impact Playbook*). It was a general opinion that these models can capture the multifaceted, complex and long-term benefits arising from cultural activities.

**ISO - International Organization for Standardization's model**

The most striking feature of performance management is the recent development of standards by the International Organization for Standardization (TC 46 Information and Documentation / SC8 Statistics and performance evaluation), highlighting the international and comparable dimensions of statistics, as well as quality aspects of activities and services assessment through performance measures and indicators:

- ISO 2789:2023 - *Information and documentation - International library statistics* (6th ed.)

- ISO 18461:2016 - *Information and documentation — International museum statistics* (1st ed.)
- ISO 24083:2021 - *Information and documentation — International archives statistics* (1st ed.)
- ISO 11620: 2023 - *Information and documentation – Library performance indicators* (4th ed.)
- ISO 21246:2019 - *Information and documentation – Key indicators for museums* (1st ed.)
- ISO 21248: 2019 - *Information and documentation – Quality assessment for national libraries* (1st ed.)

Other influences are ISO/TR 20983 *Performance indicators for electronic library performance* (since 2003) and ISO 16439:2014 *Information and Documentation - Methods and procedures for assessing the impact of libraries*. This standard recommends three methodological approaches (predominantly qualitative) for collecting evidence on impacts:

- *Inference*: the performance data that is usually collected on resources spent, results achieved, performance indicators and levels of user satisfaction with the services provided can be used to identify potential impacts.
- *Solicited*: this type of methods uses different techniques (questionnaires, interviews, focus groups, self-assessment, etc.) to ask users and non-users about their experience and to estimate the benefits generated by the information service; its application results in quantitative and qualitative data, as well as stories and anecdotal evidence about the impact of the information service.
- *Observation*: comprises methods based on the observation of users' behaviour during contact with IS, whether carried out by researchers or by technical devices (video recording or log analysis) and also self-observation, analysis of citations and tests aimed at identifying changes in users' skills following contact with the IS.

ISO 16439, in its chapter 10, also gives particular emphasis to the assessment of the economic value of information services, recommending methods to calculate the value of information services benefits for users (for example, market pricing or MAC), to carry out a cost-benefit analysis or an analysis of the economic impact of these services.

Following its "three layers approach", ISO TC46/SC8 is committed to spreading successful library standard models to museums and archives through the progressive development of standards on statistics, performance indicators and then impact assessment. Framed by this line of action, it is presently under discussion ISO/CD 16687:2024(E) - *Impact assessment for museums*. In this standard proposal, *Museum impact* is defined as the change in an individual or group resulting from the contact with museum services. It clarifies that while an impact on an individual might be produced by a one-time museum visit, cultural and social impact will usually show only after a longer time period.

The practices of evaluation models led Roswitha Poll (2018, p. 90) to consider that "there is an evident similarity in the mission and goals of cultural institutions such as archives, libraries and museums. Methods already in use in libraries for assessing performance quality and library impact can therefore also be useful in the museum sector. But the immense variety of museums requires an adaptation of existing methods and several new indicators especially devised for museum tasks." These words are confirmed by organizations like EGMUS (European Group on Museum Statistics) that collect, compare, analyse, and advocate for the harmonisation of European statistics in collaboration with Eurostat.

The role played by the alignment of strategies and impact evaluation practices is also important in the processes of gathering evidence and advocacy towards cultural heritage organizations contributions to the UN 2030 Agenda, evolving stakeholders in these processes.

The benefits of public participation in impact assessment constitute, simultaneously, a new strategy and an emerging area of research, considering the possibility of increasing the degree of citizen involvement in the assessment cycle. Taking as a reference the characteristic research phases of Citizen Science projects that were identified by Wiggins & Crowston (2011), it will be necessary to consider the forms of motivation and participation of stakeholders in all phases of the process (Geoghegan et al., 2016) aiming to co-create the evaluation design. As Cullen, Coryn and Rugh (2011, p. 347) argue, it is important to adopt a three-dimensional approach that "directly addresses who holds technical control of the decision-making process (i.e., the evaluator, stakeholders, or some combination thereof). The

second dimension describes the extent of stakeholder participation from consultation to extensive participation. The third dimension (…) has been decomposed into what are considered the most important, discrete facets related to the primary activities necessary to execute most evaluations (i.e., evaluation design, data collection, data analysis, developing recommendations reporting of findings, and dissemination)".

The co-creation strategy can increase the relevance, transparency and interest and research in evaluation, supporting new evidence, theories, and public policies for the area of Culture, and can also be the object of social innovation (Voorberg et al., 2013). In a context of expanding the use of assessment methodologies by a greater number of participants in conjunction with the scientific community, the standardization pillar presents itself as starting point for the contextualization and systematization of the types of impacts and participation by stakeholder.

ISO/CD 16687:2024(E) for museums impacts identify several types of impacts:
   a) Pleasure, entertainment during a visit: The positive emotion can lead to further impact.
   b) Finding relevant information for a question or research subject.
   c) Learning or finding material for teaching.
   d) Finding new interests, e. g. inspiration for a leisure-time technology circle, a collecting hobby;
   e) Knowing and valuing one's community or region: This can create a feeling of belonging, of being at home.
   f) Inspiration for research and other projects based on the collections.
   g) Being open-minded for products of other cultures.
   h) Understanding objects and cultural structures as products of their own time.
   i) Reliance on the preservation of the cultural and natural heritage.


**Europeana impact model**

Europeana (https://www.europeana.eu/) plays an important role in the alignment with European Union policies and strategies for the cultural sector, especially in the context of digital transformation, and in the development of impact assessment tools and strategies.

The *Europeana Impact Playbook* offers a four-phased approach to help to design, measure, narrate and evaluate impact in an open culture:

   1 - Design your impact
   2- Measure your impact
   3- Narrate your impact
   4- Evaluate your impact approach

The model integrates change pathways and strategical perspectives to evaluate several aspects:

   ▪ Actions and policies in the cultural context.
   ▪ Contributions to the improvement of society in general and individuals in particular, identifying to what extent the activities carried out by the digital platform generate changes.
   ▪ The impact of digital technologies on the lives of people and organizations.
   ▪ The impact of the digitization.
   ▪ The economic development (job creation, improvement in the quality of life, entrepreneurship)
   ▪ The transmission of knowledge.
   ▪ The promotion of tourism.
   ▪ The impact of Europeana on scientific and cultural development.

Such interests are enriched, not only by advancements on digital convergence between cultural institutions, but also due to the strength of the new critical approaches and the extended spectrum of new topics to be evaluated. Users' narratives, affective and embodied experiences, social, political, ideological, economic, cultural impacts, complemented by well-being, equal, inclusive and sustainability are the most studied aspects in the literature. Methodologies documented generally include desk research through existing studies or statistics, mapping of cultural activity, field and

users/visitors' surveys and community consultation, considering impacts of cultural activities or impacts of changes.

Other aspects are highlighted in international debates around digital transition:

a) The importance of developing competences, strategies and practices of digital literacy.
b) Forms of innovation and new collaborative lines of action through narratives of impact and storytelling - a creative way to engage with people in an evaluation, learning process and social change measurement.
c) The need to conceal different descriptive traditions, metadata schemas and different contexts and professional boundaries of the various types of institutions involved.
d) Forms of resources sharing and convergence in repositories of cultural, artistic, natural, and scientific heritage with linked open data and semantic data integration as key elements in this process.
e) Technological development of digitalization practices and different scenarios for creative interactions, including reuse of open data, citizen co-curation or citizen science practices.
f) Information practices of users that prefer being able to see all items from a single access point.
g) Various formats of digital engagement and innovative approaches to digital culture.

Other institutional and transversal impacts to be studied are:

- Intra and cross sectorial collaboration and development of new digital skills set.
- The existence of digital competencies gap among professionals of the culture sector.
- The need to develop policies, legal frameworks, as well as cultural offer(s) related to Artificial Intelligence and related impacts on cultural policy and production.
- The need to study digital audiences' consumer behaviour and the effects of related practices on society and mental health.

Generally, Heritage Information is also linked to the digital humanities umbrella and digitisation, preservation, repositories, metadata and visualisation, each field reinforcing each other. In this context, cultural heritage institutions can be viewed as communities of change and culture as an unequivocal part of the solution to humanity's challenges.

These changes create the need for the promotion of an impact agenda to measure digital convergence in libraries, archives and museums, a strategy similar to that pursued by Higher Education and academia research (Williams and Grant 2018) to address contemporary challenges, accountability and transparency in using public resources (Bandola-Gill 2019, Creutzfeldt et al. 2019).

## IMPACT EVALUATION AGENDA

This study intended to answer to the question *How can evaluation and impact models contribute to digital convergence management?* Single impact models, neither seems sufficient to value digital strategic alignment, quality criteria indicators and impact evaluation practices, nor to create interest for collaboration, interdisciplinarity, awareness, communication, trust and innovations in the cultural sector, as well as a strong commitment to listen to different audiences and stakeholders. A new model of organizational management to digital convergence assessment implies an impact evaluation agenda based in co-evaluation, together with, other cultural organizations and their stakeholders.

Our proposal is based on ISO recommended methods, Europeana impact model, CSIRO impact model, IPA Road Map, MOI Framework and Theory of Change (Table 2), with the evaluator playing the role of facilitator, collecting, curating and co-evaluation data.

| APPROACHES AND METHODS FOR GATHERING EVIDENCE OF IMPACT IN CULTURAL HERITAGE ORGANIZATIONS<br><br>SELECTION OF THE APPROPRIATE MIX OF METHODS | | LEVEL OF STAKEHOLDER PARTICIPATION IN CO-EVALUATION PROCESSES | | | | | | IDENTIFICATION OF TYPES OF CHANGE AND IMPACT | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | *Dialogue* | *Consulting* | *Involving* | *Collaborating* | *Empowering* | *Direct decision* | *Knowledge and skills* | *Perceptions and confidence* | *Quality of life Societal* | *Communities and shared heritage* |
| **Inferred (qualitative data)** | | | | | | | | | | | |
| Statistics on inputs and outputs | Statistics of library/archive/museum use | | ✓ | | ✓ | | | ✓ | ✓ | ✓ | ✓ |
| | Statistics of library/archive/museum users and visitors | | ✓ | | ✓ | | | ✓ | ✓ | ✓ | ✓ |
| Performance indicators | Indicators of library/archive/museum use | | ✓ | | ✓ | | | ✓ | ✓ | ✓ | ✓ |
| | Indicators of service quality (based on indicators of use) | | | | | | ✓ | | | | |
| | Indicators comparing library/archive/museum statistics to cultural statistics | | | | ✓ | | | ✓ | ✓ | ✓ | ✓ |
| Data from user/visitor satisfaction surveys | Direct measurement method | | ✓ | ✓ | ✓ | | | | | | |
| | Gap analysis | | ✓ | ✓ | ✓ | | | | | | |
| **Solicited and feedback analysis** | | | | | | | | | | | |
| Impact surveys | Surveys on library/archive//museum users' opinion and experience | | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ |
| | Surveys on the effects of library/archive/museum contact | | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ |
| | Survey son the general opinion about library/archive/museum value | | ✓ | ✓ | ✓ | | | | | | |
| Interviews and focus groups | (Un-)(Semi-)Structured/ interviews | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ |
| | Critical Incident Interviews | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ |
| | Individual/Group interview | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ |
| | Focus group interview | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ |
| Self-assessment of users | Critical review of one's own skills, knowledge or confidence | | ✓ | ✓ | ✓ | | | ✓ | ✓ | | |
| Collecting anecdotal evidence and storytelling | Evidence based on anecdotes or stories obtained informally from personal observations and experiences. | | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ |
| **Observed and engagement evidence** | | | | | | | | | | | |
| Collecting observational evidence | (Non-)Structured observation | | | | ✓ | | | | | | |
| | (Non-)Participant observation | | | | ✓ | | | | | | ✓ |
| | Open observation | ✓ | | ✓ | ✓ | | | | | | ✓ |
| | Covert observation | | | | ✓ | | | | | | ✓ |
| Log analysis | Evidence based on users/information systems interaction | | | | | | | ✓ | | | ✓ |
| Self-recording | Diaries | | ✓ | ✓ | ✓ | | | | | | |
| Citation analysis | - | | | | | | | ✓ | | | ✓ |
| Testing the impact on knowledge and skills, well-being | Tests for basic information/digital literacy | | ✓ | | ✓ | | | ✓ | | | |
| | Analysis of portfolios | | | | ✓ | | | ✓ | ✓ | | |
| | Analysis of the use of information in writing tasks | | | | ✓ | | | ✓ | ✓ | | |
| **Report and advocacy** | | | | | | | | | | | |
| Reporting impact evaluation findings | - | | | | | ✓ | ✓ | | | | |

**Table 2 - Approaches and methods for an Impact Evaluation Agenda**

**CONCLUSION**

This paper analysed the relationship between digital convergence and performance and impact evaluation models, discussing the need of an impact agenda to provide a more complete picture of the cultural sector impact, involving several stakeholders, stimulating cooperation and learning between different services and mobilising different professional communities. This agenda can be an opportunity for the development of performance evaluation models that value strategic alignment, accountability and impact evaluation practices, creating awareness, communication, trust and innovations in the field.

Communities of transdisciplinary and evaluative methods and practices will be central to the creation of co-evaluation integrative models, where different alignment strategies and evidence will be valued to deal with the complexity of new open evaluation processes.

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