



Revolúcia:
nežná x digitálna

- digitálne a sociálne médiá
v múzeách 30 rokov po

Revolution:
Velvet x Digital

- 30 Years of Digital
and Social Media in Museums

Zborník z konferencie
Conference Proceedings



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Moving Museums towards Transformation and Change in a Digital World: Insights from the Project Mu.SA

Posúvanie múzeí smerom k transformácii a zmene v digitálnom svete: náhľad do projektu Mu.SA

ANA CARVALHO & ALEXANDRE MATOS

Naša spoločnosť je čím ďalej tým závislejšia od digitálnych technológií, a preto niet pochýb o tom, že z toho vyplývajú nevyhnutné dôsledky aj pre oblasť múzeí. Výskum ukazuje, že vývoj technológie je jedným z faktorov, ktoré môžu v budúcnosti s najväčšou pravdepodobnosťou ovplyvniť múzeá podobne ako demografické zmeny, zvyšovanie mobility, odklon od verejného poriadku, udržateľnosť a participatívnosť. To, že je potrebné, aby sa múzeá adaptovali na zmeny v spoločnosti a najmä, aby sa chopili výziev, ktoré ponúka digitálny svet, už predvídali viaceré štúdie a správy formujúce verejné stratégie národných múzeí. To je aj prípad dokumentov ako Agenda 2026: Study on the Future of the Dutch Museum Sector (2010), Rapport de la Mission Musées du XXIe Siècle (2017), a správa z Veľkej Británie Culture is Digital (2018). V tejto súvislosti je dôležité vyzdvihnúť potenciál digitálnych nástrojov pre múzeá nie ako výsledok, ale ako jeden z prostriedkov na dosiahnutie ich strategických cieľov. Uznať vzostup digitálnych technológií ako jednej z hlavných úloh pre súčasné múzeá znamená aj uznať potrebu reflektovať s odstupom nové spôsoby, ako zosúladiť novonadobudnuté vedomosti, zručnosti a meniacu sa mentalitu spoločnosti. Profesný rozvoj bude musieť reflektovať aj nové kompetencie spojené s digitálnymi technológiami ako súčasťou meniacej sa dynamiky a očakávaní súčasnej spoločnosti, či už cez formálne vzdelávanie na univerzitách, alebo neformálne vzdelávanie v podobe celoživotného vzdelávania. Vzrastajúca digitálna gramotnosť a sebadôvera múzejných profesionálov je dôležitým aspektom podpory digitálnej transformácie múzeí. To je kľúčový argument, ktorý stojí za vznikom projektu Mu.SA - Museum Sector Alliance (2016-2019) a európskeho projektu, financovaného prostredníctvom Erasmus Plus Programme, zameraného na rozvoj digitálnych zručností v múzejnom sektore podporovaním prebiehajúcich vzdelávacích programov pre múzejných profesionálov v Grécku, Taliansku a Portugalsku. V našej prezentácii predstavíme ciele, výskum, metódy a výsledky projektu Mu.SA a rozoberieme kľúčové zistenia z prvej fázy výskumu prípadovej štúdie z Portugalska, ktorá sa zameriava na spomínané výzvy.

Going digital: not a mission in itself, but a tool

Our society is becoming more and more dependent on digital technology, and there can be no doubt that there are inevitable consequences for the museum sector. Over the last decades museums have not been apart from these transformations²⁵, however the accelerated pace of change stimulates a more proficient and agile relation with technology. Therefore, the need to update museums by incorporating new forms of communication that enable knowledge sharing on museum collections and ensure that museums establish relevant connections with their audiences. Globally, is also about pushing museums to be more relevant in the 21st century society.

Research also shows that technology development is one of the factors most likely to affect museums in the future, as well as: demographic changes, increasing mobility, public policy retraction, sustainability and participation.²⁶

Examining new trends and the possibilities introduced by digital technologies have sparked a growing interest in the museum's world, that don't go unnoticed as testified by the growing number of debates and conferences organized in recent years around these topics, as was the case of the International ICOM Conference: "Revolution: Velvet x Digital 30 Years of Digital and Social Media in Museums".

Furthermore, the need for museums to adapt to society changes, namely embracing the digital world challenges, is already an aspect foreseen in several studies and reports shaping public national museum strategies in European countries. That is the case of *Agenda 2026: Study on the Future of the Dutch Museum Sector*²⁷, the *Rapport de la Mission Musées du XXI^e Siècle*²⁸, and the UK Government's report on *Culture is Digital*²⁹, among others. In this context, the potential of digital technologies is underlined, not as an end or a value in itself, but rather as one of the means or tools to help museums achieve their mission and strategic goals.

Finding a balance: the digital and the physical

The possibilities of digital transformation encompass all areas of museum activities (management, communication, education, exhibition, collections management, and visitor engagement), from back-office to front-of-house, and in this context the challenges are multidimensional. However, museums have not responded unanimously to digital transformation and are not equally endowed with the same means. In fact, recent findings reveal that most museums are far from reaching full digital maturity.³⁰

The demand for digital transformation carries added complexity, requiring informed and critical thinking about the role to give technology (digital or otherwise), as well as the need to frame it within the mission and the (communication) strategy of each museum.

25A number of scholars have analysed technology impact and influence in the museum and heritage field. See, for instance, MACDONALD (2006), CAMERON & KENDERDINE (2007), PARRY (2007, 2010), DROTNER & SCHRØDER (2013) and DROTNER *et al.* (2018).

26 FILIPE & CAMACHO (2018). See also MAIRESSE (2013, 2016).

27 Meijer, Weide & Krabshuis (2010).

28 EIDELMAN (2017).

29 Department for Digital, Culture, Media & Sport (2018).

30 Price & Dafydd (2018).

An informed and critical thinking is also crucial to guide museums in using technology in a way that it adds value to museum activities. In that sense, to embrace technology as an opportunity is very much dependent on the use it's given.

Another stance that must not be overlooked is also an ethical one. When applying digital technologies to engage and meet audience expectations, the needs of those that might be excluded should not be ignored, namely those users or visitors that feel more comfortable with more traditional forms of engagement. In that way, there is a need to find a balance between digital engagements with existing physical forms of engagement.³¹

Finally, we argue that technology does not replace human mediation, but it may contribute to enhance users' experiences, since it broadens the range of new means and conditions of access, which also must not be ignored.

Professional development and new competences

To recognise the rise of digital technology as one of the challenges currently facing contemporary museums means stepping back to reflect on how to orchestrate the acquisition of new knowledge, competences and mindsets.³² Whether through formal training, such as a university degree, or non-formal training through lifelong learning, professional development will need to address new competences related to digital technologies as part of the changing dynamics and expectations of contemporary society.³³

Increasing digital literacy and confidence among museum professionals is a crucial aspect of supporting the digital transformation of museums and enabling change.³⁴ That is also the key argument that informed Mu.SA - *Museum Sector Alliance* (2016-2020), a European project funded by the Erasmus plus Programme that focusses on the development of digital competences in the museum sector by supporting professional training in Greece, Italy and Portugal.³⁵

In this paper, we analyse some critical points and interconnected challenges in addressing museums digital transformation, shaped by the Mu.SA project research findings, in particular from the Portuguese case study.

Mu.SA project training programmes

By focusing on the development of digital competences in the museum sector, one of the project Mu.SA aims was to design training programs that could address the sector needs and help museum professionals to better face digital transformation needs and challenges. Following a first phase of research in Portugal, Italy and Greece, the main countries represented in the partnership, the second phase was to design two e-learning programmes.

The first was a Mu.SA MOOC (Massive Open Online Course), a free course about "Essential Digital Skills for Museum Professionals", introducing basic skills (eight weeks), which was

31 Museums Association (2015).

32 WHITE (2016); GAINON-COURT & VUILLAUME (2016); FILIPE & CAMACHO (2018); PRICE & DAFYDD (2018).

33 RÉSEAUCANADIEND'INFORMATION SUR LE PATRIMOINE (2009); DAHLQUIST (2017); LANGLOIS (2015); RAOUL-DUVAL (2019).

34 MUSEUMS ASSOCIATION (2013); MURPHY (2014); PARRY et al. (2018).

35 Project Mu.SA – Museum Sector Alliance: <http://www.project-musa.eu>

delivered from 7th January to 8th March 2019. The Mu.SA MOOC reached almost 4,000 inscriptions, which can also tell about the interest and appetite there is in such topics. Furthermore, 32% of learners completed the course, which can be considered relevant, since MOOC courses usually have much higher dropout rates.

The second training programme is a specialization course (on-going), open for learners that had completed the Mu.SA MOOC. It is intended to be more specialized in focus, and thus, offering four possibilities of specialization according to four emerging job profiles identified in the project first phase of research, as follows: Digital strategy manager, Digital collections curator, Digital Interactive Experience Developer, and Online community manager.³⁶ It is also designed as blended learning, combining e-learning, face to face training and workplace learning in museums. The specialization course runs for six months, having started in September 2019 and is due to complete in March 2020.

Both training programmes were designed following a combination of modules around digital competences (e.g. managing data, developing digital content, etc.) and transferable competences or soft skills (e.g. leadership, creative thinking, communication, etc.), considering also main reference frameworks (e.g. E-CF: e-Competences framework for IT professionals, DigComp: Digital Competences framework for citizens).

Critical points and interconnected challenges

While focusing on professional development as a factor that enables change towards museums digital transformation, project Mu.SA research findings also provided a closer examination on how museums are responding to the digital shift, identifying critical points and interconnected challenges, particularly in what concerns the Portuguese, Italian and Greece situation.

Looking more closely at the Portuguese case study, research revealed a very unstructured and limited experience of digital transformation. To some extent, this conclusion is also shared by overall findings in Greece and Italy.³⁷ Clearly, the reasons are multiple and interdependent. Drawing from the findings of the Portuguese case we will further discuss a number of critical points.³⁸

The first is related to digitization of collections, which in spite of progress still remains an under-developed area that requires significant investment, including the need to improve standardization in managing information systems (e.g. collections, archives and data) and their interoperability. Digitization investment is key in the sense that it can underpin activity in other museum areas and the creation of digital content, and also a culture of sharing.

Another critical point identified is the limited use of digital platforms (e.g. websites, online catalogues, etc.) and the need to move forward towards more agile, user-friendly, accessible, updated, also driven by compelling content.

At a more structural point of view, other aspects relate to a limited investment in infrastructure (IT, e-commerce services, etc.), including, in most cases, an insufficient IT support in what maintenance concerns. Furthermore, a low communication maturity, which means that museums develop communication in an unstructured manner. In many cases,

³⁶A more detailed description of the four profiles is presented by SILVAGGI (2017).

³⁷SILVAGGI (2017).

³⁸ See CARVALHO & MATOS (2018) for a more detailed approach about Mu.SA project's rationale, objectives and research methods.

museums operate with small teams where multi-skilled professionals cumulate a range of functions and roles, including communication. To expand and include digital responsibilities museums may need to strengthen specialized roles in communication, in the sense that to create a digital culture, there is also a need to firstly develop a communication culture.

Also related with the latter point is the lack of digital competences and the need to develop it further in the museum workforce; and, on the other hand, insufficient training programmes available to address it (e.g. in-house planned training or others). At the same time, there is also the challenge of filling existing gaps within museum organisational structures to support digital maturity, by creating new job positions according to customised museum needs, considering the demands for new roles and digital responsibilities.

Other aspects have to do with bringing digital transformation to a strategic level. In this regard, also observable in most cases was the lack of strategy or planning in addressing communication operations (including the digital media) within the museum activities. Furthermore, the lack of attitude or motivation, meaning the need for leadership awareness to understand the importance of the digital, and responsiveness towards a more acting role to lead change by identifying organization's needs (including staff training), set priorities and nurture strategic outcomes. In this regard, another difficulty is related to how the issue of digital transformation is explored and supported in the agenda for museums policy at national level. In fact, the current Portuguese national policy for museums contains no guidelines that specifically address digital challenges in museums. This point emphasises that the development of national museum policy and strong leadership remains crucial to establishing strategic guidelines and objectives, and to supporting the digital transformation of museums in an integrated and coherent manner. This not only involves establishing new organizational mindsets, but also assessing the effort and means required to move forward.

A digital transformation Decalogue

Finally, we focus on some of the lessons learned from the project Mu.SA, summarized in 10 main ideas.

Develop strong leadership to support a mental shift to drive organizational change in rethinking and expanding museum activities to include digital responsibilities. This means identifying organization's needs (including staff training), set priorities and nurture strategic outcomes in line with the museums mission.

There is also a need to build digital confidence for the whole staff to better face digital transformation and taking the most of it. Familiarity with digital competences can also help to enhance a better understanding among professionals, even to overcome communication barriers, not only between older generations of museum professionals and the younger cohort that may be more digitally literate, but also to facilitate exchanges with in-house IT professionals or external service providers.

To build digital confidence means also to support professional development. Up-skilling, whether by formal training via flexible and updated training plans, whether by non-formal training through lifelong learning is needed, considering also the evolving nature of technology.

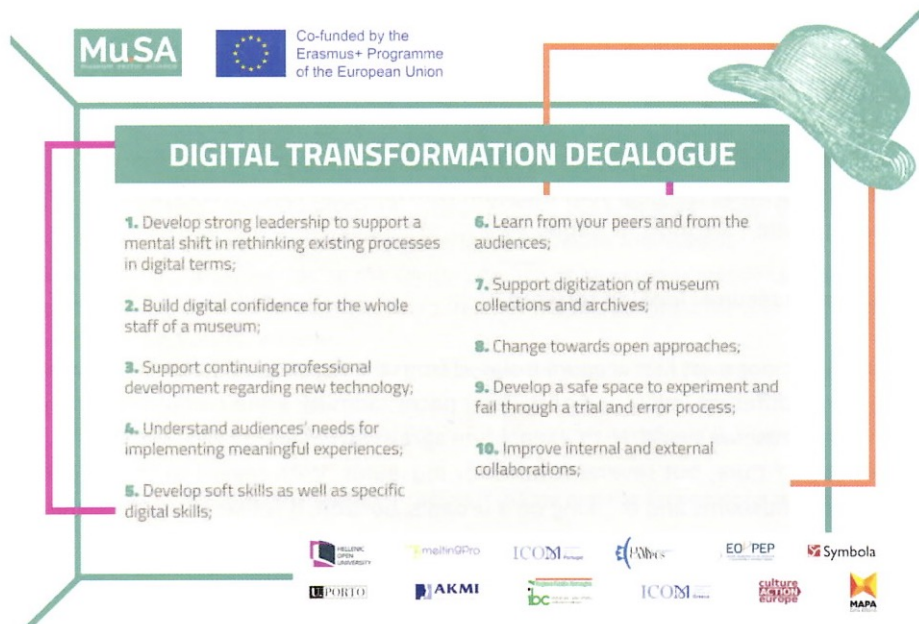


Fig. 1 – Digital transformation Decalogue. © Mu.SA project

Another lesson is to understand audience’s needs and interests in order to design meaningful experiences.

Developing digital skills is clearly important, but also not to ignore the importance of developing soft skills (e.g. leadership, team working, communication, critical and creative thinking, etc.).

Learn from your audiences and from your peers. Sharing knowledge, experiences and good practices with your peers is fundamental. Also, be open to learning from other sectors as well.

Support digitization of museum collections and archives. All museum areas are relevant in terms of digital transformation, but digitization and making collections accessible remain key to stimulate the creation of compelling digital content.

Change towards more open access policies, sharing the collections with fewer restrictions. Providing access to collections and knowledge in the digital environment is a compelling and strong argument for museums to expand their reach and increase their visibility. Several museums have lead the way in pursuing open access for their collections, meaning the online availability of images of museum objects in the public domain, in good resolution, for unrestricted use and for free. The Rijksmuseum (Netherlands), for instance, has released online (since 2011) around 150,000 images of public domain, with the highest resolution possible and without any copyright restrictions. Several other museums have been taking the same direction, designing new open access policies: the National Gallery of Denmark, the J. Paul Getty Museum, the National Gallery of Art (Washington D.C.), the Smithsonian Institution, the Metropolitan Museum of Art (MET), just to name of few.³⁹

³⁹VLACHOU (2017).

Although, this continues to be a very debated issue and is far from being embraced by a large portion of museums.

Embracing digital transformation is also about experimentation and taking risks. On the other hand, the need to understand why projects fail or succeed, and learning from it.

Finally, the need to improve internal and external collaborations, to work in partnership; find partners that can help your museum with different ideas and expertise; networking and cooperation are indispensable.

The future of museums: looking forward

Museums do not exist in a vacuum isolated from the digital world and the changes can be foreseen at different levels and at varying paces, admitting the complexity and asymmetries of the museum world. In this sense, we agree with Mairesse (2013) when he states that there is no future, but several futures for museums. With regard to the influence of technology on museums and thinking on a broader horizon, it is likely (and desirable) that museums will be transformed to broaden and diversify the forms of access and digital engagement, in which the digital and the physical are increasingly interconnected dimensions - like two sides of the same coin - both for visitors and for the museum staff.⁴⁰

It is not possible to predict the extent to which technology will evolve in society unless major changes are expected and, consequently, changes in social habits and behaviours. From this point of view, the museum sector must be able to renew itself and adapt to changes.

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⁴⁰STURABOTTI & SURACE (2017).

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