



EUROPEANA INNOVATION AGENDA

Community input on research and innovation
priorities in the European cultural heritage sector

Le Jockey
Henri de Toulouse-Lautrec, 1899
Statens Museum for Kunst, Denmark
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Acknowledgements

Credits

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Contents

Introduction	4
Evaluation matrix	5
Survey results	7
Institutional strategy and impact	7
Technological innovation	9
Social change	11
Economic innovation	12
Conclusion	13

Introduction

For ten years now, Europeanana has played an important role in supporting memory institutions to reap the benefits of the digital transformation, and at the same guarding the heritage sector against undesired consequences. With this wide-ranging expertise and a far-reaching network, the Europeanana community is in a great position to champion the growth of the cultural heritage sector.

Harnessing this potential, in 2017 the Europeanana Foundation Governing Board established a Task Force to identify research and innovation needs for the European cultural heritage community. The result of their work is the Europeanana Innovation Agenda which highlights the priorities for innovation in the cultural heritage sector and advocates for their implementation across Europe.¹

The Task Force followed a three-step research approach to identify and evaluate these research and innovation priorities in the sector. First, they carried out an extensive literature review consulting the latest reports on innovation and research trends within the heritage domain.² This served as the basis for formulating the initial list of topics for the Agenda.

Second, these initial comments were complemented by ideas from the Europeanana Network Association gathered during the EuropeananaTech conference in May 2018.³ These were reviewed and a final list of thirteen research and innovation topics was formulated. The topics were arranged around four overarching areas: institutional strategy and impact, technological innovation, social change and economic innovation.

As a third and final step, the Task Force assessed the urgency and achievability of each topic. A survey was sent out to the Europeanana Network Association in November 2018 to evaluate the proposed Innovation Agenda using the Certainty-Impact matrix. The input gathered from the heritage community provides a clear indication of the direction that advocacy campaigns for innovation should take. This evaluation was an essential step for determining the priority of research and innovation actions proposed in the Agenda to ensure that the investments in an innovation cultural heritage sector yield fruitful results.

This document presents the results of this survey.

¹ See the Europeanana Innovation Agenda <https://pro.europeanana.eu/page/europeanana-innovation-agenda>

² See the full bibliography here

https://www.zotero.org/groups/2261357/europeanana_innovation_task_force/items/

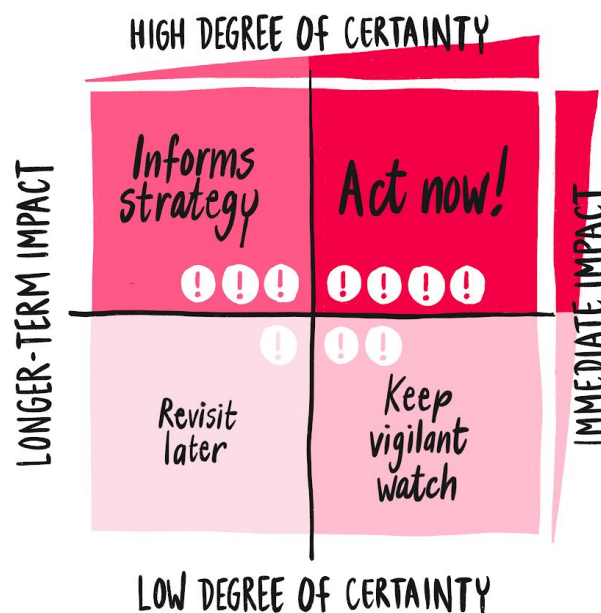
³ During the EuropeananaTech conference on the 15-16 May 2018 in Rotterdam, participants were asked "What research and innovation topics should be included in the agenda for future development and growth of the digital cultural heritage sector? 75 people contributed their ideas by filling in a postcard. See <https://pro.europeanana.eu/post/meet-the-europeanana-innovation-task-force>

Evaluation matrix

The thirteen research and innovation topics identified in the Europeana Innovation Agenda highlight the most prominent innovation challenges and opportunities in the cultural heritage domain. They point to the areas where the community has unanimously expressed the need for improvement, experimentation and implementation of novel solutions.

While all of these research and innovation topics call on the cultural heritage sector to take action, the urgency and impact of those actions may vary. Some could require immediate implementation whereas other could play a supporting role and inform strategic decisions about innovation in the near future. Furthermore, the readiness of the cultural heritage sector to take on these calls for innovation required assessment.

It was important to address and evaluate these factors with the stakeholders from the heritage community. For this reason, a survey was sent out to the members of the Europeana Association Network. As representatives of organisations from across the European cultural heritage landscape, the network members could provide valuable input on the priority of the call for innovation and indicate how these could be implemented to benefit the community the most. The Certainty-Impact matrix⁴ was chosen as a tool to gather this input from the survey participants.



Certainty-Impact Matrix

⁴ The matrix was borrowed from the 2018 Tech Trends Report published by the Future Today Institute.

Four sections of the matrix represent varying degrees of certainty and impact:

- Is there an urgent need to ACT on it NOW? Are cultural heritage organisations ready to implement it immediately?
- Is this something that should INFORM STRATEGY and guide our decisions about the future of the heritage sector?
- Should we KEEP VIGILANT WATCH on it and prepare to act on it in the near future? Are further actions required to make sure that the sector is ready to act on it in the near future?
- Is it something that would be more achievable at a later stage and we should REVISIT it LATER?

In the survey, participants were asked to evaluate the role of each topic and select one of the four areas of the matrix that best fit the degree of urgency and impact that should be attributed to it. In this way, we could determine the priority of each research and innovation topic in terms of the certainty of its achievability and the immediacy of its impact.

The final results provide a strong indication of where the priorities of the cultural heritage community lie and what actions should be taken to successfully stimulate and implement innovation in the domain.

Survey results

In total, 62 respondents participated in the survey. The graphs below indicate the percentage of responses received per each category in the Certainty-Impact matrix. Brief descriptions of the research and innovation topics that were used in the survey are provided along with the results.

Institutional strategy and impact

The Europeana Innovation Agenda aims to strengthen the network of cultural heritage institutions and calls for actions that can increase the reach and impact of the sector.

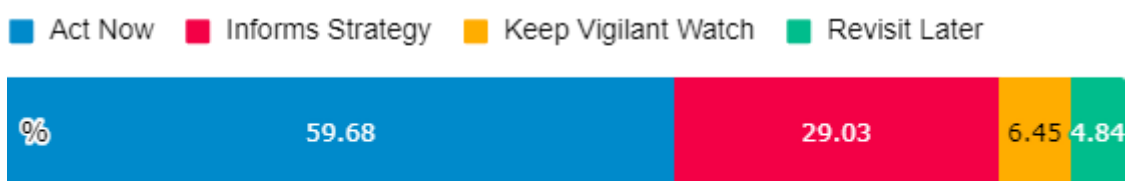
Skills for cultural heritage professionals

- provide support for the continuous development of digital skills
- cultivate a culture for experimentation with new technologies and tools
- conduct training programmes that focus on the implementation of interoperable standards and improvement of digital services



Opening up and reaching out

- promote the integration of efforts and resources on European level projects
- encourage partnerships with outside communities and businesses
- increase support in legal areas (copyright, online publishing) and the implementation of interoperable standard



Frameworks for sustainable collaboration

- sustain long-lasting relationships between cultural heritage organisations
- ensure that organisations have the resources to participate in collaborative initiatives
- make collaborative culture more attractive to individual institutes and help them benefit from participation in European projects

■ Act Now ■ Informs Strategy ■ Keep Vigilant Watch ■ Revisit Later



Maximising audience engagement

- develop tools that can anticipate and predict user needs, analyse their use of cultural assets and deliver the right content to the right audiences
- engage end-users in the development of tools and services
- deliver more diverse content, especially in the currently underrepresented media

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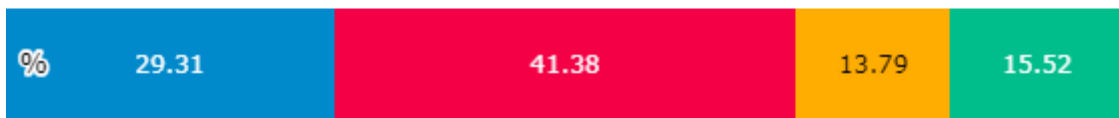
Technological innovation

The Europeana Innovation Agenda aims to ensure long-term access to cultural assets and calls for continuous support for the improvement of digital content, tools and services offered by cultural heritage organisations.

Digitisation and digital durability

- automate the digitisation process for massive volumes of heterogeneous artefacts
- develop non-invasive digitisation technologies that offer high-quality results
- explore innovative methods for long-term preservation of complex digital assets
- coordinate digitisation and preservation actions and oversee their implementation across the heritage sector

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Data quality, usability and retrieval

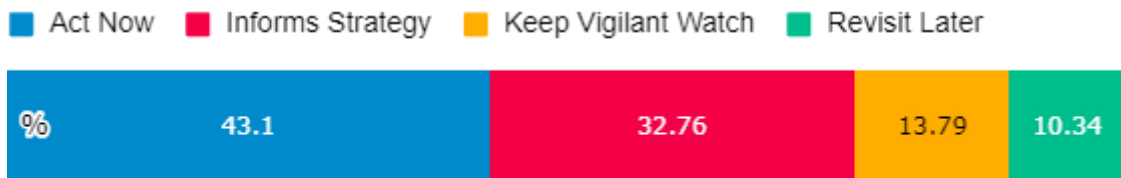
- stimulate research into innovative technological solutions such as machine learning and artificial intelligence that can enhance the quality, usability and retrieval of complex digital objects
- implement solutions to enrich multilingual materials, three-dimensional objects and audiovisual content
- promote the interoperability of standards to ensure the usability of data for diverse purposes and platforms

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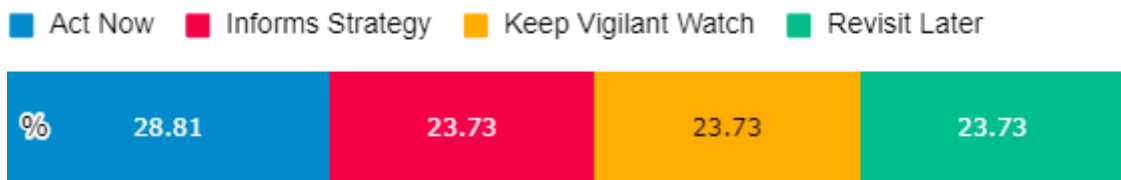
Digging into data

- develop tools for efficient management, curation and analysis of big data
- support digital humanities projects that investigate novel data mining and visualisation techniques



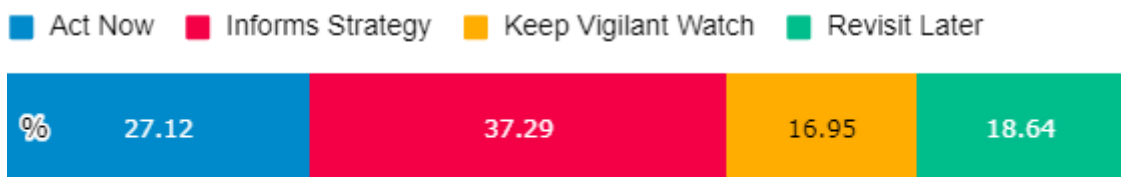
Storytelling and immersive experiences

- investigate the potential of emerging technologies such as VR, AR, 360 videos and 3D modelling to offer full-body, immersive and personal encounters with cultural heritage
- explore solutions for connecting diverse cultural assets into coherent and engaging narratives



Infrastructures for secure, trustable and shareable content

- increase the efficiency and quality of sharing and improve data management workflows
- investigate how distributed vendor platforms such as Blockchain could guarantee the security of content and services



Social change

The Europeana Innovation Agenda calls for actions to increase the social impact of the cultural heritage organisations and aims to intensify their contribution towards the well-being of European citizens.

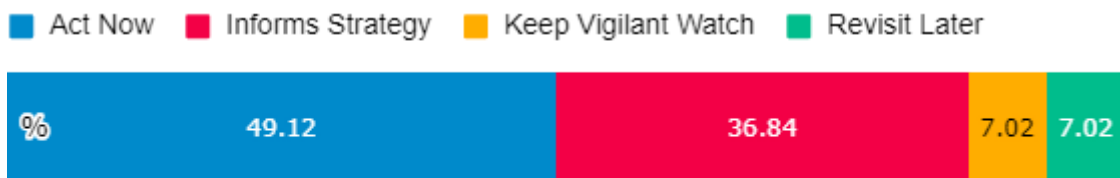
Social impact of cultural heritage projects

- invest in innovative projects that reflect on social challenges that matter most to European citizens
- foster cultural diversity and engage different social groups in the construction of European identity



Cultural heritage for education

- support the development of projects and services that reach end-users from diverse age groups and create conditions for lifelong engagement with European heritage
- embed cultural assets into education programmes and platforms



Economic innovation

The Europeana Innovation Agenda recognises the financial challenges faced across the cultural heritage sector and aims to stimulate research into more sustainable business models.

Economic potential of cultural heritage assets

- explore opportunities for harnessing the economic potential of digital cultural heritage
- experiment with novel solutions that can turn cultural assets into sustainable sources of revenue

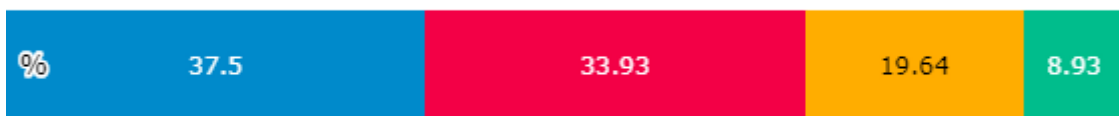
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New routes to funding

- explore new business models and alternative funding options (crowdfunding, donation-based initiatives, impact investment) that could help the heritage sector to become more responsive to economic challenges
- encourage investments from the private sector into individual cultural institutions and large-scale European projects

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Conclusion

The input from the cultural heritage community representative indicates an urgency to invest in the innovative potential of the cultural heritage sector. Especially, a high level of consensus was expressed towards the research and innovation needs in the area of institutional strategy and impact and social change. Responses to the topics in the technological and economic innovation areas demonstrate more distributed opinions, pointing to the lower degree of readiness in the sector to implement them. To a large extent, investments in the area of institutional strategy and impact will prepare the sector for technological, social and economic transformation and will help to unleash and sustain this innovative potential.

The results of this survey provide a strong backing for the Europeana Innovation Agenda and serve as a call to action to include these research and innovation priorities in the European policies and research and innovation frameworks. The Europeana Foundation will include these recommendations in its advocacy campaigns to invest more in the innovation potential of digital cultural heritage and coordinate the development of an execution plan.