Measuring the Impact of Digital Culture

inDICEs

Deliverable 3.3

Infocharts describing the CHIs DSM readiness Assessment Methodology

D3.3 – Infocharts describing the CHIs DSM readiness Assessment Methodology

Version 2.0

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Executive Summary

De D3.3 Infochart describing the CHIs DSM readiness Assessment Methodology gathers the infographics that were designed in the project for the development of the CHI readiness assessment methodology - the inDICEs Self-assessment tool - as well as for its dissemination. The graphic designs and representations will be used to convey the key concepts that drive the participatory innovation and its monitoring as is envisaged by inDICEs. They will be used in the final version of our D3.2 deliverable "Deliverable 3.2: Guidelines for CHIs Digital Transformation" and in the upcoming inDICEs MOOC. They will also be used in web communications for the project on the website and social media - Facebook, Twitter and Linked-In, and will be integrated in the participatory platform.

The infographics centre on the 4 monitoring domains identified for the self-assessment tool: Digital Trends and Participatory content, Empowering IPR for the commons, Invigorating Collaboration and Organisation Growth, Approaching Innovation and Digital Strategy. The infographics will become powerful communication tools for the project when we start to promote the self-assessment tool and the MOOC. They are meant to be styled in a consistent way, with the aim to appeal to a public of CHI professionals as well as senior management and decision makers. The design has been granted to a professional design bureau.

Part 1, "Digital Trends and Participatory content" contains infographics on the regimes of cultural production, the 8 impact areas of Culture 3.0, Data collection and analysis and also highlights project research results in this area. Part 2, "Empowering IPR for the commons, describes 5 steps for CHI's to take when managing IPR for their collections, in light of their public mission of open access. Part 3, "Invigorating Collaboration and Organisation Growth" features graphics on the need for collaboration and the value creation chain. In the last section, Part 5, "Approaching Innovation and Digital Strategy" a set of 10 visualisations on this topic detail innovative workflows.

Table of Contents

1. Introduction

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Digital Trends and Participatory content highlights the main research premise and results from the inDICEs project: documenting the growing importance of participatory value creation in the CHI sector, and offering tools to monitor performance in this area.

Empowering IPR for the commons tackles the conundrum of IPR and in particular copyrights for the CH sector. How can the sector turn the limitations copyrights pose on the achievement of their core mission to deliver open access to heritage into an asset? How can assessing and documenting the rights status of digital collection representations influence digitisation strategies and enable more freedom of action?

Invigorating Collaboration and Organisation Growth focuses on the reality that CH organisations cannot master the challenges of going digital on their own, and should build strong local networks as well as join international networks to build capacity. It also details an updated, adapted value chain model for the sector that takes into account their core public mission and marries it with research insights on Culture 3.0 production modes.

Approaching Innovation and Digital Strategy explains the value of integrated, encompassing digital strategies that not only start from the collections perspective but also integrates the heritage community viewpoint. It addresses methodologies for innovation and risk management.

2. Digital Trends and Participatory Content

2.1 Graph 1. Speedometer of the regimes of Cultural production (from Culture 1.0 to Culture 3.0)

A speedometer would represent the tension between two opposites which in the info chart correspond by two different layers. It includes:

- A first layer, where key words of each regime are gathered (e.g. 1.0: #patronage #élites #gatekeepers, 2.0: #industry #audience #copyright, 3.0: #openplatforms #communities #cocreation).
- A second layer with each regime's main features.
- A third layer showcasing a number of chosen best cases such as:
  - Culture 1.0: Encyclopaedias, Academies, Cultural Circles, Public funding for culture, Cultural philanthropy, Opera, Ballet.
  - Culture 2.0: Hollywood, Film Festivals, Music Labels, Publishing companies, Netflix, Fashion houses.
  - Culture 3.0: Artistic collectives, Social network communities, Heritage communities, Post copyright practises, Community-based practises, Participatory platform.

Within the speedometer the tension goes over three sections composed by Culture 1.0 (Patronage) , Culture 2.0, and Culture 3.0 (Open plot). Each section is represented by a different colour gradient, respectively red, yellow, and green.
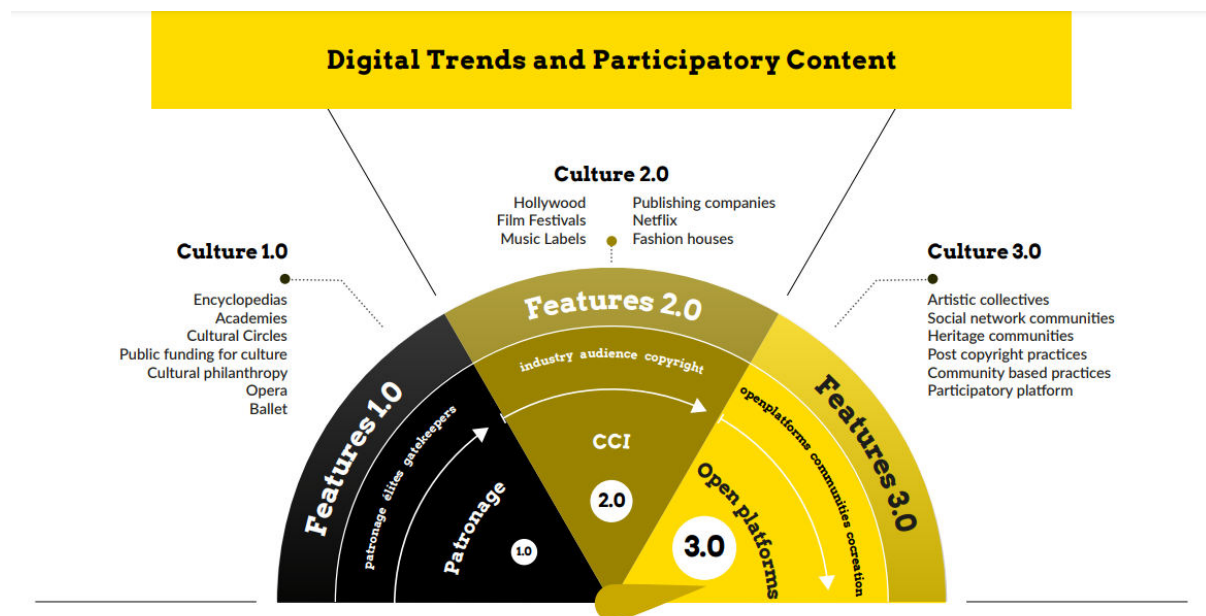

Fig. 1. Speedometer of the regimes of Cultural Production.

2.2 Graph 2. The 8 impact areas of the 3.0 Culture (/or of Digital Cultural Participation)

A second info chart will be dedicated to the representation of the areas which can have an impact on the CHIs intake of a production based on a Culture 3.0 model:

1. Innovation and knowledge (bottom-up capacity building)
2. Welfare and /wellbeing (personal and collective psycho-physical benefits)
3. Sustainability and environment (awareness and tools for action)
4. Social cohesion (intersectoral community building)
5. Intercultural dialogue (overcoming stereotypes)
6. New forms of entrepreneurship (crossover business models) and knowledge
7. Learning society (from school to lifelong learning)
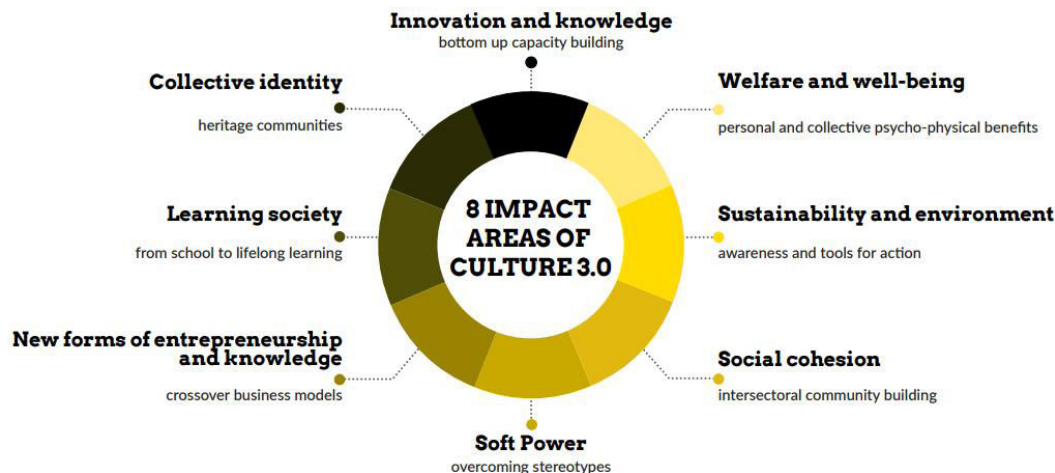8. Collective identity (heritage communities)

Fig. 2. Info chart model for Graph 2.0.

2.3 Graph 3. Data collection workflow

The third graph's main goal would be to illustrate how data is getting collected and analysed by FBK (Fondazione Bruno Kessler) and WLT (Web Lyzard Technology) within WP1 of the inDICEs project.

This information would be included within a chart which identifies the types of datasets. Each dataset, collected by WLT and FBK, refers to a specific typology and instrument of analysis:

- Instagram, Facebook via Crowtangle
- TW, Web Sites, News and Open Sci Journals and FB again via VAD

    ○ TikTok, Wiki, IMDb, DeviantArt various types of complex analyses carried on the scientists of FBK
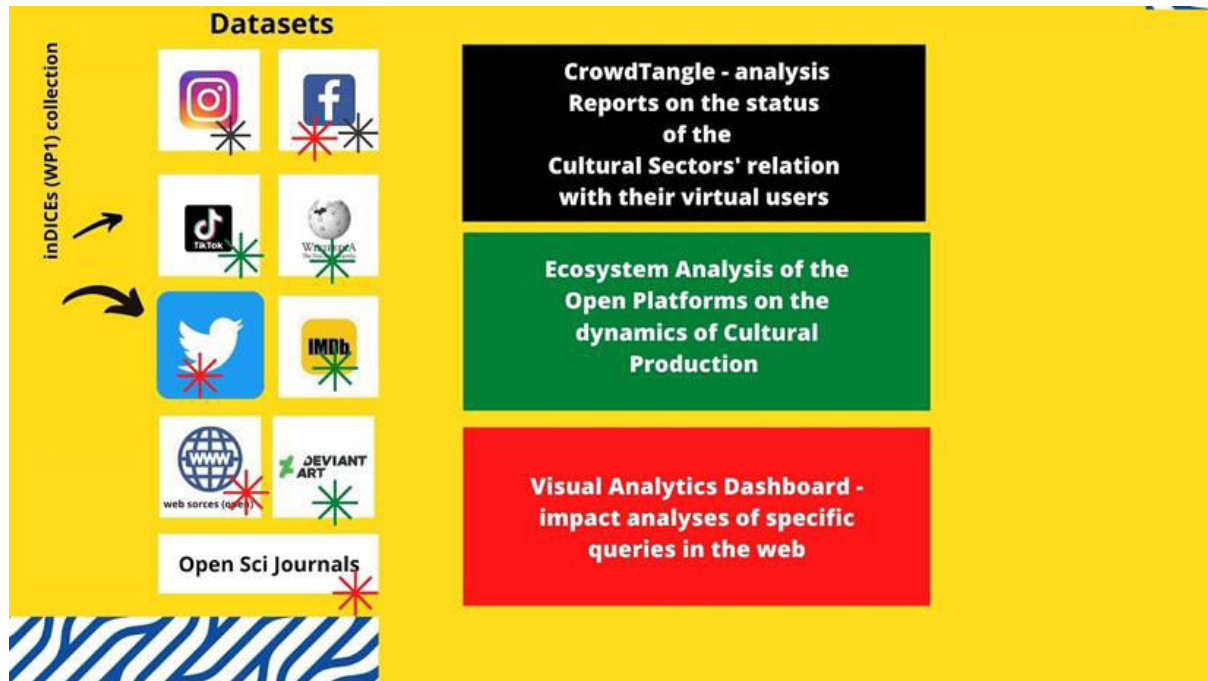

Fig. 3. Data Collection workflow (1).

2.4 Graph 4. Data Collection and Analysis

The results of this data analysis and collection would feed:

- **In**: the partners with results, reports, and recommendations
- **Out**: the repository with reports, research papers and raw data in .CVS, the light version of the VAD (for the Observatory users) with raw data
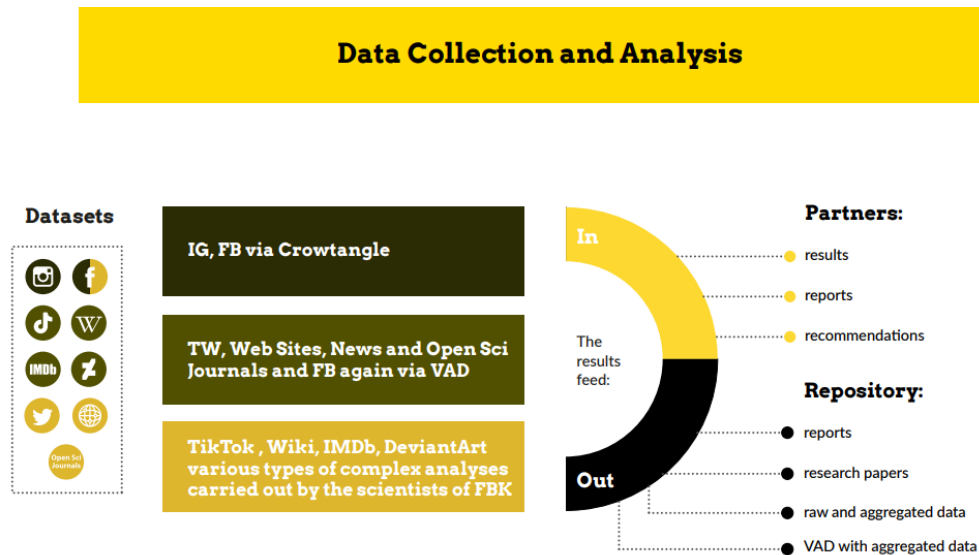
Fig. 4. Data Collection workflow (2).

2.5 Graph 5. Results

The previous info charts will be supported by a last graph, which aims to represent the main results of the comparative analysis of the European Cultural Sectors based on CHIs and Social Media production and users' participation between the years 2019 and 2021. The info chart would reflect the results contained in the following reports: https://drive.google.com/drive/folders/1QtR8V62nJDqvKZrhUj_oIHr1ld7Si46i

3. Empowering IPR for the commons

These graphs will be developed at a later stage, when it becomes clear how we can integrate them into the inDICEs MOOC and the Self-Assessment tool workflow. They might need a more personalised and persona-oriented design.

3.1 Graph 6. Step 1: Consider the end goal

1. Some works in CHI collections might be protected by intellectual property rights. More often than not, CHIs are not the original rightsholders.
2. As such, copyright might create barriers for the fulfilment of their public interest mission of providing access to culture to the public.
3. As CHIs develop their digital strategy, they need to take copyright management into account to best achieve their end goals.

4. Copyright must be taken into account from early on. A successful digital strategy allows CHIs to navigate the copyright framework seamlessly.

5. Having a copyright strategy will allow CHIs to do more with their collections, maximise their resources and avoid unnecessary expenses.

3.2 Graph 7. Step 2: Building your collection

1) Acquiring a physical artwork does not necessarily mean you have obtained all the rights you may need in the future.

2) Make sure that the contract through which you obtained the piece (be it a purchase, loan, donation, or other forms) grants you enough rights to pursue your objectives.

3) There is no point in being too clear. Make sure this contract mentions all uses that you intend to make accurately and in detail. This way you can avoid going through extra layers of clearance in the future.

4) Good documentation goes a long way. All relevant information about the contract, rights obtained, conditions, and duration should be well documented to facilitate internal use.

5) Retrieve and record as much metadata as possible – this will facilitate future use and circulation of the work.

3.3 Graph 8. Step 3: Mapping out the copyright framework in your collection

1) Public domain: if the copyright has expired or was never granted in the first place, you are free to use the work in the public domain. However, moral rights may still apply.

2) Licencing agreements: if you have not obtained any copyright during the acquisition phase, as a rule, you will need to ask the rightsholder permission to use their work. Rightsholders are entitled to proper remuneration for third-party exploration of their work. This can be achieved through a licensing agreement.

3) Exceptions and limitations: however, there are some cases in which permission from the rightsholder is not necessary, based on copyright exceptions, which apply to specific categories of users and uses.

4) If the works are still in copyright and no exception applies for you or your intended uses, check the ownership of the rights, and identify the author or the collective management organisation (CMO) that operates on their behalf.

5) Remember: your copyright strategy will depend on what you plan to achieve with your collection. Establish good communication with rightsholders and define your (long-term) goals early on.

3.4 Graph 9. Step 4: Relying on copyright to enable your intended uses

1. Cultural institutions fulfil their public mission by providing access to works in the premises of the institutions, welcoming the general public to the exhibition of works in museums, or by allowing researchers to access printed or digitised material. These activities might require permission from the copyright owner unless an exception to copyright exists.

2. Preservation: check your national legislation for a preservation copyright exception. Pay particular attention to your national definition of "preservation purposes", as well as to the scope of the exception. Is it restricted to works permanently in your collection? Are all permitted uses limited to essential acts of preservation?

3. Advertising an exhibition: making copies of works to advertise an exhibition can be done without specific permission from the rightsholder but only in jurisdictions that implemented this exception. Digital advertising e.g., any online advertising or catalogue for the exhibition is normally covered by this exception.

4. Giving online access to the public: there is no general exception at the EU level that allows CHIs to freely share their collections online. However, there are some exceptions for specific categories of works. Try to ascertain whether the work is an orphan or out-of-commerce work, and if it falls in one of the permitted categories of works. If it is the former, you can use it without permission. In the case of the latter, you will need to acquire a licence from a representative CMO (if none exists, you may share the work online without permission).

5. Research activities: If you are interested in supporting research, and other activities such as text and data mining of your in-copyright collections, you could now provide access to your collections by relying on an exception. Accessing works for research and private study purposes can also be allowed when it is carried out via dedicated terminals in your institution (this exception is still subject to variations in national legislation).

3.5 Graph 10. Step 5: Fostering creative reuse of collection

1) Communicate the copyright status of your collection in a clear manner. Adhering to standards, rights statements or CC licences maximises the potential for reuse of a collection.

2) CC licences (simple attribution [BY] and share-alike [BY-SA], particularly) and tools, (such as the CC0 copyright waiver), are some of the simplest means to convey what can be made with the digital cultural heritage assets and to foster re-use and circulation.

3) Relying on licensing metadata standards will help users find your work and bolster reusability.

4) The Europeana Publishing Framework allows you to learn how to best manage the metadata in your cultural assets.

5) Always remember that, regardless of your copyright strategy, exceptions you might rely on and licences you might have acquired, the author's moral rights still subsist! Enabling re-use does not necessarily enable any use.

4. Invigorating Collaboration and Organisation Growth

4.1 Graph 11. Invigorating Collaboration

The goal of this info chart is to reflect the importance of networking and collaboration for CHIs. This inserts itself within a graphical narrative, realised using a Miro board, where issues and elements that CHIs should consider, are identified.

1. *Starting elements that a CHI should consider:*
    a. Internal organisation, networking and the development of new adapted business models are on the same importance level and go hand in hand.
    b. The identification and prioritisation of the key stakeholders play an important role when starting developing a digital strategy
    c. Gathering the right knowledge and skills in capacity building and recognize the value of networking
2. *What are the present issues?*
    a. CHIs still tend to work in isolation not giving enough importance to the enhancement of their network channel
    b. Learning how to work successfully with different sectors represents also a key but also often a missing element.
3. *What should CHIs realise?*
    a. That impact is a basic measurement of performance.
    b. Besides economic impact, social impact and innovation also play a crucial role.
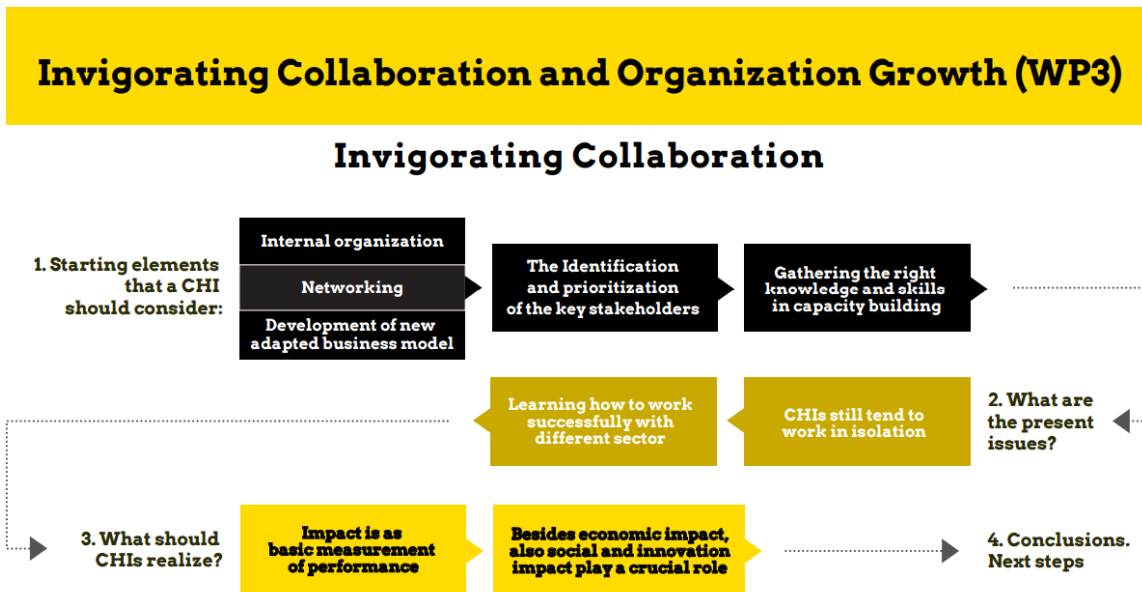
Fig. 5. "Invigorating Collaboration and Organisation Growth".

4.2 Value Creation Chain

4.2.1 Graph 12. The Culture Cycle

The model is mainly based on the five-staged UNESCO cultural cycle model (UNESCO 2009). These five stages include creation, production, dissemination, exhibition, and consumption. The model is not hierarchical and should be understood rather as a network. Within this network, all kinds of connections and directions may happen when producing cultural goods. There is also an assumption that the process can be cyclical, returning to previous stages over the cultural cycle. Yet in practical terms, reuse of digital cultural heritage usually follows a path from creation to consumption.
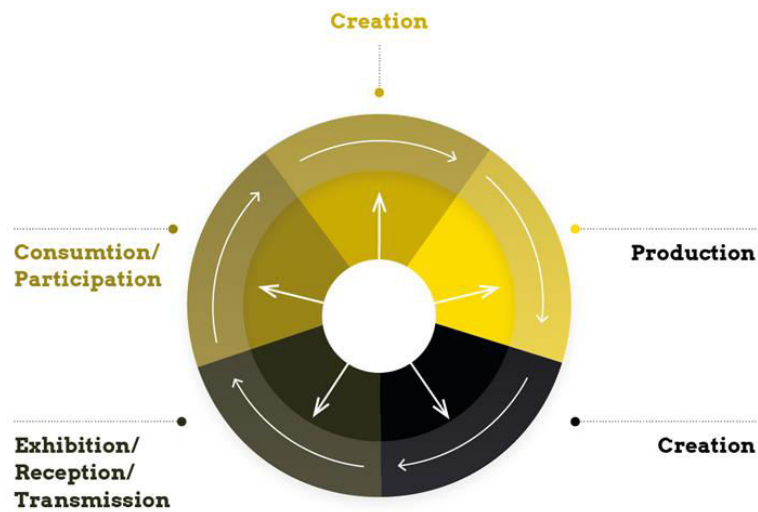
Fig. 6. The Culture Cycle.

4.2.2 Graph 13. Key Milestone Types

Specific milestones have to be achieved to arrive at the moment in which one has a sufficient, broadly understood vision for a project and its societal impact. The four key types of milestones are: having an initial prompt, acquiring heritage expertise, establishing cross-sectoral collaborations, assuming non-access purpose. These milestones can happen in a cyclical fashion.
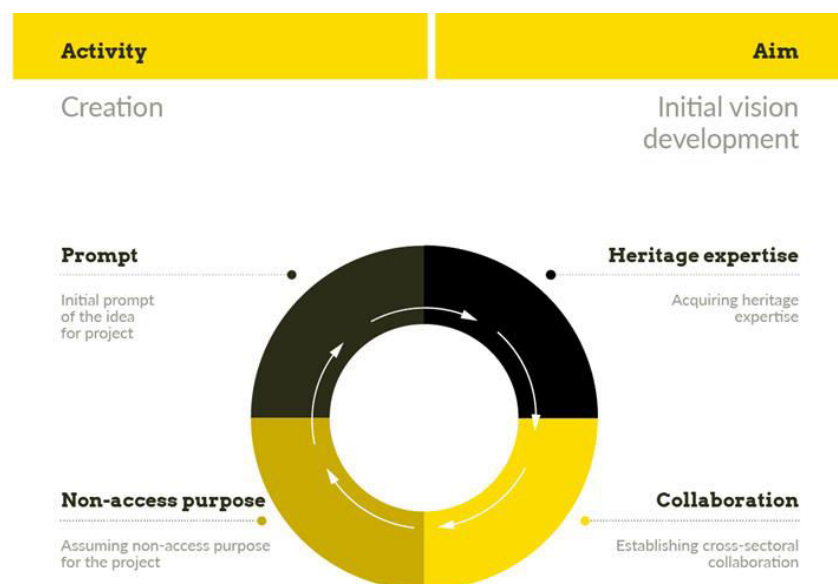

Fig. 7. Key Milestone Types.

4.2.3 Graph 14. Digital Cultural Heritage Value Creation Chain

The chain or cycle of value creation in the field of re-use of digital cultural resources can be brought down into four building blocks: Vision Development, Production, Connection with Audiences, Market Linkages. The activities carried out within the building blocks identified influence each other. Broadly understood impact emerges on the basis of two broad types of activities, conducted in the Creation stage of the cultural cycle: connecting with audiences and market linkages.

Digital Cultural Heritage Value Creation Cycle

Stage	Vision Development	Implemen-tation and Production	Connection with Audiences	Market Linkages (optional)
Action	Acquiring heritage expertise Establishing cross-sectoral collaboration Assuming non-access purpose for the project	Safeguarding IT expertise for digital project	Designing and implementing adequate instruments	Designing and implementing adequate instruments
Impact	Impact vision	Impact planning	Impact on society (8 tiers)	Impact on markets

Societal and economic impact
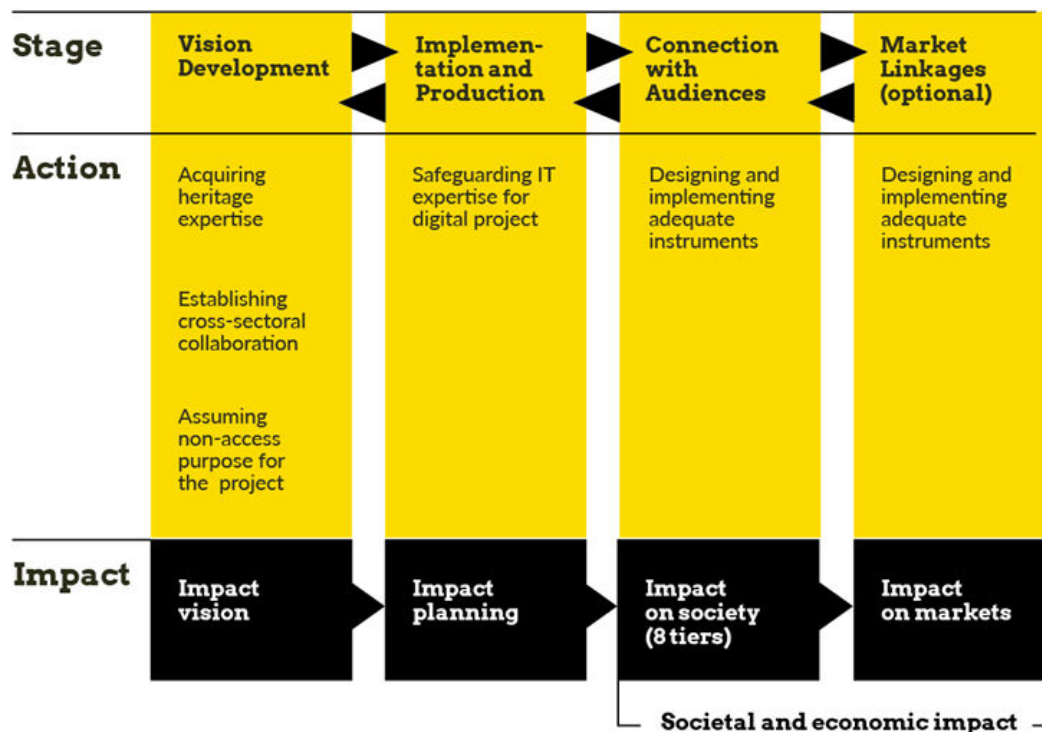
Fig. 8. Digital Cultural Heritage Value Creation Cycle.

5. Approaching Innovation and Digital Strategy

Traditionally, digitization strategies start from the objects to be digitised, to then publish them as online collections, from what we call an "inside-out" perspective. A sizable part of current research on best practises focuses on how to implement a digital workflow and anticipate the need for (re)training staff. Once collections are digitised, the challenge is to transform those into usable assets for the institution, in which case copyrights often become a headache. inDICEs research explores how open access policies can be best implemented to make the effort sustainable in the

long run, looking into non-IP based business models. This way the Digital Strategy supports what Simon Tanner calls a "Balanced Value Impact Model".[1]

After years of crowdsourcing efforts, participatory practises have been well established in the CH sector. inDICEs tries to look at the digitization strategies starting from user engagement. This is what we call an "outside-in" cycle. What needs to be taken into account in a digital strategy to enable true user community support? How can stakeholders have a voice in selection and curation? How can open content contribute to a more democratic access to heritage? This way a Digital Strategy addresses, connects to, and feeds into the Culture 3.0 production regime as described by Pier-Luigi Sacco.[2]
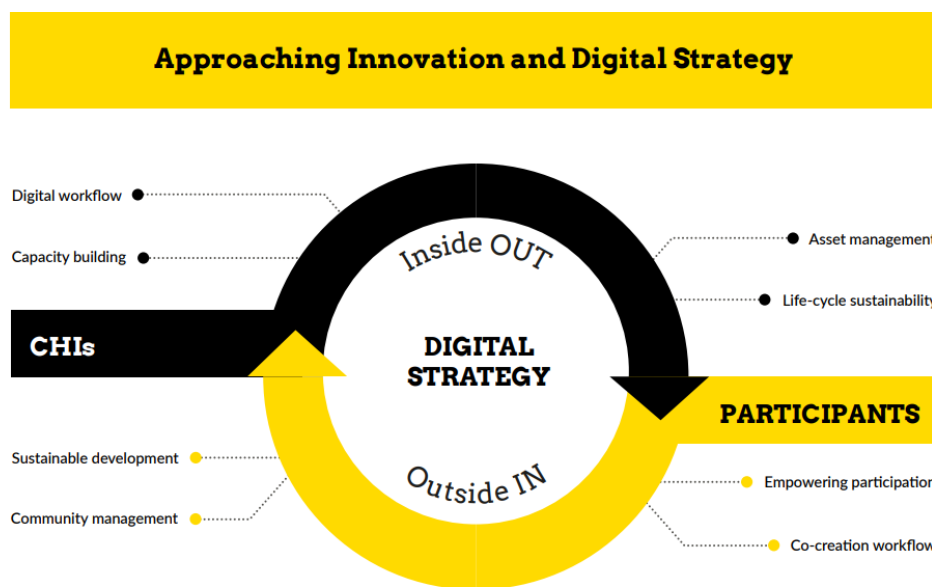

Fig.9. Info chart draft of Outside-In/Inside-Out Digital Strategies (Roxanne Lagarderder 2021, CC-BY).

5.1 Graph 15. Digitization and Co-Creation Workflow

In a classic digitisation workflow, a selection is made of collections to be digitised. It starts with an assessment of the objects to be digitised and their properties. Digitisation is not the same as cataloguing or documentation. It involves capturing key properties of the collection objects involved so that they can be represented digitally. This can be done in a variety of levels, up to a digital facsimile or digital twin.

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[1] Tanner, S. (2020). Delivering Impact with Digital Resources: Planning your strategy in the attention economy, London: Facet Publishing.

[2] Sacco, P.L., Ferilli, G. and G.T. Blessi (2018). 'From Culture 1.0 to Culture 3.0: Three Socio-Technical Regimes of Social and Economic Value Creation through Culture, and Their Impact on European Cohesion Policies'. Sustainability 10, no. 11: 3923. https://doi.org/10.3390/su10113923; Sacco, P.L. (2011). Culture 3.0: A new perspective for the EU 2014-2020 structural funds programming, EENC Paper.

Typically, a digitisation plan covers different steps of the process: it often starts with a careful selection of the collections to be digitised, depending on institutional priorities. From the selected objects collection come the digitisation requirements, defining the technical specifications.

Next is the description of the objects, and metadata enrichment. Traditionally, curation activities fall beyond the scope of a digitisation plan, but we see more and more that these activities become linked, as more and more the digital collections are published online, which involves digital curation, storytelling and editorial planning. The published data offer the opportunity to capture user feedback and stimulate reuse.

When we look at digitisation starting from the requirements of a co-creation workflow, we need quite a different model. The requirements will now not be set by the properties of the objects and the wishes of the curators, but by the intended user community.

The community of stakeholders will influence the selection of to-be-digitised collections, and the properties of interest that need to be digitally captured.

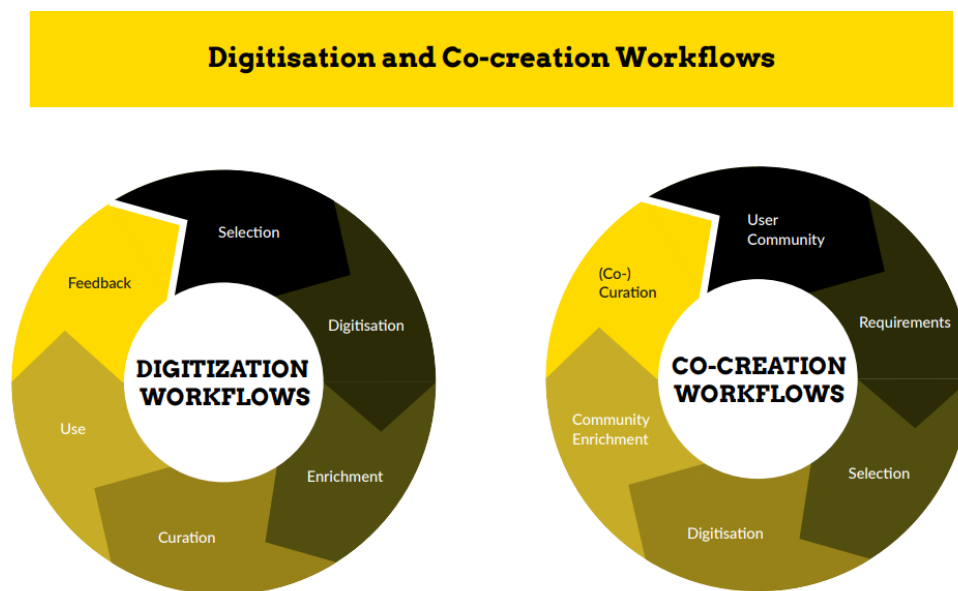The subsequent metadata enrichment can involve crowdsourcing, and often uses established thesauri.

Fig. 10. Digital workflow steps.

5.2 Graph 16. Reaching out to Communities

Online, open publishing of digital collections offers the possibility to integrate data from different provenance into aggregated, virtual collections, across institutional boundaries, whether they are a gallery, library, archive or museum data: it all comes together online.

The emergence of aggregated collections such as the DPLA and Europeana adds a new dimension to the use and reuse of digitised cultural assets and offers avenues for cross-institutional curation and storytelling, as well as for new educational and research approaches.
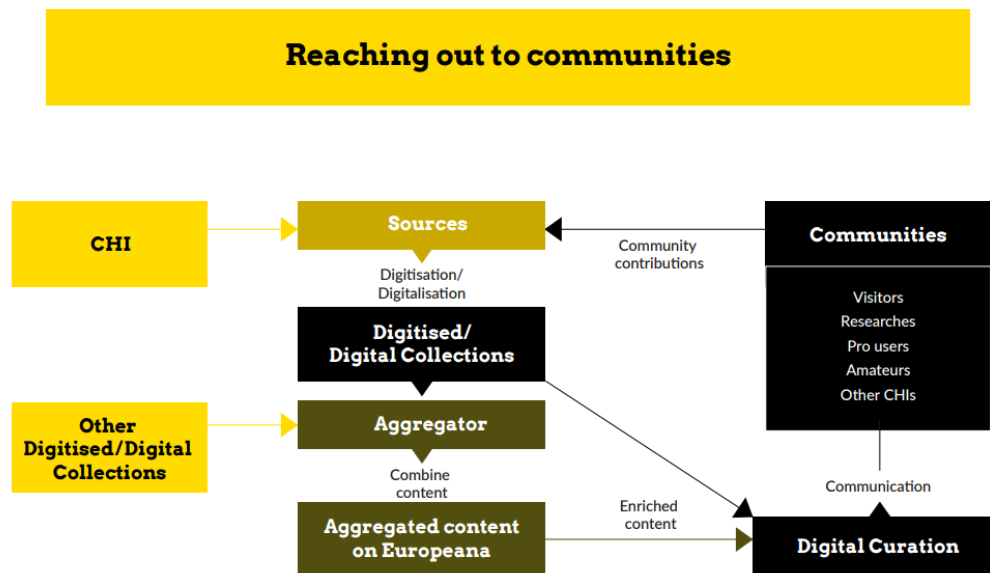

Fig. 11. Reaching out to communities.

Our advice for the digitisation workflow consists of the following recommendations:

- Develop an institutional digital strategy that takes into account the needs of different departments and activities within the organisation, and that transcends the specific requirements of individual projects;
- This strategy should align with external conformity and interoperability requirements set by your regional/national context and/or international collaboration networks;
- The strategy should also form the basis of internal conformity and interoperability requirements for individual projects;
- A public summary of this strategy should be published online, to document the digital maturity of your organisation.

Also, CHIs should take into consideration 3 important actions while planning their Digital Strategy:

1. A capacity building framework, in which the organisation reflects on what capabilities the individual employees should have - their skills and competencies - to be able to generate the required capacity - the ability to perform and deliver the desired outputs;
2. A Digital Asset Management, to make sure the digital copies resulting from digitisation efforts become reusable assets that can support a multitude of organisational activities, ranging from online catalogues over virtual exhibitions to printed publications, user engagement, high-end visualisations. A sound Digital Asset Management makes sure that the digitised collections can be part of a "Digital Proof" business model for the CH operations, allowing to explore new revenue streams that require a stronger online presence;

3. An integrated Digital Life-Cycle Management, so that not only the digital copies remain up-to-date but also the supporting software and databases. This will guarantee the sustainability of the digitisation efforts.

5.3 Graph 17. Participatory Process

The info chart - elaborated on the base of the proposed image- should illustrate the importance of promoting meaningful dialogue between CHIs and the public, which should be allowed and involved in contributing to the growth of the institution.
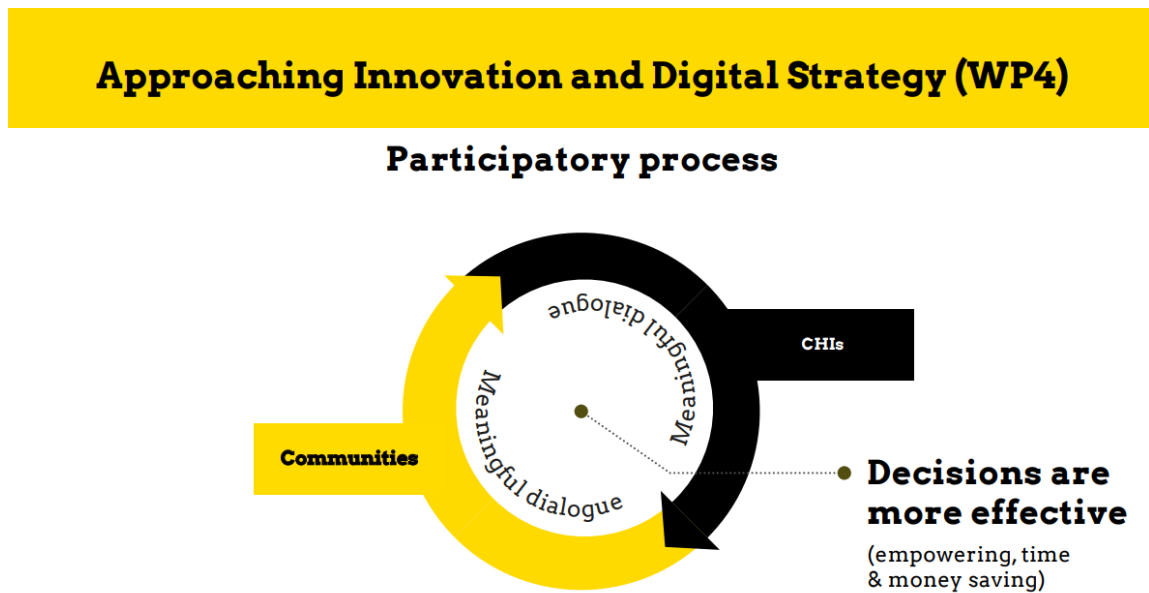

Fig. 12. Participatory process.

5.4 Graph 18. Risks of developing a digitisation strategy

Fig. 13. Info chart draft for digitization strategy risks (Roxanne Lagarderder 2021, CC-BY).

5.6 Graph 19. Develop a successful Digital Strategy: which factors can positively influence it?

Fig. 14. Success factors.

The ideas for the info charts dedicated to the theme "Approaching Innovation and Digital Strategy" were -as well as for other topics explored within this report-, elaborated firstly through the help of a Miro board which allowed the representation of a graphical narrative. This posed the basis for the drafting of the above proposed info charts.
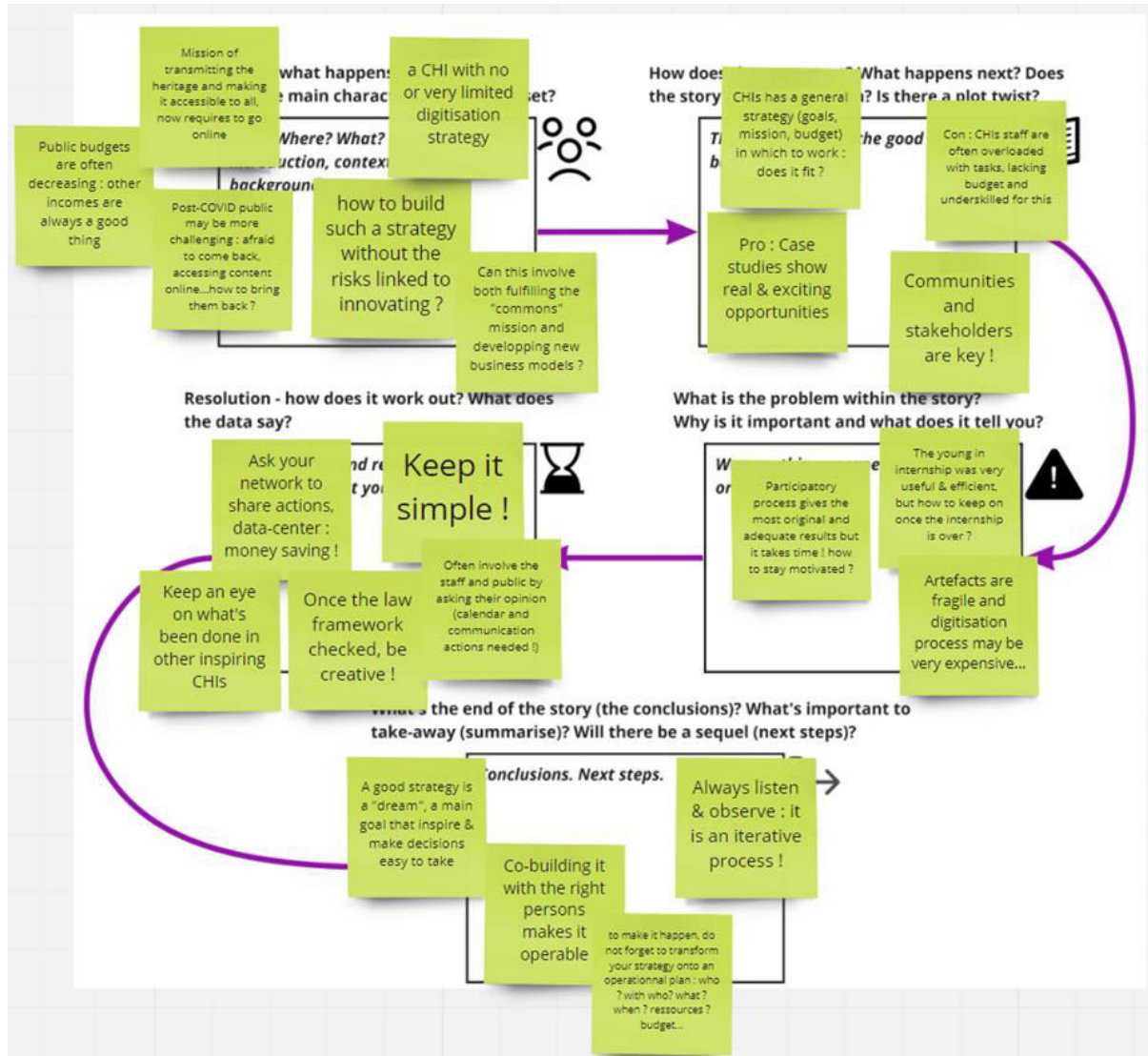
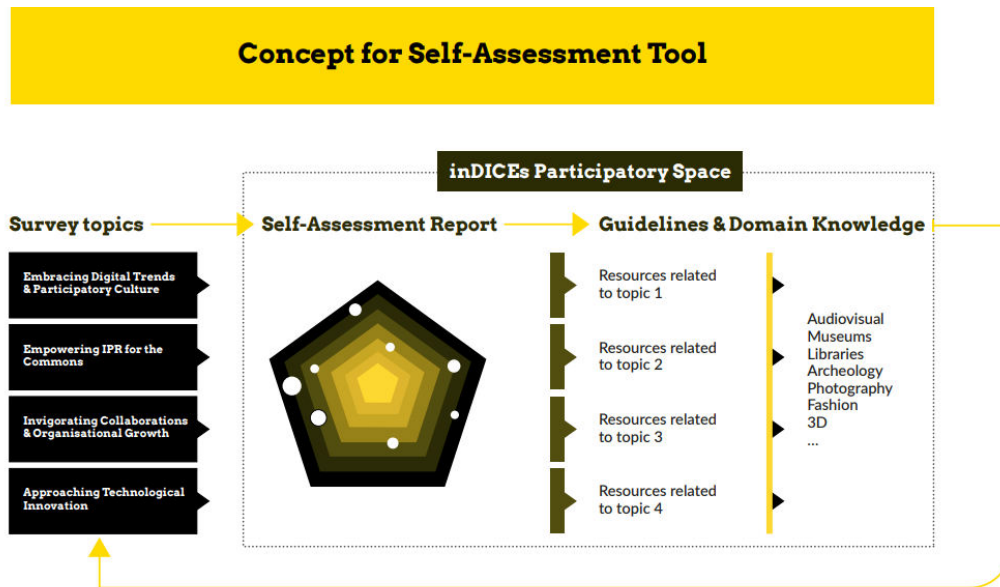Fig. 15. Overview of Miro board frame dedicated to "Approaching Innovation and Digital Strategy".

Fig. 16. Concept of the Self-Assessment Tool.

6. Conclusions

With these infocharts inDICEs will be able to set up a massive promotional campaign for both the Self-assessment tool (integrating the ENUMERATE survey) as well as the inDICEs MOOC to be hosted on the KULeuvenX MOOC platform. These infographics will also appear on the website, integrate in the participatory platform, be used in social media communications (Facebook, Twitter, Linked-In), fuel project presentations, and illustrate conference papers - some were already used in that role - and journal publications. Now that the design and implementation phase of the Self-Assessment Tool is reaching its finalisation in the winter of early 2022, and major research results have been acquired, the spring - 2022 will see the start of a massive visibility campaign of the inDICEs project and its results.

References

- Sacco, P.L. (2011). Culture 3.0: A new perspective for the EU 2014-2020 structural funds programming, EENC Paper.
- Sacco, P.L., Ferilli, G. and G.T. Blessi (2018). 'From Culture 1.0 to Culture 3.0: Three Socio-Technical Regimes of Social and Economic Value Creation through Culture, and Their Impact on European Cohesion Policies'. Sustainability 10, no. 11: 3923. https://doi.org/10.3390/su10113923.
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