inDICEs

# Measuring the Impact of Digital Culture

## Deliverable 5.2

## Plan for Exploitation and Sustainability of Results

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# D5.2 – Plan for Exploitation and Sustainability of Results

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# 1 Executive Summary

This deliverable identifies suitable ways of enabling take-up of project results in order to achieve the expected outcomes in a sustainable way. The document draws from the activities carried out during the first 12 months of the inDICEs project within task 5.2 by consortium partners and describes the progress and next steps in the strategy for exploitation and sustainability of the project. The Chapter 2 of this deliverable identifies the main objectives of the task 5.2, which includes the use of CC-BY licenses and open-source developer communities to encourage adoption of the results of the project.

Chapter 3 briefly introduces inDICEs from an exploitation point of view, outlining the unique methodology and the Open Observatory platform for CHI that serve as the basic framework of the project. Chapter 4 presents the inDICEs Business Model Canvas, a way to map and explain the key propositions of inDICEs. This chapter further describes the three main components of the canvas (the customer, the organisation and the finances) and key propositions of the project: The Open Observatory Platform - including the Participatory

space, the Analytics Dashboard and the Self Assessment tool -, the IP Register and the access to the Raw Data.

Chapter 5 describes the Initial exploitation strategy, which includes the SWOT analysis that lists favorable and unfavorable internal and external issues of the project. This chapter also identifies and explains what is envisioned as the different avenues of exploitation for the key propositions of inDICEs: the Open Observatory platform. The platform offers an online space with functional components and tools that provide a wide range of possibilities for users and for future avenues for exploitation. From the access to collected data throughout the project, engage in discussions relevant to the CHI sector, to the possibility to network or find inspiration for diverse range of projects. Additionally, this chapter includes a progress report on engagement with the different external stakeholders: researchers, cultural heritage institutions, policy-makers and special interest groups. Chapter 6 briefly explains the sustainability of end results, which are set to be carried out by the Europeana Foundation, by integrating the Open Observatory with the core service platform of Europeana. It is important to mention that this document serves as the first iteration of the Deliverable 5.2, and will be updated with two more versions on month 24 and month 36 of the project.



# 2 Introduction and Objectives

## 2.1 Introduction

The objective of this document is to provide an overview of the actions that will be taken to exploit the project results and outputs. Since most of the project partners are from the public sector, it is expedient to talk in terms of sustainability rather than just commercialisation. A key output of the project is the Open Observatory platform that will be integrated in the Europeana Core Service Platform with its supportive tools: readable datasets publisher, guidelines for best practises regarding the maximization of cultural heritage digitisation impact, comprehensive matrix of IPR ecosystem, inDICEs analytical toolbox and a Cultural heritage institutions self-assessment tool. Following the description of the objectives, we introduce the methodology of the project, that cast light into the activities that have been and will be carried out throughout the project. The document follows up by introducing the Business Model Canvas and it's three main sections, then describing the Key Proposition of inDICEs, which include the Open Observatory platform and its components. The document concludes with the initial exploitation plan and a brief explanation on

the sustainability of the outcomes by partners of the project. This document is the first of three envisioned versions. The next version of the deliverable will be submitted on month 24 of the project.

## 2.2 Objectives

The following objectives have been identified to support the actions in the sustainability and exploitation strategy of the project:

- Identify and engage with essential stakeholders, to facilitate the adoption of the project key propositions.
- Map and identify key actions and venues, such as CC-BY licences and open-source developer communities, to encourage adoption of the project results. These results include the adoption of the Open Observatory and its components.
- Make gathered data largely available and accessible, in a variety of formats in order to encourage fast and early adoption.

# 3 Introducing inDICEs from an exploitation point of view

The main goal of inDICEs is to empower policy-makers and decision-makers in the Cultural and Creative Industries (CCI) to fully understand the social and economic impact of digitisation in their sectors and address the need for innovative (re)use of cultural assets. By tracking policies in an open observatory and



establishing policy priorities for successful digital transformation and future governance of cultural and creative content ecosystems.

To this end, inDICEs is making advances beyond the state-of-the-art, by developing a unique methodology and an open observatory platform for both CHs where they will be able to make strategic decisions that will allow them to increase their positive contributions to the CCI and society. For their own part, policy-makers will have a solid framework to assess the impact of cultural heritage and a dashboard to keep track of the advancement of the impact of cultural heritage in Europe.

**Conceptualizing and evaluating the effects of digitisation in the cultural and creative sectors**

The ambition of the project is to provide the first systematic attempt at conceptualizing and evaluating the effects of digitisation processes in the CH sector, in the context of the overall ecosystem of cultural and creative production and the structure and evolution of business models, value creation and competitiveness in CCI. inDICEs will attain this goal by both gathering and providing access to a solid evidence base supporting comparative analysis at the institutional level, at the sectoral level and in terms of the relationships between content-holders and the overall cultural and creative economy with its different systems of IPR protection. The methodologies and the evidence base will be made available to potential

users (researchers, professionals, experts and policy-makers) and will become a permanent legacy of inDICEs beyond the scope of the project. As the literature on the topic is relatively scarce, both from the scientific and consultancy points of view, we envisage that this work as a seed of possible further development beyond the scope of the project itself. This will lead to new analytical tools and new evidence for understanding and effectively addressing the criticalities and the potential of the CH sector, both in its industrially and non-industrially organised forms.

## Supporting transformational change in the cultural and creative institutions

The inDICEs project will foster the development of new business and organisational models through the development of an innovative framework for the monitor and self-assessment of the CHIs readiness for the Digital Single Market (DSM)[1]. This is a novel approach in the Cultural Sector and it is aimed at supporting CHIs in developing business and organisational models for the digital era. It will provide an environment where CHIs can assess their readiness-to-market and evaluate their strengths and weaknesses towards entering the DSM. It will help CHIs to monitor trends, threats as well as mitigation actions and opportunities so as to flexibly adapt their strategies and to write new ones for their organisations, and set best practices to be shared between Institutional networks.

The project is novel in its approach to openness in the Cultural and Heritage sector. Most initiatives dealing with digitisation and access to digital collections of CHIs focus on the social and democratic value of it. In our project we focus on value chains and economic potential of digitised cultural heritage within the DSM, as introduced by the Directive on the re-use of public sector information (Directive 2003/98/EC).

[1] The Digital Single Market designates the 2014-2019 strategy of the European Commission for the best possible access to the online world for individuals and businesses. This strategy aims to provide a digital space in which the free movement of persons, services and capital is ensured and where the individuals and businesses can seamlessly access and engage in online activities under conditions of fair competition, and a high level of consumer and personal data protection, irrespective of their nationality or place of residence.



The inDICEs project will unlock innovation potential for all the end-users on the whole value chain. All the technologies and the knowledge production that will be developed within the CH sector for this project could reward other cultural industries, thus maximizing the impact of the project, in the framework of the exploitation strategy of the results.

## Developing a permanent Open Observatory Platform

The inDICEs Open Observatory Platform seeks for target audiences (cultural institutions, policy-makers, funding agencies, researchers, practitioner networks, etc.) to experience the value of opening their knowledge and not only share it, joining participatory processes. The Open Observatory puts the data analysis in the centre, with attractive and usable designs, that help in the decision making and for that it must collect, process and provide relevant information. It also contributes by making a step further in creating a space for the participation and continuous dialogue of communities and experts that will play an important role in the digital platform that the project (in WP4) wants to develop. The Open Observatory Platform will be further discussed in Chapter 4: inDICEs value proposition.

## 3.1 inDICEs Methodology

inDICEs is developing a comprehensive methodology to measure and assess the economic and social impact of digitisation of cultural heritage on the access to European cultural goods and services and their modes of production. The methodology (Figure 1) is organised in three phases: 1) Data gathering, 2) model building and, 3) analytics and interpretation, and makes use of existing frameworks (e.g. Culture 3.0, the Europeana Impact Framework, Enumerate reports and network). The frameworks will be refined and combined to provide a full clear picture of the impact of Cultural Heritage to the Cultural and Creative Industries.

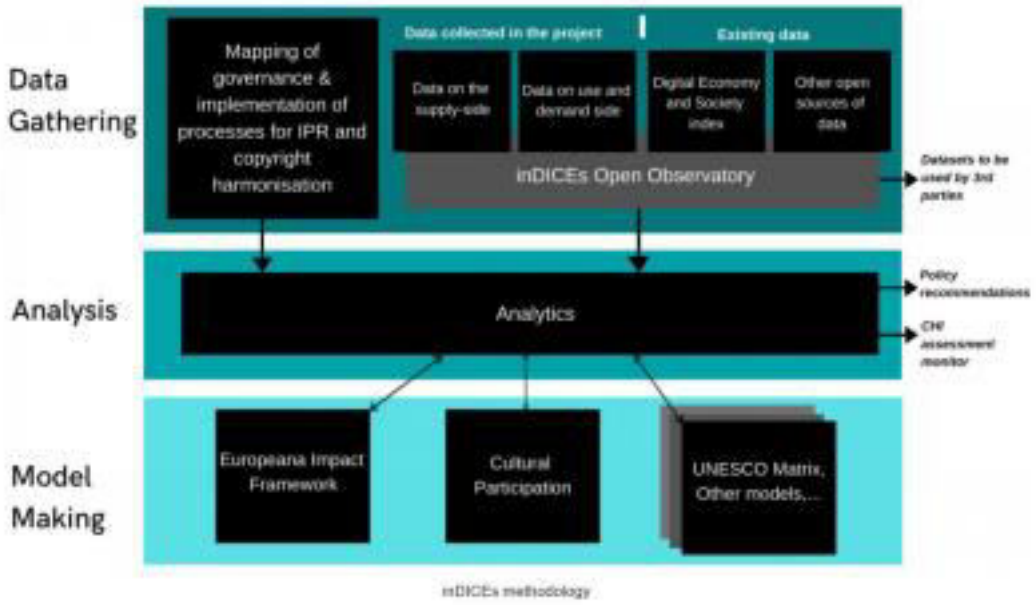




*figure 1 - The inDICEs Methodology*

The methodology is translated into the inDICEs value proposition, further explained in chapter 4.

# 4 inDICEs Business Model Canvas

The Business Model Canvas is a strategic tool for describing, analyzing and designing business models. It is a nine-part visual chart with elements describing a company's assumptions about not only the key resources and key activities of your value chain, but also your value proposition, customer relationships, channels, customer segments, cost structures, and revenue streams. A Business Model Canvas is divided into three main components: (i) the customer, (ii) the organisation and (iii) the finances.

For the purpose of mapping and explaining the key propositions of inDICEs, a Business Model Canvas was created and included in this deliverable (figure 2). These three main components of the canvas and it's sections are elaborated hereunder.

### i) Customer

The customer component describes the value proposition that a company offers towards the customer. In the case of inDICEs, this component includes four sections:

1. The key or value proposition that inDICEs will offer is the unique Open Observatory Platform - with its three elements - and the access to specialized data. These will be elaborated in Chapter 4.2.

2. The customer segment refers to the target audience of the company. inDICEs caters to four target groups: the cultural heritage institutions, policy makers, creative industries and researchers. A report on external stakeholders can be found in chapter 5.3.

3. The customer relationships section defines how often a company interacts with their customer. It is expected that the target stakeholders will interact with the inDICEs Open Observatory on a weekly basis.

4. The channels utilized by a company to reach its customers. InDICEs has developed its own channels to reach out to key stakeholders. These include the project website and blog, social media accounts and outreach events. The project also makes use of the partner's networks and the Europeana Pro website.

### ii) Organisation

The organisation targets three sections: 1) key partners that provide competitive advantage, 2) key activities or steps that allows a company to move ahead to its customers and, 3) key resources that make the value proposition work. inDICEs has identified the cultural heritage institutions and data providers,



researchers in related EU projects and, the consortium partners, as decisive partners to accomplish the project goals. The project has identified activities to engage with stakeholders, these include assemblies or working groups within the Open Observatory, data collection and the co-creation of new features for the Open Observatory through a series of workshops and meetings. Finally, the partners of the project identified that the use of timely data, the support of a community of developers and the community engagement serve as key resources that will assist in reaching the goals of inDICEs.

### iii) Finances

The finances component is divided into two sections: 1) the cost structure and, 2) revenue streams. It has been determined that resources have to be allocated for the development of the Open Observatory platform, these include the hosting costs, managing the ingestion of data into the system and quality control of the platform. For the time being, the revenue streams are identified as future EU fundings. These two elements will be set out in further detail in the second version of this deliverable.

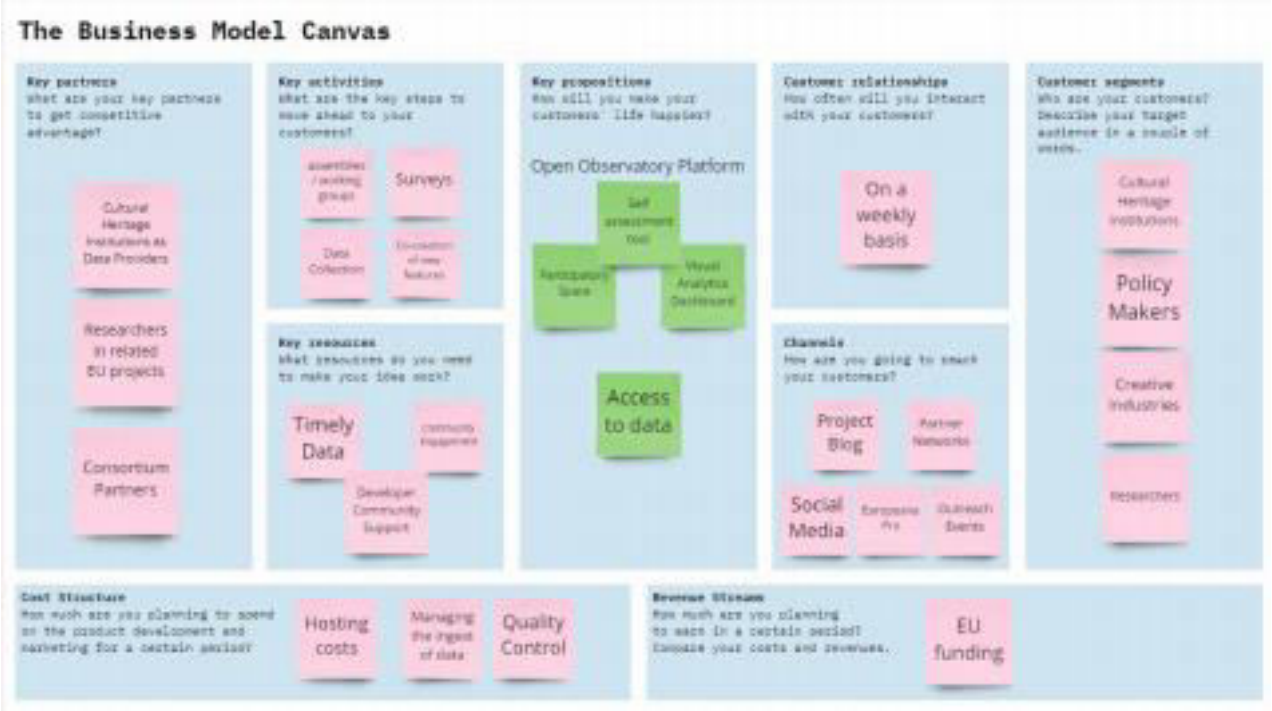


*figure 2 - inDICEs Business Model Canvas*

The following chapter describes in more detail the key proposition and the components, as outcomes of the project.

## 4.1 The Key Proposition of inDICEs

As laid out in the Business Model Canvas, there are three concrete results that will be exploited as an outcome of the inDICEs project: The Open Observatory Platform - including the Participatory space, the Analytics Dashboard and the Self Assessment tool -, the IP Register and the access to the Raw Data. This chapter briefly describes these three elements.



### 4.1.1 The Open Observatory

One of the main objectives of inDICEs has been to establish an Open Observatory Platform. It is conceptualized as an online participatory space that promotes action, facilitates moments and spaces for information, exchange and collaborations between communities and experts in the research, cultural and creative sectors.

Platoniq is leading the design and development of the Observatory by establishing a methodology to collaborate, co-create, gather, and evaluate findings, through online workshops and assembly meetings involving all partners and inviting external Stakeholders from December 2020.

The Open Observatory is an integrated space with a unique access point that will offer three functions:

1. **Participatory Space** - a space for cultural heritage professionals, researchers and policy makers to

collaborate, co-create and engage in transparent dialogue and deliberation with the Cultural Heritage community

2. **Visual Analytics Dashboard** - facilitating different types of individuals seeking information and visual data

3. **CHI Self-Assessment Tool** - a toolbox with recommendations, models and references

## Participatory Space

Within the Open Observatory, the *Participatory Space* has been created to facilitate creation of a community amongst organizations and participants, and engage stakeholders to actively participate in online activities by contributing to surveys, debates, collaborations that innovate existing practices and priorities of CHIs online and offline.

In anticipation of the life of the platform extending far beyond the normal parameters of an EU project, the work packages and tasks were restructured on the platform more as digital participatory processes. For the purpose of creating a digital platform for participant engagement and collaboration Decidim has been ideal. Decidim is the open source platform that serves as the basis of the Participatory Open Observatory. Decidim comes with a set of functions and structure that was created for practical needs within a community or organization whose decision making is based on a democratic structure and accountability. The tasks in the DOW (document of work) for inDICEs concerning the co-creation process were translated into digital participatory processes that also included new jargon and different modes of meetings and working groups for all the partners involved. To start the co-creation workshops a series of 'processes' and 'assemblies' were created.

Currently the inDICEs Open Observatory Platform offers different components that facilitates group discussion to gain insight into the needs, preferences, and overarching themes and issues within the CH community. We enumerate some of these key components hereunder:



**Processes -** A process as defined by the Decidim community is a sequence of participatory activities (e.g. first filling out a survey, then making proposals, discussing them in face-to-face or virtual meetings, and finally prioritizing them) with the aim of defining and making a decision on a specific topic. This process is then defined by a number of phases. The first process on the inDICEs platform was the co-creation process to initiate activities that had to be migrated online due to the pandemic.

**Assemblies -** An assembly is another variety of digital space for engagement on Decidim. Like processes they involve multiple types of participatory activities. However, they are more akin to ongoing discussions around a thematic topic and do not have marked phases. Assemblies roughly translated to the inDICEs context can be described as working groups. Currently within the platform there are five different assemblies: Hypothesis, Participation Model and Ethics, Tech Integration, COVID-19, and the CHI consultation process. These different assemblies are meant to address the core areas of the work within the inDICEs project:

- tackling more theoretical areas such as academia and policy around cultural heritage ● integrating various technologies to create tools and grow and sustain online communities
- sharing, creating and developing an inventory of governance and ethics models and resources for online communities around cultural heritage in Europe
- rethinking the impact of COVID-19 on the work of the inDICEs project work.

**Additional useful components of the platform** - An important aspect of the platform were components that partners could use in their work and deliverables. Perhaps the most commonly used component is the ability to make a survey on the platform. Other components that have been used are proposals and debates which allow for discussion threads. The onboarding and current autonomy of the partners within this space has been a strong indicator of future engagement, commitment, and use of the platform.

## Visual Analytics Dashboard

The Open Observatory Platform is the result of the ongoing collaboration between the tech partners within the inDICEs project. Through the tech integration assembly research, proposals, and designs have been generated to create a tool that is both well-integrated into the user experience of the platform as well as a relevant and useful tool for future participants and users.

Through research with the various partners a user classification (segmentation) was created identifying cultural heritage practitioners, creative communities and artists, policy makers, researchers, and special interest groups as the most likely users. From this various methods from empathy mapping to creating various scenarios for potential users were created to develop in depth personas (user profiles) that serve as user experience (UX) design tools. As a result various features and functions have been proposed for the analytic dashboard, including creating a component that would allow administrators to create preset visual dashboards that support their work in their community or working group. Other similar ideations were



creating context aware proposals that would allow users to use functionalities within the dashboard in proposal creation to allow users to see what trending topics or similar proposals exist when writing their own proposal. In summary the analytics dashboard is conceived of as more than just a page on the platform that users can access, but rather a tool integrated to better engage and support user research and creativity.

## CHI Self Assessment tool

The CHI Self-Assessment Tool enables organizations to assess their readiness to enter the Digital Single Market (DSM). Based on the user's input regarding their organisation’s resources, infrastructure, mission, audiences and other parameters, the tool will provide recommendations into strategies for digitisation and

access, audience engagement methods and business models suitable for their specific context, taking into account legal regulations in their region. The tool is meant for any professional in the CH sector with an interest to develop an institutional strategy on digital transformation - including those who are at an exploratory phase as well as those thinking about advanced strategic solutions.

The self-assessment tool works through a series of questions to determine what kind of opportunities and recommendations would be relevant for the user. It also connects to the activities in the Participatory Space to support further discussions between heritage professionals and knowledge sharing.

### 4.1.2 Access to raw data

In addition to the inDICEs portal, the development of an Observatory API Framework will allow access and reuse of the data collected by third parties. The API will offer access not only to the collected data, but also to additional metadata like entities, sentiment or relations.

To this end, during the first year the inDICEs project has conducted the gathering of several datasets. The full details can be found in the report section *D1.3 Report on data gathering v1.* The process of data gathering, though, is planned to continue along all the project in order to keep enriching the data collection.

At the present stage of the project, the main efforts on this regard have been devoted to the data gathering and curation. During the following months the design of the Observatory API will become a more central activity, in order to provide access to the steadily increasing number of collected datasets. More information on the access to raw data will be provided in the next iteration of this deliverable.

### 4.1.3 IP Register

The Intellectual Property Register refers to all IP rights from patents, registered copyrights, to business names and domain names, that have been registered or issued under the authority of a governmental entity. This section lays out and describes the IP status of the inDICEs' key propositions.



| Project result/deliverable/component | Partner involved | IP status |
|---|---|---|
| Self Assessment Tool | KU Leuven & Platoniq | MIT License[2] |
| Participatory Space | Platoniq | GNU Affero General Public License |
| Analytics Dashboard | WebLyzard | Used under licence |

| | | |
|---|---|---|
| Access to raw data | various | various |

## Self Assessment Tool

The conceptualization of the Self Assessment Tool is in its early stages and its development will start in M20. At the moment it is envisioned to be published under the MIT License, but more information on the IP Register will be provided in the next iteration of this deliverable.

## Participatory Space

The **Participatory Space** is based on the software Decidim [3], which is licensed under the GNU Affero General Public License terms [4]. This license forces any derivative work to be shared under the same terms, therefore, the source code of the platform is published in a Github repository.[5]

As per the data collected in the participatory platform, any user registered should agree with their terms [6] and conditions where it is encouraged to use open licenses for the creation of derived works and the reuse and modification of the works contained in the web. Although some specific parts of the web can collect data in its owns terms (in which case users need to acknowledge their consentment), by default, the contents protected by intellectual property rights and disseminated on the participatory platform are subject to a Creative Commons - Attribution - Share Alike license (CC-BY-SA). In accordance with this licence, any person may make use of the protected contents, both for commercial and non-commercial purposes, provided that the authorship is acknowledged and the resulting work is disseminated under the same CC-BY-SA licence.

On the other hand, the platform complies with the GDPR regulations and grants their users their right to be forgotten in which case, the data generated is either deleted or anonymized. Open Data principles are also observed by providing a fully documented API and downloadable open data CSV archives.

[2] https://opensource.org/licenses/MIT
[3] http://decidim.org
[4] https://www.gnu.org/licenses/agpl-3.0.en.html
[5] https://github.com/Platoniq/decidim-indices
[6] https://participate.indices-culture.eu/pages/terms-and-conditions



## Analytics Dashboard

The visual analytics dashboard is proprietary IP of webLyzard technology, but can serve as an access and distribution mechanism for open content resources. Depending on the configuration of the dashboard, the visual frontend can be open to the public or restricted to certain groups of users. Similarly, a role-based access model allows specifying specific sources or bookmarks to be shared or private. The various widgets

contained in the integrated desktop version of the dashboard are also available in a reduced mobile version as well as in the form of individual widgets that can be integrated into the *Participatory Space* outlined in the previous section.

### Raw data

Up to today, the main efforts of the project have been devoted to data gathering and curation. More information on the different raw data sets and their respective IP register, will be provided in the next iteration of this deliverable.

# 5 Initial exploitation strategy

This chapter details the initial steps for the exploitation strategy of the project. This lays out the initial SWOT Analysis which identifies the key strengths and opportunities of the inDICEs, the different avenues of exploitation and a progress report and plan of engagement with external stakeholders.

## 5.1 SWOT Analysis

SWOT or Strengths, Weakness, Opportunities, and Threats, is an analysis that lists favorable and unfavorable internal and external issues of an institution, product or service. With the SWOT analysis grid, planners can better understand how strengths can be leveraged to realize new opportunities and understand how weaknesses can slow progress or magnify organizational threats. In addition, it is possible [7] to postulate ways to overcome threats and weaknesses . The following table (figure 3)

| | **Opportunities** (external, positive) | **Threats** (external, negative) |
|---|---|---|
| **Strengths** (internal, positive) | **Strength-Opportunity strategies** Which of the project's strengths can be used to maximise the opportunities we identified? | **Strengths-Threats strategies** How can you use the project's strengths to minimise the threats we identified? |

[7] https://www.emerald.com/insight/content/doi/10.1108/17554251011064837/full/pdf?title=exploring-swot-analysis where-are-we-now-a-review-of-academic-research-from-the-last-decade

| **Weaknesses** (internal, negative) | **Weakness-Opportunity strategies** Which actions can we take to minimise the project's weaknesses using the opportunities we identified? | **Weakness-Threats strategies** How Can you minimise the project's weaknesses to avoid the threats we identified? |
|---|---|---|

*figure 3 - SWOT table*

With the use of the SWOT analysis, we've identified key strengths and opportunities of the inDICEs project. The results are introduced and described hereunder:

**Strengths: internal, positive**

***Core idea***

- First project delivering an analysis of the impact of culture from a societal and economic viewpoint
- Strong conceptual framework
- Combination of macro-level policy model + micro-level institutional assessment

***Partnership***

- Diversity and multidisciplinary background of project partners ("swarm intelligence")
- Innovative approach to cultural big data analytics (if we get ethics right) ● Capacity to involve CHIs
- Capacity of producing relevant papers

***Foreground (technology)***

- Building upon proven software (Decidim)

**Threats: external, negative**

***Beyond our reach***

- The economic environment (potential global downturn pushes 'people' to value economic more than social impact measures)
- Fast evolving landscape
- The constant changing nature of EC Policy
- Many other EU projects building frameworks and policy recommendations ● Political opposition to culture 3.0 model and needed changes to IP Law to make it successful

***Model***

- CH processes too diversified to fit in universal model
- Not easy to involve stakeholders (users to participate and policy makers to use the results)
- Lack of participation from CHIs
- Not enough data at early stage

***Engagement***

- To fail in engaging communities to participate
- (Potential) lack of engagement of communities
- Long-term sustainability & community growth
- Risk of "resistance" from >some< CHIs with the use of a "shared space"
- Prejudiced resistance from some sides of the heritage profession
- How to engage cultural heritage institutions in the process
- Get a broad range of participants

**Opportunities: external, positive**

***There is a considerable demand***

- For a flexible methodology that could be adopted beyond the project
- A demand from CHI to have a working tool relevant for practices
- To track topics relevant to cultural heritage and make these more visible
- To develop a new framework/toolkit with a participatory approach
- To come up with a framework that is desperately needed for CHI
- Create synergies with already existing initiatives about new indicators for social impact
- To have a more unitary and comprehensive vision of cultural heritage ● Create a standard for participatory research using a digital platform
- To grow awareness among CHI on the need for the digital transformation

***Connections***

- Align with DG Connect/DCHE strategy
- Integrate with Europeana
- Engage SMEs that are not playing a prominent role in the sector
- Partner with Wikimedia
- Improve Decidim as a data collection platform

***Wider context***

- Circular economy + emerging economic models
- Open mind and appetite for change in policymakers
- New Commission, new Agenda
- Help CHIs to be more appreciated/contacted/funded by other players (leaving the CH niche)

**Weakness: internal, negative**

***Not inclusive enough***

- Little involvement of actual practitioners in WPs (testing, stakeholders) that are not engaging digitally yet
- Low levels of maturity in knowledge in sector
- Little attention to digital skills in the sector to be able to participate
- Overlooking the non-participating actors in the sector
- Fragmented European Space
- Low levels of maturity in knowledge in sector
- Not reaching communities from the start





- Lack of more institutional stakeholders (create a working group)
- Combination of macro-level policy model + micro-level institutional assessment

***Methodology depended on external input***

- Communities and data on cultural heritage in social media channels are difficult to identify
- Challenge of the modeling the non-economic "crossover" value of Digital Heritage

● Relate the different results (methodology-observatory) one to another ● Value chains based on digital heritage might not have significant value ***Scope of the project is too extensive***

- Small technical team
- Fragmented responsibilities
- Complexity excess
- The ambition of the task calls for very high commitment
- (Too) Ambitious scope of the project
- Coordination and knowledge management challenges
- Difficult to align tasks between various partners
- Find one project language

## 5.2 Avenues for Exploitation

The objectives of the project are translated into inDICEs' key proposition: the Open Observatory platform.

The platform offers an online space with functional components and tools that provide a wide range of possibilities for users and for future avenues for exploitation. From the access to collected data throughout the project, engage in discussions relevant to the CHI sector, to the possibility to network or find inspiration for diverse range of projects. Therefore, the avenues for exploitation are wide and depend on the prism of the user.

Members of the consortium, led by Platoniq, worked on these avenues by creating "personas" (figure 4) that could be potential users on the platform. The users that were created fell into one of five different

categories: artist, cultural heritage practitioner, special interest group, policy maker and researcher.

In line with the activities, certain profiles were highlighted such as individuals who work with cultural heritage institutions (CHIs, policy makers, artists and cultural heritage makers, and researchers). This action allowed us to identify the uses and exploitation of the Open Observatory platform from one profile to another, including what might be issues and challenges that a user face. This working tool validates at the same time, what are the demands and needs that inDICEs can ultimately target and how to make this reply attractive and ergonomic. More information on the user scenarios can be found in the deliverable 4.1 User scenarios and wireframes.



*figure 4 - Screenshots from MIRO board in the Hypothesis Assembly October 2020*

Additionally, during the kick-off of the project in January 2020, Platoniq conducted several workshops that aimed to assess the sentiments, ideas, and preferences of the partners involved in the project, and identify users and scenarios that would later be translated into the development of the Open Observatory platform. Besides the creation of the personas, the workshop allowed us to identify different uses for the platform. These are described hereunder.

On another level, the financial exploitation of the platform is yet to be envisioned. Questions such as who will manage the Open Observatory after inDICEs' project's end, does it need to provide benefits or at least be economically self-sufficient, will be clarified in the next iteration of this delivery by the Europeana Foundation and members of the consortium. Knowing that, we propose hereunder a few ideas of how the platform could be monetized, if decided so. These ideas will need extended research and consolidation (or evincing) that will occur in the further steps of the project.



### 5.2.1 Using the Open Observatory platform for research

We have recognized researchers and their preferences for the design of the Open Observatory platform. An illustration of a Researcher and priorities is exemplified in one of the "personas" (figure 5) created during one of the initial workshops. Researchers identify as priorities the need to have access to searchable data sets and specific profiles to network with and study. Researchers have the inclination towards more curated content, accessible contacts, streamlined conversations and work areas and collaborations. Researchers will have access to different data, from raw ones to case studies, with different filtered criteria, and the ability to play with it and be part of a working group in the platform.

*figure 5 - User profile and user story 1*

The Open Observatory platform has a strong value set based on open data, available for researchers. Thus, it is not envisioned to make them pay in any way to access the data. On the opposite, we trust them will

enrich the platform by adding their own data and studied cases that could legitimate the whole platform.

### 5.2.2 Using the Open Observatory platform for policy making

As a second potential use of the Open Observatory, we identified the priorities of the policy makers, related to the cultural heritage sector. We want them to see the Open Observatory platform as a reliable and convenient source of information regarding Cultural's challenges, but also a channel of direct connection with the Cultural sector's practitioners.



Policy makers identify as priorities the access to clearly communicated case studies, policies and data sets. Legislators will have access to studies, narratives, data from CHIs, indicators, and access to new and relevant contacts. Besides the complete information they will be able to find quick to read and exploit data. The clearer the data, the better: conclusions out of comparisons and evaluations of different situations, provided through data visualisation is the best way to empower them. This way, they may easily represent the cultural sector's voice and share digest information to those they may have to convince. The aim is to guide their decisions toward laws that allow more sharing, creativity and enrichment on all levels of the Cultural Sector in the EU.

We could imagine that policy-makers, legislators or other experts working on infographics of treated data could access it in different monetized ways: it could be an annual fee to access some services, or a payment by file they want to download.

### 5.2.3 Using the Open Observatory platform for CHI

As a third potential use of the Open Observatory, we identified the priorities of the CHI practitioners and the creative communities and artists. An illustration of a CHI practitioner and priorities is exemplified in one of the "personas" (figure 6) created during one of the initial workshops from inDICEs. One of the common interests for those working with CHIs is the need for more resources to follow how other CHI are managed, how they are changing, and tools that give greater clarity when benchmarking their own progress, such as surveys and interactive tools for visitors or reports from other CHI.

When speaking about artists, their needs and desires are varied. Priority for this audience was the need to engage and amplify their impact whether it be in terms of audience or collaboration with other actors and institutions. Interaction seemed to be at the crux of what would best serve for artist or artist communities' interest and sustainability. In this case, CHI practitioners will be able to participate with collaborators to solicit advice and also make decisions collectively in the Open Observatory. At the same time, they will be able to provide recommendations, such as "best practices", contacts or how-to and other relevant data to contribute to the conversation.

*figure 6 - User profile and user story 2*

CHIs and artists may want to promote their call (for contribution, for advice, temporary exhibition or whatever the subject) up and more visibly in the Participatory space and, so for, be willing to pay a little fee.

On the other end, once the Open Observatory platform has been launched and adopted by the community, it may be of some interest for all the businesses whose artists and CHIs are clients. In that second step, some limited and wisely chosen ads could be providing funds to sustain the platform. These ads could be paid either by a time-space visibility fee, or by a percentage of the sales made through the platform.

The following section will provide an update on the engagement with external stakeholders and potential users of the Open Observatory Platform.

## 5.3 Engagement with External stakeholders

Freeman defines a stakeholder as "'any group or individual who can affect or is affected by the [8] achievement of the organisation's objectives". This gives rise to a way of analysing the significance of a stakeholder group in terms of their influence or power over the outcome of the project and their interest in that outcome. With this in mind, throughout the initial months of the project we have identified stakeholders, target groups and audiences relevant for the overachieving objectives of the project. The inDICEs' key players - both interested and influential - are a group who need active two-way dialogue as

[8] https://www.emeraldinsight.com/doi/abs/10.1108/00251740010373089?mobileUi=0&journalCode=md

external partners or participants in the project. In this section we outline these key external stakeholders and we provide an update on the engagement activities. More information related to our stakeholders can be found in the Deliverable 5.1 Communication plan.

## Researchers

Research groups involved in Social sciences and humanities, Cultural Economics and IP Law are key stakeholders of inDICEs. Over the first year of the project, partners engaged with researchers throughout different communication channels, online conferences and most recently, with the use of the Participatory Space in the Open Observatory platform. Partners of the project organized the first CHI Consultation Workshop, focused on the IPR framework for the Digital Transformation of the CHI sector. Although the workshop targeted CHI, as an open online event, several researchers had the opportunity to partake in the presentations and discussions. Participants and partners of the project also had the opportunity to use the Open Observatory platform during the breaking rooms sessions.

The second consultation workshop of the project will take place during the first quarter of 2021. In this occasion, the workshop aims to connect the CHI and research practitioners, improve collaborations between both parties and promote best practices. The activities of the workshop - discussions and follow up conversations - will be hosted in the Open Observatory. The next version of this deliverable will offer a closer look into the use of the Open Observatory platform and its components from the perspective of the researchers.

## Cultural Heritage Institutions

European memory institutions holding cultural assets and CH practitioners are vital players in inDICEs activities. inDICEs organized the first CHI Consultation Workshop, with a focus on the IPR framework for the Digital Transformation of the CHI sector. The open workshop provided an opportunity for partners and CH practitioners to engage in discussions, to better understand the needs, concerns and wishes of CHI professionals regarding IPR and crowdsourcing. In line with the workshop, WP2 and WP3 also launched two surveys on the Open Observatory platform. One of the surveys focused on collecting cases of reuse of digital cultural heritage in products and services, in informal cultural initiatives and communities of co-creation. With the help of these cases, partners aimed to understand how chains of added value - cultural, social and economic - are created on the basis of digital cultural heritage. With the second survey, partners aim to explore how CHIs face the IP challenges and/or whether IPRs contribute to generating further revenues and if so, through which mechanisms.

The next steps to engage with this group will be throughout the CHIs Self-Assessment Tool which will be added as a component of the Open Observatory platform. This tool will help them assess their readiness-to-market (DSM) and their potential in the new digital era, allowing them to estimate the benefits and advantages of such development. Additionally, partners aim to engage with CHI practitioners in the next Consultation workshop Developing Future Researchers, organized by the project in 2021.

## Policy-makers

Over the first year of the project, WP1 has gathered policy-related data, from different sources that will, later on, serve as part of the Analytical Dashboard. The aim of the dashboard is to clearly visualise the enablers and barriers of the exploitation of digital cultural heritage, offering stakeholders a better and clearer insight into the economic and social impact digital cultural heritage may achieve. This will lead to policy recommendations, IPR related policy briefings and analysis of policies to find the best fair balance between protection of intellectual work and the enabling and democratisation of creativity. The next version of this deliverable will offer a closer look into the use of the Open Observatory platform and its components from the perspective of policy-makers.

### Special interest groups

These special groups refer to different networks and associations related to the field, such as the Europeana Network Association, FIAT/IFTA, to mention some. Recently, partners of the project participated in numerous online conferences, providing visibility to the project and the Open Observatory Platform. One of the main activities has been the collaboration with the partnership of inDICEs with the Europeana Impact Steering Group, as part of the Europeana 2020. Both parties are hosting a series of interactive sessions with the use of the Participatory Space, where they'll talk about the impact of digital cultural heritage as a driver of social change. This exercise aims to, among other things, facilitate the onboarding of external stakeholders into the Open Observatory Platform.

# 6 Sustainability of end results

The Europeana Foundation (c.60 staff, 20 nationalities, based in The Hague) operates the Europeana core service platform with 27 partners. Supporting the digital transformation of the Cultural Heritage Sector, Europeana supports and delivers services to stakeholders such as policy makers and cultural heritage institutions.

Concurrently with the iterative development of the Open Observatory, Europeana Foundation will continue to work with inDICEs partners to address the operational and strategic considerations of integrating the Open Observatory with the core service platform. Europeana remains committed to supporting services such as the Open Observatory that can provide potential long term value to the delivery of the core service platform. An outline of the principles efficiencies and considerations are detailed below.

Possibilities for efficiency gains and connection with existing core service platform infrastructure that further reinforce the value of integration of the Open Observatory (also identified in 5.3, Special Interest Groups) such as the ENUMERATE Observatory and Europeana Network Association Impact Community are;

- Establishing strong connections, and supporting the continuation of the data collection through the ENUMERATE Observatory infrastructure through actions such as managing the development of relationships and actions with the Member State Coordinator Network established to support the ENUMERATE data collection.

- Developing the awareness and practice of data collection and analysis through the Europeana Network Association Impact Community, where members share a mutual interest in gaining a better understanding of the process and benefits of data collection around the digitisation of cultural heritage.

Consideration for the sustainable integration with the core service platform, and feasibility of the long term maintenance of the Open Observatory as the core output of the project are;

- The base platform connected to the Visual Analytics Dashboard will be operated beyond the end of the project. webLyzard will offer premium services to maintain and further evolve the platform. The economic model to self-support this is under development (5.5) and will require further consideration from all partners.

- A governance or community structure that facilitates the maintenance of supportive tools developed in the project will strongly support it's long term sustainability, such as: readable datasets publisher, guidelines for best practises regarding the maximization of CH digitisation, impact, comprehensive matrix of IPR ecosystem, inDICEs analytical toolbox and a CHI assessment monitoring tool. These tools are critical to the success of the Open Observatory, and a sustainable maintenance play must be established.

# 7 Conclusions

In conclusion, the deliverable identified and described the project results and the necessary steps that are to be taken in order to exploit and maintain the outcomes in a sustainable way. The key proposition of inDICEs are the Open Observatory platform and its components: the Participatory space, the visual analytics Dashboard and the CHI self-assessment tool; the IP Register and the access to raw data. Currently the visual analytics Dashboard and the CHI self-assessment tool are under construction and will be further explained in the next versions of this deliverable.

Additionally, details related to the long run management of the platform are still to be determined by the consortium and Europeana Foundation. This document serves as the first version and will be updated in the next couple of years, month 24 and 36, therefore, details on the exploitation and sustainability of the main outcomes of the project will be further detailed in the next iteration of this deliverable.

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