Measuring the Impact of Digital Culture

inDICEs

Deliverable 3.1

Policy Analysis of Value Chains for CHIs in the Digital Single Market - Summary

Policy Analysis of Value Chains for CHIs in the Digital Single Market

A summary of the Deliverable D3.1 | WP3: Change Management and Policy Recommendations
Maria Drabczyk, Aleksandra Janus, Jan Strycharz, Alek Tarkowski (Centrum Cyfrowe Foundation)

Within the inDICEs project, we aim to understand the effects of the digital revolution on modes of cultural and creative production and on their economic and social impact. The task *Policy analysis of value chains for CHIs in the Digital Single Market (T 3.1)* was focused on the analysis of the value chains for CHIs in the DSM to contribute to the understanding of current business models of interaction between CHIs and creative industries and how such models can reinforce access to culture and European identity.

Context: changing role of CHIs and the COVID-19 pandemic

A shift can be observed in the perception of the role of culture – and the CH sector in particular. Institutions more and more often define their role and mission broadly, understanding that — having great social trust — they can have an impact in many areas of life of our societies. There is also a growing interest among the institutions in measuring and understanding their social impact. There is a parallel, shifting relationship between cultural activity and the generation of economic and social value added. This shift is captured by Pier Luigi Sacco who describes the move from the Culture 1.0 model, which is based on a patronage system, through the Culture 2.0 model, with mass production of cultural products that is controlled by entrance barriers of access to technologies and resources, to Culture 3.0 model, that blurs the boundaries between producers and users (Sacco 2011). This shift should be accompanied by a new policy perspective and structural funds programming that takes into account the Culture 3.0 framework.

The experience of the global pandemic seems to be proving that we should be thinking in terms of the impact that the CCS have on societies and try to capture the role of digital cultural heritage, having in mind that the path towards rapid digital transformation taken by many CH institutions in response to the pandemic will be enhancing the variety of interactions with heritage content online (strengthening Culture 3.0). Considering the impact of culture on different macroeconomic areas, we need to remember about the still existing challenges in the sector and thus underline the importance of media literacy, digital competences, access and use in this context.

We decided to look at the CHI sector in the context of the structural inter-dependencies and the impact it has on other sectors of the economy and on the society. Taking into consideration the changing perception of the role and responsibilities of cultural heritage institutions, as well as the impact of the COVID-19 pandemic, in the report we start with providing context for understanding the social, economic and cultural value of digital cultural heritage; we take a closer look at the European policies concerning digital heritage resources & the Digital Single Market; and propose a

framework for analysing digital cultural heritage value chains (created on the basis of a case studies analysis of the re-use of digital cultural heritage).

Conclusions from our case studies analysis

The core of our report consists of a case study analysis, through which we aimed to better understand how digital cultural heritage value chains are created and sustained. We analysed 82 cases of re-use of digital cultural heritage and identified diverse types of actors involved in the re-use of the digital cultural resources: CHIs, other public institutions like universities or local authorities, NGOs, informal groups, private firms, communities and individuals. We present below key findings from our studies.

➢ Almost 30% of all the cases of re-use collected by us have been developed and delivered by CHI actors. 21% of the cases were produced and disseminated by other public institutions (mostly universities and local authorities).

➢ Private endeavours that end with some concrete product, service, and/or initiative that end-users can interact with, constitute only 16% of re-use cases in our sample. What is interesting, is that (within this 16% fraction) individuals seem to do much "better" – 1 in 10 cases was created by an individual without support of substantial capital – than informal groups and/or communities. Only one case in our database (n=82) can be attributed to an informal group.

➢ The high percentage of cases where resources are reused by CHI actors – most probably the same ones who own the resource – force us to revisit the typical policy narrative tied to reuse of publicly available resources. Traditionally, such re-use is seen as conducted by external actors – our research shows that CHIs' activity is dominant. What is also important – 80% of CHI re-use can be attributed to museums.

➢ The other way of looking at the actorship in the realm of re-use is to use traditional sectoral divisions. Mapping the use-cases according to these categories shows that over 50% of the cases in our sample are created by some sort of public institutions, 17% by non-governmental actors and 26% by private actors. It may seem trivial to say – but our data confirms that most value created by re-use applications is rather still the outcome of some form of public investment. Much less action is noted where little public policy instruments and/or incentives are in place.

➢ Many re-use initiatives analyzed by us strive to make meaningful connections with end users. Only 11% of cases in our database are strictly focused on access with either no or very little effort to engage end users. Others make use of over 30 connection and interaction tools we identified.

➢ Cross-sector collaboration in the process of developing re-use projects is not that common. In general, less than one-third of the cases we analyzed have been developed with at least minimal level of intersectoral discussions and/or negotiations. At this note, CHIs seem not to

be very open to cross-sectoral cooperation in the process of re-using digital cultural resources. The same can be said about the NGO type of actors. While the probability for cooperation (at least in our sample) grows substantially for other public institutions (such as universities or public authorities). Cross sectoral collaboration should not be seen – of course – as valuable per se. However, as we studied our database, it turned out that when this type of cooperation occurred, there was more probability that the creators were also preoccupied with applying connection, interaction and engagement tools.

➢ We analyzed the main purpose of the re-use projects. Most of them focus primarily on providing access to digitised heritage (33%). And while it is undeniable that these efforts are necessary (and also – which should be stressed – very challenging), they should – in our opinion – be supplemented with much more activities that link availability with the actual usage and application by end-users. That is why we welcome the finding that the second most present primary purpose in our sample is entertainment (22%); almost equaled by education (20%). And it is optimistic to see that CHI actors (which are mostly responsible for re-use projects) are equally active in all three fields trying to breach the gap between access and more targeted social impact. CHI actors have initiated 33% of all primarily access projects, 47% of all education projects and 44% of entertainment projects.

➢ On the other hand, if one wants to see more impact in areas such as economy, community building, and more direct political and/or social change, one should inspire or incentivise other actors to take part in re-use ventures in a more decisive way. Our data shows that these impacts may happen only outside of the world of – say – institutional culture. It also shows that the current production of such initiatives (one may put under the common brand of "Community & Politics") in which influence is targeted directly towards economic, community or political impacts with the application of digital cultural resources is very limited. One may, also, risk the conclusion that we rather observe suboptimal effectiveness of promotion of the idea that digital cultural resources may be re-applied to directly influence community-building, targeted knowledge sharing, political decision-making and/or rescue of specific heritage being in danger of extinction.

➢ We found out that more than one-third of the cases grouped in our database have some kind of market linkage – i.e. more than one-third have established financial income from the target groups. Closer analysis of these cases allowed us to elaborate on the list of eight mechanisms that are being applied here to raise market income: (1) Pre-sales; (2) Freemium-premium model; (3) Advertisement; (4) Commodity sales of by-products; (5) Membership; (6) Paid access; (7) Donations; (8) Paid "tailored" service.

Digital cultural heritage value creation framework

We propose a value creation framework developed on the basis of existing approaches to understanding cultural value chains and impact of cultural heritage, combined with insight from specific cases of re-using digital cultural resources that we analysed. Our framework is more complex in comparison with traditional models that assume linear creation of added value through the metaphorical "chain" of connected actors and productive processes. Introducing this kind of

complexity is of crucial importance to present a theory of how social, as well as economic, value and impact is constructed within the process of re-using digital cultural resources.

In the proposed framework, in which 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. We want to underline the fact that impact – in other words, the added value created through value chains or cycles – is not just economic in character. While a DSM perspective focuses on economic and market impact, from the viewpoint of the CH sector, content use has cultural and social effects as well as an indirect spillover effect that is essential for the economy. In the studies that we analysed, it is social and not economic impact that is prevalent and that can be identified in each of the cases that we studied. This applies to the initial stages of vision development and implementation, in which many projects do not define any market-related goals or economic impact. Also in later stages of the cycle, connection with audiences occurs in many cases, but the market linkage is an optional element of the value creation process, taking place only in some instances (see: Appendix).

An extended perspective on digital cultural heritage policies

We believe we need to develop new, system-wide representation of the structural interdependencies between the online cultural sector and other sectors of the online ecosystem. We therefore propose that the debate on digital cultural policies needs to connect with an ongoing debate about European vision and regulation of the broader online ecosystem, the internet as such. Only in this way can we fulfill the stated goal of our project, to understand cultural heritage value chains in the Digital Single Market.

In this debate, some of the tiers of impact proposed by Sacco (2011) are defined as key goals of this European vision: sustainability, social welfare, social cohesion or sovereignty. And just as a decade ago he argued that "cultural and creative industries need a more solid rooting within the broader economic and social context", today we need to connect cultural policies and digital heritage frameworks within the broader regulatory context of the European internet. This means looking beyond the traditional policy loci, such as the Recommendation on the digitisation and online accessibility of cultural material and digital preservation of 2011 (currently under evaluation) or copyright laws. A perspective based on an understanding of how digital cultural heritage value chains contribute to broader value creation should be also present in European debates on platform regulation and the search for European platform alternatives, on European cloud solutions, or data governance. In this way, we can develop new policies that will strengthen positive interdependencies between the online cultural sector and other sectors of the online ecosystem.

Recommendations

We present below initial recommendations, developed on the basis of our research and the framework that we have developed.

We would like to note that full recommendations constitute a separate deliverable, which will be created in 2022. We omit here legal recommendations, as these are being developed on the basis of a separate Work Package, devoted to legal analysis and recommendations.

Quality-focused approach in the CHI sector

Digitisation of cultural heritage remains a substantive issue for the whole cultural heritage sector. It is essential that while increasing the volume of digitised heritage, CHIs become also more particular about the quality of the digitised content and its copyright status. There has been a growing demand from various stakeholders (educators, researchers, CCS and IT, etc.) for rich metadata and high-quality digital items, allowing for their (at least some) use and re-use within the context of the cultural heritage but also other sectors.

In the Culture 3.0 paradigm, where the audience turns into engaged users and creators / producers, improvement of the online access to digital cultural heritage has turned into a necessity. Therefore, CHIs ought to see their role as going beyond making content available and also stimulate its use, especially through high-quality projects that generate substantial added value. This can mean focusing on more narrative-based solutions, encouraging interactive and engaging storytelling, allowing for contextualisation and an immersive user experience, and when possible, opening the collections for use and re-use. The ambition should be built around the notion of making full use of cultural heritage data in various contexts and by different stakeholder groups.

To achieve the above, ie. a more qualitative approach to digitisation, access, curation and use of cultural heritage, requirements towards the CHIs should be revised in a way that they support key standards and needs of the heritage sector, but also other sectors interested in the data (rich metadata, diverse licensing, access and possibility to use high-resolution content, etc.). This approach should be at the heart of the revised approach to digitisation of digital heritage.

Evaluation and impact assessments of the CHIs' work should become an integral part of the daily processes with quantitative metrics and targets being expanded by qualitative measurements (especially crucial for determining social impact). Digitisation funding might come with an obligation (or at least encouragement) to provide free access.

Museums as market re-use facilitators and promoters

Our research showed that museums are the most active (if not to say dominant) actors in executing re-use projects. However, they are often reluctant to collaborate with non-institutional actors. And when this type of collaboration happens more focus is put on promoting engagement of the end-user. At the same time, when non-institutional actors are engaged in re-use projects chances of economic impact, community-building and/or other socio-political changes rise.

With all the above in mind, we propose the development and execution of regranting schemes that would make use of the experience and expertise of museums and other active CHIs in order to encourage and support re-use outside of the institutional context. Specifically we have in mind programs in which museums would be the operators of open calls targeted (mostly but not exclusively) at firms operating within the creative sectors. Those firms could present their proposals for implementing digital cultural assets in their production cycles – for instance (just to give some examples) involving more digital heritage in media products, books, films, video games, fashion

products, etc. In other words – firms would present their proposals for including digital heritage in their products that are directed towards markets and consumers.

The museums (maybe together with some other industrial actors/associations) would be responsible for organizing the call, promoting it, and organizing an evaluation rules and process. Also, they could support the promotion of end-products in their strive to reach markets and clients. The companies and individuals involved in the creative sectors should be given substantial finances for supporting the involvement of the digital heritage in the production cycle; not for the funding of the whole process of production and marketing. Also, the funding schemes should allow for proposals presented by cross-sectoral consortia of actors and they should not exclude the possibilities of subcontracting in order to allow for more SMEs presence (not ready yet to become consortia members, but eager to cooperate on a smaller scale).

Similar projects could be targeted at other types of CHIs, taking into account their specificity and with the aim of encouraging re-use and value creation of the sort that we observe in the case of museums.

Promoting collaborative re-use of digital cultural heritage

Promoting digital cultural resources (both content and data) and their re-use among other sectors is crucial. It is also important to promote and encourage cross-sectoral collaborations in re-using digital cultural heritage. Instead of conducting digital projects in the model where institution hires a contractor (eg. software house), it would be beneficial to encourage a more collaborative approach, where projects are being developed in even closer partnerships. This would offer an opportunity for learning and knowledge sharing between the partners and possibly result in solutions more attractive for end-users. CHIs have the potential to become R&D labs where innovative approaches to culture and heritage are being prototyped and tested. They are not only guardians of amazing collections, but also places of knowledge-creation. That is why more attention should be focused on promoting both the resources available for reuse as well as the benefits from using institutional knowledge related to them. Such initiatives as collaborative labs, hackathons and incubation projects might be a way to stimulate such collaborations and promote re-use, encouraging dialog between sectors, between experts on content and experts on tech.

One of the possible ways of how to make it happen, is encouraging such collaborative approaches within existing frameworks that support and promote culture, such as for example in the framework of European Capitals of Culture.

Digital transformation with the help of digital cultural heritage

Ongoing policy debates on the European data strategy and related issues of data governance need to include digital heritage, considered as a specific type of data. Firstly, as part of the European data strategy, a digital heritage data space is needed to fully support the development of modern data access, sharing and use practices in the cultural heritage sector, other public sectors (such as education or research) and creative and cultural sectors (both public and commercial). This will support digital transformation of the CHI sector and enable development of better user experience and relations with users for the CHIs.

Furthermore, and in line with the framework that we propose in our report, benefits of developing this cultural heritage data space should be seen as potentially having much broader effects on the online ecosystem. We see this space as one where novel data governance models and data practices can be developed in a relatively safe environment, avoiding controversies related to the use of other types of data. CHI sector can play the role of an incubation lab, developing novel practices of use in other data spaces as well.

Shared platforms and innovative tools enable CHIs to reach their audience faster

While many institutions across Europe invest their time and efforts into bringing their collections online, it does not always go hand in hand with raising the awareness of CHIs' audiences about what they really have to offer online and how it can be used. Although aggregators have been around for some time already, many institutions still publish their collections using solely (or primarily) their own websites/platforms, which often proves to be insufficient for the audience to roll in effectively. This may not be the issue for the big institutions known worldwide, yet keeping their audience's interest seems to be crucial for the smaller and local institutions.

There is a lack on behalf of these institutions of tools necessary to reach end-users and to promote effectively online content. CHIs need to improve their skills in storytelling while using their online resources, so they can be more recognizable for the wilder public. This stresses the importance of platforms such as Europeana, that provide the audience with an easy to use tool to browse collections of multiple CHIs at once and find interest in some new institutions they never heard before as a result.
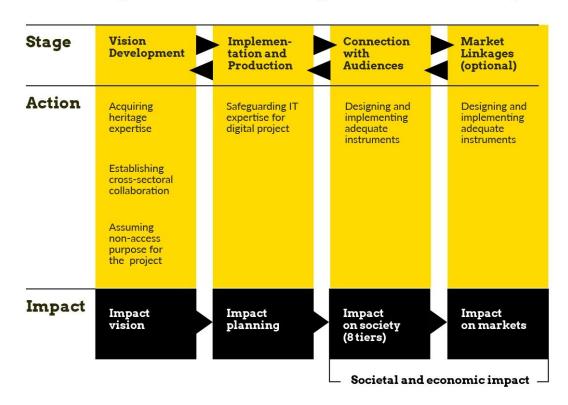
Moreover, moving digitized collections onto common platforms seems crucial, especially when taking into account the COVID-19 pandemic as it generated a staggering spike in digital platform usage. An important reason why the CHIs should join online platforms is not only to be searchable but also to enable re-use of their content, which ultimately leads to better promotion of cultural heritage and may ensure better collaboration between various institutions as well as between institutions and end-users.

Digital cultural heritage generates educational value

Remote education during the pandemic has created opportunities for greatly increased use of digital resources, including cultural heritage. In a study conducted by Centrum Cyfrowe, our foundation, in September 2020 in Poland, 35% of teachers declared that they used, while teaching remotely, resources from CHI – making them one of top 5 most used sources of educational content. We believe that there is great, unused potential for building digital cultural heritage value chains in the educational sector.

This requires dedicated programs that support, in a complex manner, re-use of CHI collections by educators, educational systems and institutions, or educational startups (which consist a significant part of the European start-up ecosystem). Policies need to run the spectrum from offering support in both basic digital literacy among educators – so that they can benefit from these resources and initiate grassroots activities, to incubation projects that will support the development of novel educational services, built with the use of digital cultural heritage resources.

Appendix. Digital Cultural Heritage Value Creation Cycle

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