RADICI: an Advanced Design Approach for Prototyping Trans-sectoral Ecosystems in Digital Cultural Heritage

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ABSTRACT

As the cultural heritage sector intertwines with the computing industry and expands into the creative sector, this paper disseminates preliminary findings of an applied industrial research project to contribute to ongoing discussions on key challenges in Digital Cultural Heritage and outline potential future directions. RADICI is a two-year ERDF-funded project aiming to develop an aggregating platform of digital cultural assets from diverse cultural and creative industry sectors, ensuring their interoperability to unlock new value co-creation. Stemming from a design-driven approach, RADICI contributes to regional development by prototyping trans-sectoral value chains in accessing, co-producing, experiencing, and leveraging Digital Cultural Heritage. Central to this effort is the strategic role of GLAMs as boundary objects connecting institutional knowledge with creative entrepreneurship, enabling cross-pollination of skills and visions. Living heritage is considered a dynamic knowledge infrastructure, where activating traditional know-how through digital tools empowers reinterpretation and innovation across sectors. The project explores Advanced Design methods to support long-term, cross-sectoral engagement beyond its operational boundaries. This paper presents RADICI's theoretical framework, rooted in a rhizomatic interplay of perspectives, and illustrates how trans-sectoral conversations were designed to fuel co-creation sessions among stakeholders from academia, business, GLAMs, and CCSIs. Data from participant observations, workshops, and feedback were thematically analyzed to generate actionable insights for further rhizomatic development.

Keywords: Advanced Design, Trans-sectoral Collaboration, Value Co-creation.

1. FRAMING THE CONTEXT

1.1. Venturing the emerging sector of Digital Cultural Heritage

The exponential advancements in digital technologies and their underpinning infrastructures are boosting what has been scholarly addressed as Digital Transformation (Vial, 2021). Recognized as "digitization" in its early stages, Digital Transformation (DT) has been and still is significantly impacting disciplines, sectors, and industries transversally, pushing for shifts in value creation and meaning production stemming from many human activities. Here, the cultural heritage sector makes no exception. Since the 1970s, cultural institutions such as galleries, libraries, archives, and museums (GLAMs) have increasingly turned to digital

technologies to transform the preservation, management, and dissemination of cultural heritage. Hosting collections online has not only ensured the longevity of artifacts but also democratized access, reaching global audiences. This evolution intertwined with advancements in user experience design and the creation of immersive interactions, which have redefined how people engage with heritage (Parry, 2010; Terras et al., 2021). Ultimately, institutional initiatives like the Common European Dataspace for Cultural Heritage initiative and the Cultural Heritage Cloud further illustrate the growing commitment to digitization, open access, and participatory practices, establishing "Digital Cultural Heritage" as a cornerstone of contemporary heritage practices.

The digitalization of cultural content has evolved into a transformative shift, redefining how cultural institutions interact with technology and the broader innovation ecosystem. As DT fosters tighter interconnectivity, it is evident that "technology itself is only part of the complex puzzle that must be solved for [GLAMs] to remain competitive in a digital world" (Vial, 2021). This shift invites stakeholders to re-think digitized collections as digital assets – resources to be re-used and build-upon to unlock new value and to successfully engage with the digital economy (Terras et al., 2021). Initially rooted in the cultural sector, this challenge has intertwined with the computing industry and expanded into the creative sector, forming a dynamic, cross-disciplinary space. Digital Cultural Heritage emerges here, focusing on how both GLAMs and creatives can collaborate to reuse digital assets, ultimately aiming at contributing to social, cultural, economic, and environmental benefits through the development of new products and services.

1.2. Paper focus, methodology, and objectives

Building on such a context, this paper presents a design-driven case study, offering insights into Digital Cultural Heritage's main challenges thanks to the preliminary results emerging from an applied industrial research project.

RADICI – Design of an infRastructure of Aggregation and Digitization of heritage to encourage Interaction with the Cultural and Creative Industries, is a two-year ERDF-funded project supported by the Emilia-Romagna Region, Italy. By navigating the complexity arising from the main challenges in the Digital Cultural Heritage sector, RADICI aims to develop an aggregating platform that collects digital assets from diverse cultural and creative industries sectors (CCSIs), working on their interoperability to unlock new value co-creation. Particularly, RADICI stands out as one of the funded initiatives rooted in a design-driven framework, which grounds the project's outcomes in a regional development perspective. By fostering the exploration of trans-sectoral value chains through pilots, it addresses key aspects of Digital Cultural Heritage, such as enabling access, co-production, immersive experiences, and the strategic utilization of heritage assets.

As such, the paper frames the theoretical framework behind RADICI, unpacking its roots into the rhizomatic interplay of perspectives it stems from. Then, it introduces Advanced Design as the framework driving its development, discussing how it supported researchers in designing trans-sectoral conversations to fuel co-creation sessions and foster collaboration among stakeholders from academia, business, GLAMs, and CCSIs. Data was collected through participant observations, workshop material, and post-event feedback. By conducting a thematic analysis, actionable insights were harvested and formulated according to a trans-sectoral lens, to inform further developments of the project.

2. RADICI: A RHIZOMATIC APPROACH ROOTED IN CULTURE AND CREATIVITY

RADICI intends to create an aggregation and service infrastructure for the dynamic integration of archives, collections, and repositories related to regional cultural heritage. The main aim of the project is to enable the re-use of such a variety of digital assets by both cultural and creative industries, flowing seamlessly into the broader framework of the emerging Digital Cultural Heritage sector. Lined up with European initiatives shaping such a cross-disciplinary field, RADICI addresses the following research questions:

1. What features need to be designed in the aggregating platform to offer an actionable and meaningful experience for each stakeholder?

2. How can digitized assets hosted by cultural heritage stakeholders be re-used by the creative sector to unlock innovative forms of value?

3. What competencies are required to access and effectively re-use such a diverse collection of digital assets?

The project aligns with institutional calls to promote digital agendas, such as Emilia-Romagna's Smart Specialisation Strategy, which emphasizes technology transfer and cooperation among companies, research centers, and universities. These efforts focus on strategic regional clusters, including CCSIs, which are considered strategic levers to fuel systemic innovation (Tingvall Kornmacher & Vai, 2023).

Historically, CCSIs have grown contextually, shaped by social, cultural, and economic factors, consolidated as a concept and area of development and innovation by political initiatives (Howkins, 2002; Florida, 2019; Tingvall Kornmacher & Vai, 2023; Sacco, 2023). Institutionally recognised as engines of social, environmental and economic regeneration (Unesco, 2022), culture and creativity have recently gained deeper recognition as key drivers to navigate the complexity inherent to the wicked challenges of our times. This recognition culminated in the establishment of the ninth Knowledge Innovation Community within the European Institute of Technology framework, pinpointed as "the most important and ambitious project ever embraced in European history to put culture and creativity at the centre of European policies" (Sacco, 2023).

This resonates particularly with the Emilia-Romagna Region, whose landscape of CCSIs is the result of over a decade of coordinated efforts and investments across private, public, and research sectors (Celaschi & Vai, 2021). By 2017, the sector had grown to over €7 billion, employing 80,000 individuals, with a notable increase in employment and educational attainment. Policies, such as advancements in cinema and audiovisual production, have contributed to this growth. The "Orange Economy" report (Emilia Romagna, 2018) highlighted the resilience of the sector, forecasting sustained growth. Such cumulative work has ultimately positioned the region as a model for systemic innovation and interdisciplinary collaboration driven by CCSIs. In the Emilia-Romagna region, flourishing, multifaceted ecosystems of CCSIs bring value to the region as they operate in an increasingly complex, non-linear manner. As such, they have been lately recognised as strategic actors to partner with, when aiming at cultivating and layering multi-scale, trans-sectoral, and interdisciplinary practices.

Here, taking a rhizomatic perspective provides a nuanced approach to systems thinking, highlighting heterogeneity and the blurring of disciplinary and sectoral boundaries. Drawing

on Deleuze and Guattari's rhizome (1987), this lens brings to the fore the seamless tangle of social, economic, and cultural relationships that constitute a regional system. By focusing on the interconnectedness and non-linear growth of these relationships, it reveals an ecosystem that is both dynamic and adaptable – a living system shaped by the constant, cultural interplay of its stakeholders (Vai, 2017). This perspective offers a portrayal that respects the complexity and multi-layered nature of such systems, valuing their ability to evolve organically. Such a rhizomatic portrait allows to spot its source of nourishment, embodied in the notion of living heritage: according to Lenzerini (2011), living heritage sees cultural practices, knowledge, and traditions as dynamic, evolving elements that are actively transmitted and reinterpreted over time. Just as a rhizomatic system grows through adaptation and interconnectedness, living heritage thrives on the active participation and reinterpretation of its keepers. In the Emilia Romagna region this extends to the know-how in arts and crafts, which local CCSIs come from and constantly infuse in the practices they contribute to (Celaschi & Vai, 2021). Living heritage as know-how is how RADICI approaches the trans-sectoral partnership it is built on. RADICI's roots stretches out in almost fractal directions, reaching out to the regional clusters dedicated to strategic development. These clusters relate to each other, providing encountering – e.g. matchmaking – platforms for diverse stakeholders across Emilia-Romagna. In RADICI Clust-ER Create, Urban, Tourism, Innovate, and Build act as mediating structures that facilitate collaboration and knowledge exchange among academia, industry, and government.

As RADICI addresses the pressing challenges in the Digital Cultural Heritage sector, it draws upon its trans-sectoral perspectives to prototype an aggregating platform. This platform seeks to redefine how digital heritage collections are perceived and utilized, transforming them into digital heritage assets that can inspire and empower creatives. This shift requires a robust ecosystem of services and competences, equipping both GLAM operators and creatives to collaboratively engage in value co-creation (Terras et al., 2021). By merging their expertise, these stakeholders can contribute to a trans-disciplinary area of innovation with profound implications for all the involved sectors.

Given its quite recent establishment, the Digital Cultural Heritage sector is alive in the proliferation of experimental and pilot initiatives. RADICI contributes to this metamorphic landscape, by offering a regional-clustered perspective, starting with three locally strategic cultural and creative sectors: publishing (Panini Editore), audiovisual (DocCreativity), and design/architecture (Studio Performa A+U). These sectors are engaged alongside Interdepartmental Research Centers that specialize in GLAMs (CSAC), built heritage (CICCREI), extended technologies (CIRI-ICT), digital humanities (DHMORE), and CCSIs (CRICC). This collaboration creates a unique and dynamic partnership, blending diverse expertise and knowledge across academia and industry.

As a result, the whole partnership provides RADICI with a highly diverse pool of expertise and knowledge, aiming at bridging academia and professionals from CCSIs, serving as a platform for researchers and professionals operating in the GLAM and CCSIs sectors to access services and tools designed to engage with the emerging Digital Cultural Heritage sector.

3. RADICI: A DESIGN-DRIVEN CASE STUDY

3.1. Designing trans-sectoral conversations through the lens of Advanced Design

With RADICI building on a rhizomatic partnership, it is relevant to highlight the disciplinary roots of the project, which are well grounded in culture and creativity. With CRICC – Research Center for Cultural and Creative Industries –, as project coordinator, RADICI is infused with the transversal approach inherent to culture and creativity as a sector. Culture and creativity employ unique tools and approaches to unpack, reframe, and define problems, enabling shifts in perspective and revealing untapped opportunities for innovation (Tingvall Kornmacher & Vai, 2023). Among the creative fields, design stands out for its distinctive position at the crossroads of research, industry, and civil society: such a multifaceted position allows it to mediate between knowledge creation, value creation, and societal needs – meaning creation. Additionally, recent shifts in its disciplinary agenda have further consolidated design as a people-, community-, and even more-than-human-centric practice (Sanders & Stappers, 2008; Bannon & Ehn, 2012; Wakkary, 2021), making it increasingly relevant as a strategic approach to promote systemic change (Irwin, Kossoff & Tonkinwise, 2015).

This is central to RADICI: here the emerging field of Digital Cultural Heritage is reimagined through the lens of "Advanced Design" (Celaschi, 2014). This perspective reflects CRICC's role as the outcome of a sustained effort in the Emilia-Romagna Region to design processes that foster regional development. Central to this ten-year endeavour has been the creation of "a [regional] recognisable and cohesive CCI ecosystem" (Vai, 2017), achieved through projects "that frequently mediate between producers of knowledge (scientists), potential production systems (enterprises), and potential consumers (markets), who often struggle to understand one another's language" (Celaschi, 2014). Here, design has been involved to "stich together culture, creativity and productive capacity (industry and manufacturing)" (Celaschi & Vai, 2021), facilitating processes in which they could bridge their perspectives, establish a common ground of understanding and, thus, collaborate as-a-system on complex challenges. Zooming in, RADICI focuses on trans-sectoral value co-creation, drawing on a diverse pool of expertise to support its development. Each stakeholder in the partnership contributes a unique resource, creating a multidisciplinary foundation. This includes a digital media repository serving as a pilot unit for the prototype aggregation platform (Al Kalak & Baraldi, 2023), APIs, immersive technology hardware and software, archives and collections, and the professional expertise of the involved CCSIs. This setup quickly revealed the need to bridge the diverse perspectives at play. This was essential not only for stakeholders to fully grasp the potential of each other's contributions but also, and more importantly, to develop a shared language. Such a common language would enable stakeholders to exchange ideas effectively and collaboratively shape trans-sectoral value chains.

Originally titled as "Co-Creation Sessions" in the project proposal, RADICI leverages on three touchpoints in which involved stakeholders discuss among each other and with local CCSIs on the project's development. As such, it has been key to frame Co-Creation Sessions as conversations occurring in environments that would foster the anticipated needs and

exchange perspectives, allowing participants to broaden the scope of action in further developments of the project. Adopting an Advanced Design approach, we identified the challenges outlined by the project's research questions and used them as a guiding compass to design three macro-areas of intervention. Each area was primarily rooted in a core expertise within the partnership but required integration with others to shift thinking and practice, fostering a process of mutual (un)learning:

1. **Data Economy:** rooted in computer science and information management, this area focuses on the design of the digital platform. It stretches out to digital humanities and cultural heritage sectors to look for lenses to approach themes of shared open data, paired with the degrees in storing, accessing, consulting, and using cultural data in creative ways.

2. **Repository of Know-How:** rooted in digital humanities and cultural heritage sector, this area highlights the dual nature of digital content, "knowledge-information". Working with metadata might help return the layered nuances of meaning behind cultural artifacts, whose storage lies in living heritage – all the intangible instances of inherited culture held by people, beings, and communities.

3. **Designing Experiences:** rooted in CCSIs' perspectives, the third area challenges usage of cultural heritage content, leveraging the fluidity of their digital version. This area provides a practical ground to enable alternative value chains, based on the introduction of digitised assets in design/production processes, opening to trans-sectoral value chains which ultimately generate spillovers gravitating around experiencing and co-producing creatively cultural heritage assets. – i.e. advanced tourism models, advanced building restoration processes, etc.

The identified areas served as common ground for stakeholders to engage in trans-sectoral conversations. As the descriptions above suggest, the conversations occurring in each area were meant to begin in a core area of expertise, and then to expand into other domains, with the aim to design strategies that could more effectively address the needs of the emerging Digital Cultural Heritage sector. As such, these conversations were not merely a prerequisite for entering the prototyping phase; they were vital due to the stakeholders' shared multidisciplinary foundation: to fully harness this foundation, it was essential to uncover and leverage the untapped interdependencies within the ecosystem – namely connections that were readily available but had yet to be activated. For this reason, the trans-sectoral conversations required careful design. Their purpose was to foster an environment where stakeholders could identify, understand, and build on these interdependencies, paving the way for meaningful collaboration and outcomes that were not only innovative but potentially transformative.

3.2. Designers at work: illustrating conversations' materials and Co-Creation Session's steps

The design of the first Co-Creation Session, held on April 12, 2024, resulted in a step-by-step set of exercises, inspiring participants throughout the session engagement using a toolkit made of the following designed materials: two template cards, a set of keyword cards, and one board. Exercises set the rhythm of the conversations, which unfolded along the following phases:

Check-in phase: Participants were invited to share relevant experiences or collections using Check-in Cards, as shown in Figure 1, facilitating an initial alignment of perspectives. This step allowed the group to surface diverse viewpoints and identify preliminary insights to inform subsequent activities.

Figure 1. Check-in card. This tool aims at collecting data on available digital heritage assets and best practices.

Themes and Macro-keywords definition phase: Using a set of designed macro-keyword cards (Figure 2), participants selected and placed on the board the concepts they perceived as most urgent considering the sectoral challenges they were already facing

Figure 2. Set of macro-keyword cards distrubuted for each area/working table: Data Economy (blue deck); Repository of Know-How (teal deck); Designing Experiences (orange deck).

While participants presented their selections, facilitators distributed blank keyword cards on the board, inviting listening participants to contribute novel keywords by merging their own sectoral perspectives with the themes being pitched. This enabled them all to integrate additional themes that emerged during the discussions. Cards were then organised on the priority rings shown on the board, placing the most urgent themes at its centre, as shown in Figure 3.
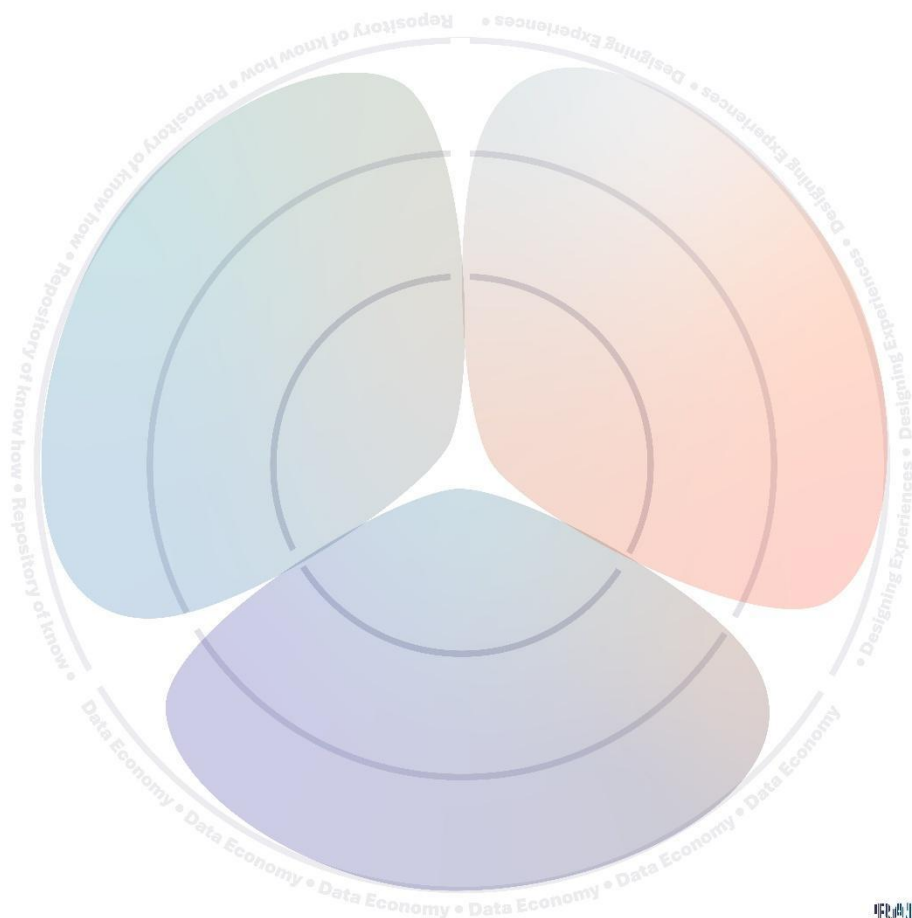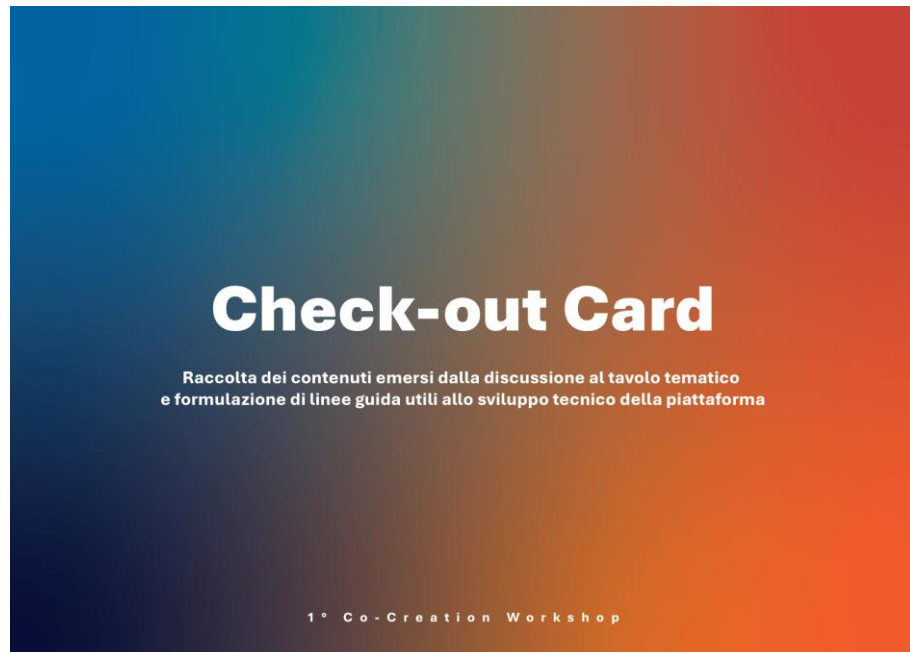
Figure 3. Main template board. Distributed at the beginning of the co-creating session, the board provides the playing ground to trans-sectoral conversations.

Co-Design phase: Each group engaged in focused ideation to address specific challenges identified during the thematic discussions. For instance, in the Data Economy track, participants explored data interoperability and the integration of middleware to harmonize archival standards. In the Repository of Know How track, emphasis was placed on participatory knowledge management and the development of frameworks for shared responsibility and accountability. In the Designing Experiences track, strategies for improving accessibility through immersive storytelling and advanced interaction techniques were proposed.

Check-out phase: The Co-Creation Session concluded with participants documenting outcomes on Check-out Cards, as shown in Figure 4, synthesizing key priorities and formulating strategic guidelines for the next phases of the project.

Figure 4. Co-Creation session completed with participants and documentation of the results in Check-out Cards.

This approach aligns with the European Framework for Action on Cultural Heritage (2018) and the Piano Nazionale di Digitalizzazione del Patrimonio Culturale (PND), both of which emphasise cross-sectoral collaboration, data accessibility, and innovation as key drivers for enhancing the value and reuse of cultural heritage in the digital age. The Check-out Card has been designed to invite participants to make sense of what was discussed until then. They did so by reflecting together and making synthesis of perspectives in play, following the Check-out Card's filling structure.

The Card prompts participants to formalize their insights into recommendations to inform further developments of the aggregating platform, as well as of the Competence Shop package of services and products (e.i. guided digitization services, digitazation Report; VR, AR, XR exended; up-skilling and reskilling services). As such, participants work together to outline specific actions, detailing the expertise required, the timeframe for implementation, and the level of urgency for each.

Designed tools leverage RADICI's interconnectedness of expertise, bridging sectoral divides and contributing to the establishment of a shared language for stakeholders coming from with different branches. Collectively, these tools provided tangible materials for collaborative reflection and decision-making, ultimately nurturing a unified vision for the project's future steps. The step-by-step structure – also embedded in each tool's prompts – helped participants easily follow the logic behind the Co-Creation Session, making it also transparent and to some extent hackable, as some participants engaged directly with the blank cards, using them creatively to add not only words but also sketches and diagrams, further enriching the discussions.

At the conclusion of the Co-Creation Sessions, facilitators documented each table's completed tools by taking photographs. The project's coordinator's team of researchers analysed collected data – as in pictures and notes – taken during the conversations-, synthesizing the co-created content from each exercise. The insights were compiled into a comprehensive report, which outlined key findings for each working area. This report was subsequently shared with the entire RADICI partnership, so that results were accessible to all stakeholders and could inform the project's next phases.

4. HARVESTING AND REFLECTING ON INSIGHTS

The following recommendations and guidelines emerged from the trans-sectoral conversations held during the first Co-Creation Session.

Data Economy

1. **Enhancing heritage diversity: from digitization to back-end data management**

This strategy focuses on the back-end side, the system's infrastructure managing data and operational side. To unlock the potential of digital heritage and enrich its content, key steps include:

- Identifying common languages to map digital object types and link them with harmonized digitization protocols and dedicated repositories, leveraging on already available infrastructures.

- Integrating languages leveraging on multi-perspective meta-data, employing middlewares to harmonize the interoperability of diverse set of information.

2. **Facilitating access and creative use of available digital assets. This front-end strategy targets CCSIs. Key steps include:**

- Designing an intuitive user interface, with features like advanced search and filters to navigate assets efficiently and build tailored inspiration boards.

- Embedding AI-assisted queries to suggest trans-disciplinary and unexpected connections or design needs.

- Showcasing best practices in an online portfolio to connect with experienced professionals and access to specific expertise.

Repository of Know-How

1. **Enhancing the intangible leveraging ecosystems of people and relationships.**

To manage and organize knowledge linked to digital cultural heritage, it is crucial to define information sources, ensuring access and participation for the heritage citizen, a role encompassing visitor, contributor, and creator of heritage-driven content. Key steps include:

- Envisioning participatory contribution, by establishing a network of accredited agents to upload and/or review information, supported by accountability strategies for data accuracy. RADICI could act here as an aggregator and connector, offering consultancy services to guide heritage citizens through digitization processes, aligned with precise protocols for archiving and conservation. The credibility and authority of custodial entities remain essential, emphasizing the need for trusted partnerships in digitization and material preservation.

- Tree-structure prototyping to develop pilot nodes and better handle the contextual frictions occurring while working with a specific digital heritage asset. Pilots might converge into an open portfolio accessible via RADICI's platform and inform the design of alternative legal frameworks in matters of intellectual property.

2. **Nurturing living heritage. Value living heritage knowledge by engaging with and empowering GLAM and non-GLAM operators, creating the space for them to share, translate, integrate, and disseminate content. Key actions include:**

- Mapping essential skills to enable access, usability, and co-creation of digital heritage assets.

- Provide targeted up-skilling training for CCSIs, universities, research centers, and creatives. General audiences' educational formats can be also prototyped in the platform, through the embedding of personalized AI-driven learning paths and chatbot implementation.

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- Providing mentorship and cultural project assistance to GLAM operators and CCSIs, to build strategic partnerships, enabling expertise-exchange and co-designing trans-sectoral business plans with experts.

Designing Experiences

1. **Developing protocols and support services to harmonise digitization processes, formats and assets' modes of use.**

Digitization often follows standards disconnected from immediate usability. This gains a particular focus in cultural heritage assets, since their digitalized versions are not traditionally seen as creative assets. RADICI could address this by providing a set of services for CCSIs and non-GLAM operators to engage with digital content and learn how to use it. Key actions include:

- Identifying target stakeholders interested in experimenting by utilizing the project's digital heritage content.

- Mapping digitization requirements and formalizing digitization guidelines, according to the level of detail that might be needed at various stages of creative processes.

- Integrating digitization guidelines with regional, national and high-level digital agendas, to contribute to harmonizing frameworks in matters of digital cultural heritage content usage linked to the specific needs of targeted production sectors.

Insights emerging from each working table and connected strategic areas match RADICI's research questions, highlighting several potential pilots to be developed as a package of demonstrators. These pilots intertwine with each other, establishing an interplay between the three areas and, thus, the whole pool of multi-sectoral expertise informing RADICI's partnership. Concrete actions include a detailed market survey to align research with industry needs, revealing a significant market-research gap in terms of approaching the Digital Cultural Heritage emerging sector. Although it may sound obvious, this is a result that strengthens different approaches to such a gap. Here, Advanced Design provides a lens of anticipation, inviting stakeholders to embrace the prototyping endeavor and navigate together the complexity underpinning the experimentation of trans-sectoral practices. Advanced Design infuses RADICI with scenarios regarding relatively distant futures, inspired by collective dreaming and grounded in pilots, framed here as the embodiment of anticipated narratives resulting from trans-sectoral endeavors.

Next to this, recognizing value in the quality of digitised data, supported by efforts promoting its constant review, depository and repository so that it is taken care of in terms of being searchable, accessible, interoperable. This resonates with the enlivenment put in place whenever the source holding a specific memory lies in a person, a being that is the depository of specific knowledge. When working with digitalised assets, they seem to be perceived as data-as-information, a flat body floating in the cloud. On one side, this strengthens the opportunity to design indexing processes open enough to tap into that tacit, situated, indigenous knowledge, that is rooted in the notion of living heritage. Here, the focus on these dimensions is getting sharper, as they seem to return data-as-information the thickness – namely the context, the entanglements, the original body it once had. Certainly, this opens a

double-sided opportunity: on one hand it invites the development of systems that recognize "new actors" such as heritage citizens, as untapped sources of specific knowledge that is worth preserving; on the other hand, it challenges themes of accountability and credibility, expanding the pool of keepers and inviting the design of processes to share and enlive human knowledge digitally. With data thickness inviting an in-depth exploration, embedding of AI at different stages of the pilots – and the resulting platform, might foster the spotting of unseen patterns among data nuclei, inviting and supporting a transversal exploration, enriched with

5. RADICI: DIGITAL ROOTS BRANCHING OUT TO CULTURAL, LIVING, CREATIVE HERITAGE

RADICI is contributing to the enhancement of Digital Cultural Heritage through a dual strategy. On one side, it is developing an aggregating platform that aims to preserve and disseminate global artistic and cultural content, ensuring open access to heritage for everyone, everywhere. On the other side, it provides a suite of integrated services, referred to as the "Competence Shop", hosted on the same platform. The Competence Shop promotes digital cultural heritage not merely as an archival repository but as a creative and strategic asset capable of generating new forms of value. It targets CCSIs (Cultural and Creative Sectors and Industries), public/private GLAM operators, and researchers, encouraging them to use the platform's available digital content as a foundation for experimentation and the co-creation of new products and services. Particularly, the Competence Shop envisions the possibility to access specific training and upskilling modules designed for GLAMs to shift from their traditional role of keepers to the untapped role of co-creators of value. Additionally, training modules will also be dedicated to CCSIs, to provide them with the tools, i.e. approaches to intellectual property and legal mechanisms among the most urgent, to uptake available digital heritage assets and shape them into new products and services, triggering the co-creation of value and/as meaning in heritage data through their imaginative and transformative power.

By disseminating these early results, RADICI aims to contribute to a shared understanding of how challenges in the emerging trans-sector of Digital Cultural Heritage are evolving—particularly where trans-local, cluster-driven innovation models are called for. RADICI is providing its underpinning partnership with the opportunity to venture on a rhizomatic journey, crossing disciplinary boundaries and branching out to a multi-faceted notion of heritage tout court. With digitalization flowing into cultural heritage – bringing in transformative opportunities and multi-layered challenges, people and communities gain increasing access to it. Here, the figure of the heritage citizen is emerging as a crucial notion of these concluding reflections. As digital turns heritage artifacts into a fluid, shapable matter, and become more accessible and participatory in this form, people will increasingly play a role not solely in preserving and interpreting those artifacts, but most importantly in reshaping them, their meaning, and their memory. It is a form of democratisation of heritage, which could lead to a more inclusive, decentralized model of cultural preservation – one that allows citizens from diverse backgrounds to contribute with their perspectives to the creation and transformation of cultural assets. In this way, heritage is no longer something solely managed by institutions, but a living, rhizomatic community-driven process.

This resonates with the notion of living heritage, a concept that despite the physical or digital nature of the support, it considers people, and communities as holding specific bits of a given memory or knowledge of heritage. Approaching living heritage as a working notion in the Digital Cultural Heritage stresses the importance of those who maintain and pass down

cultural knowledge, including those who interact with and work with it: here, digital and living heritage intertwine, making space for what can be described as creative heritage. As access to heritage content becomes more widespread, creatives will see it as an opportunity for (co)creation, unlocking an in-between space where heritage is not just preserved, but continuously reimagined and reshaped through the lens of digital technologies. Creative heritage is a space that seems to disclose as soon as trans-sectoral perspectives converge, informing integrated value chains (specialized in architecture, design, fashion, publishing) that activate, channel, and re-contextualize digital cultural heritage assets in unexpected settings and experiences. Thus, it might be adopted as an experimental framework, inspiring RADICI's future: a lens to grasp possibilities arising by leveraging on aggregating trans-sectoral ecosystems towards Digital Cultural Heritage.

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