



# Intangible

Digitizing Intangible Cultural Heritage

HANDBOOK  
for  
professionals

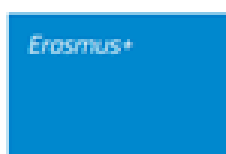


## **INTANGIBLE:**

Digitizing Intangible Cultural Heritage  
amidst the digital shift

## **Handbook for Professionals**

Project Number:  
2021-1-RO01-KA220-VET-000034794





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Authors:

Ioana Baskerville

Adina Hulubaş

Introduction: Coralia Costaş

Text contributions:

Deborah Hustić

Victor Munteanu

Ana-Maria Raţă

Thrasos Tilemachou

Chrysi-Maria Triantafyllou

Editor: Coralia Costaş

DTP: Thrasos Tilemachou

Cover: Cătălin Hriban

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Complexul Muzeal Național „Moldova” Iași

Piața Ștefan cel Mare și Sfânt, Nr. 1, Iași 700028, România

Tel.: 0040 232 218383      Fax: 0332 408166

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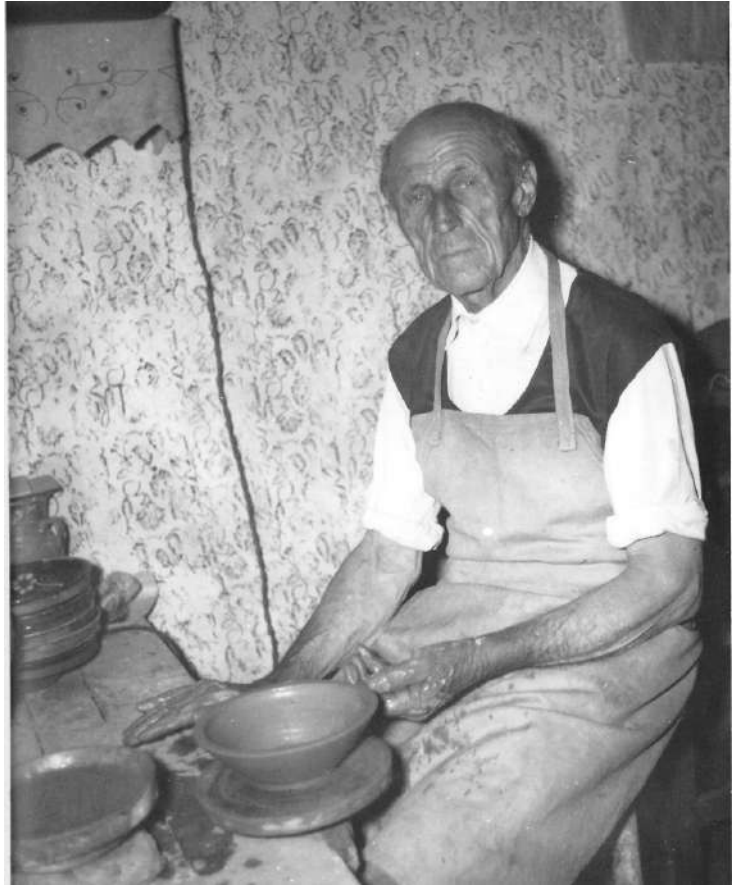
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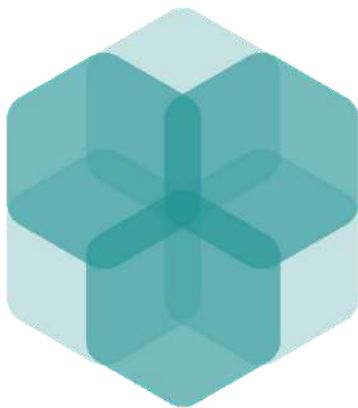
# TEAM



**STANDOUTEDU**



**COMPLEXUL  
MUZEAL  
NAȚIONAL  
MOLDOVA  
IAȘI**



**Innovation Hive**



**Academia Română  
Filiala Iași**



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# INTRODUCTION

The Project “iNTANGIBLE: Digitizing Intangible Cultural Heritage amidst the digital shift” (2021-1-RO01-KA220-VET-000034794) is a strategic partnership in the field of vocational education and training, funded through the Erasmus+ Programme, spanning over a two year-timeframe: January 2022–December 2023.

The project consortium includes one cultural organization as project leader (“Moldova” National Museum Complex of Iași, Romania), one research partner (The Romanian Academy, Iași Branch through the “Alexandru Philippide” Institute of Romanian Philology – the Ethnology Department), one tech organization (Innovation Hive, from Larissa, Greece), one STEAM and digital communication focused partner (RADIONA, from Zagreb, Croatia) and a VET provider (Stando, from Nicossia, Cyprus). The partnership has been brought together to bridge the gap between digital and cultural experts through their input and expertise and the consequent development of relevant Project Results and Training, encompassing innovative elements needed to match the digital shift in the cultural realm.

The elaboration of the present handbook is one of them, and it aims, as the entire iNTANGIBLE project does, to support cultural workers and particularly those working in the field of Intangible Cultural Heritage, develop and enhance their digital competencies so to match the rapid digital shift that has spread into almost everyone’s life during the last decades, particularly in the context of COVID-19.

As pointed out in the specialized literature, during this specific interval digital users in Europe have grown from 81 to 95%, i.e. a much faster rate compared to pre-pandemic times [1], and this affected both professional and personal life.



1. [Europe’s migration to digital services during COVID-19](#) | McKinsey.

# INTRODUCTION

While closed for the public, museums throughout the world facilitated a wide variety of digital initiatives and experiences to keep cultural heritage accessible and maintain relationships with their audiences. This phenomenon of heritage digitization has transformed Europe's cultural resources into crucial stepping stones towards the digital economy. Consequently, considering the importance of heritage and culture to European cohesion and economy, professionals of the field require relevant digital skills and competencies in order to contend with the rapidly advancing pace of innovation.

The most important guidance in terms of ICH digitization is to be found in the Basic Texts of the International Convention for the Safeguarding of the Intangible Cultural Heritage (UNESCO, 2003) [2], which is the reference document for any professional dealing with ICH. Unlike tangible heritage items, intangible heritage is somehow volatile, lacking palpability, while being equally material, equally important.

Due to its ungraspable specificity, ICH is even more challenging as a field of work and that is why it is critical to use digitization methods to achieve its preservation.

Nowadays, technological progress allows user-friendly digitization and digitalization tools that are available to professionals in the field. "Digitization for preservation creates valuable new digital products, whereas digital preservation protects the value of those products, regardless of whether the original source is a tangible artifact or data that was born and live digitally" [3].

Due to the necessity for culture to remain accessible and, as a result, engage the public in new and inventive ways, digitization of cultural heritage has become a main approach used throughout the pandemic and increasingly vital in today's Europe and its cohesion. Moreover this handbook provides, on one hand, tech talents the opportunity to fill gaps from the cultural field and vice versa, professionals in the cultural field the possibility to acquire theoretical knowledge about the digitization of ICH.

2. 1001\_22 E ICH Basic Texts\_COV\_2022.indd (unesco.org)

3. Conway, Peter: "Preservation in the Age of Google: Digitization, Digital Preservation and Dilemmas", in *The Library Quarterly: Information, Community, Policy*, Vol. 80, No. 1 (January 2010), p. 65. <https://doi.org/10.1086/648463>





# INTRODUCTION

The handbook consists of an introduction into the field of ICH, a review of the literature regarding the concepts of digitization and digitalization, then it provides examples at national and at local levels of ICH digitization initiatives. It also includes a synthetic presentation of the answers to the questionnaires that were distributed and interpreted by partners as part of the methodological research, as well as examples of good practices gathered at partnership level.

We are convinced that this handbook will serve as a both ICH and IC&T empowerment tool for the professionals of the concerned fields, involving transfer of knowledge and skills from one domain to another, thus providing a global view of the preservation of cultural heritage as immersed into technological advances and contributing to the development of confidence in the own competences.



# Structure of the Handbook

This handbook is designed to offer clear and accessible steps towards understanding the existing practices and strategies of using the digital technologies for storing, preserving and disseminating of intangible cultural heritage data. Presently, digital technologies are everywhere in our lives, from digital public services to entertainment and daily communication. In the educational sector, the digital approach is more and more used and it generates innumerable possibilities for distance learning and global connections; among the digital educational tools, we can now enjoy MOOCs (Massive open online courses) or e-learning platforms, and expand our knowledge in many fields, no matter where we are.

As it is defined by the 2003 UNESCO Convention, the intangible cultural heritage is however a world where direct social interactions are a key feature. Still, in order to ensure the intergenerational transfer of knowledge as well as the ease of access from a specialist's point of view, recordings on various supports and media have become particularly useful. How is then mediated communication relevant for preserving the living dynamics of intangible cultural heritage? In his influential book about the changes that the Internet brought in our culture, Hubert Dreyfus acknowledges the inferiority of digitally mediated communication as opposed to face-to-face communication [4].

In conclusion, our biggest challenge in this project was to find appropriate ways to find the relevant examples of ICH digitization in which transforming the living heritage into digital objects would not mean overshadowing the relationship of data with living heritage reality and its permanent transformation. It means that we had to find creative ways to maintain as much as possible information about the complex embodied culture, as Diana Taylor suggested [5]. A video recording of a ritual performance is not the actual ritual performance, and thus we acknowledge the tension that may appear between the digital archive and the living heritage.

We have to emphasize that, even though in the first set of recommendations for the protection of folklore and traditional culture (1989), UNESCO was pointing out the importance of documentation and preservation of documents about the topic, the 2003 Convention mechanism and the operational directives that accompany the implementation are more drawn to encourage the embodied performance of ICH.

This newer strategy does not leave in the past the early preservationist philosophy, but would rather determine a working complementarity. An ICH inventory is meant to go beyond written or recorded texts, and offer as much as possible a glance into the oral, the non-verbal, the "here" and "now" that the heritage bearers are transmitting to a live audience.

4. Dreyfus, Hubert: *What Computers Can't Do: The Limits of Artificial Intelligence*, Harper & Row, 1972, *passim*.

5. Taylor, Diana: *The Archive and the Repertoire. Performing Cultural Memory in the Americas*, Duke University Press, 2003, *passim*.

# Structure of the Handbook

The importance of storing such a type of “living” data not just for the internal mechanism of living heritage safeguarding, but also for supporting and inspiring creative cultural production will be further explained in the 5th module of this Handbook.

In order to achieve this goal, the project team devised 5 modules that are intended to introduce cultural professionals, museographers, archivists, IT specialists, cultural management experts, students of cultural heritage studies in the topic of ICH digitization, inviting all those interested to join the journey from the past to the future of living heritage digital preservation.

Since the concept of intangible cultural heritage is rather new, being devised 20 years ago by UNESCO within the framework of the 2003 Convention, the **first module** provides a comprehensive presentation of its history and features, as well as examples of its various domains collected purposefully from the four countries represented in this project.

The **second module** of our handbook starts with the steps undertaken in terms of preservation of documents pertaining to traditional culture, ever since the conventional folklore archives, which represent the inception of storing this particular type of information content, long before the concept of *intangible cultural heritage* was drafted.

If old folklore archives had working protocols and technical means that may seem primitive compared to digital

preservation repositories, it is important to realize that their internal indexing systems and traditional metadata have often been translated and adapted into the new digital formats.

The module also presents influential strategies and plans for digitizing cultural heritage at international level, as well as relevant examples of projects that highly determined the state of the art in the field, and could motivate aspiring cultural professionals to further contribute to the continuous progress thereof.

A very important rule established under the 2003 UNESCO Convention is the creation of national ICH inventories, which are left at the intention and specific prerogatives or strategies of each state-party to the Convention.

Though UNESCO does not imply that these inventories should be analogue or digital, the working philosophy of ICH safeguarding indirectly suggests the need of a flexible, updatable system of ICH inventorying, a system that should be easily adjusted and enriched, based on the new feedbacks of the communities of practice and performance of ICH.

The **third module**, dedicated to the topic of national systems of ICH inventorying is therefore meant to provide suggestions and examples of good practices as for how this task should be achieved using digital technology that allows for the accomplishment of the dynamic and engaging goal of updating ICH databases.



# Structure of the Handbook

Before being stored and classified by means of official platforms, ICH is first and foremost functioning at the local level, where it is created, performed, made, produced, and received by the members of one specific community. ICH is about the people, ICH is for the people, ICH is by the people. Therefore, the **fourth module** is making room for this very relevant reality, the people, and offers strategic suggestions of how a plan of digital preservation of ICH should be designed with the intention of preserving local ICH in such a way that humans are not turned into mere digital objects.

Starting from our strong belief that the ICH regime should be developed also independently from the bureaucratic state actors, the **fifth module** is an introduction to the vast possibilities of employing digital documents of ICH as a great cultural resource and a stimulus for creativity of cultural professionals within and beyond the cultural sector. The module intends to encourage cultural activists, proponents of the new museology or open education to fully use the potential of digitized and digitalized ICH.

**Annex 1** of the volume provides generic presentations of the ICH landscape in the four countries, including information about the implementation of the UNESCO 2003 Convention, national-level frameworks for ICH management (national law/s on safeguarding ICH, national bodies of experts, other government-based stakeholders involved in documenting and archiving of national ICH), the higher

education system offering degrees connected with ICH research, and also best practices in the field of ICH digitization.

Issued from the research undertaken within the iNTANGIBLE project, **Annex 2** is an extensive list of good practices and projects of ICH digitization implemented in Europe and beyond.

Our perspective on ICH digitization and digitalization is not intended to bring about the loss of the individual and personal touch on ICH performing, but to enable the rightful preservation of the ownership of ICH, along with a better access to it. Training professionals in the field, helping with finding the right inspiration and tools, is the most important purpose of this handbook.



# MODULES

**Module 1:**  
*What is ICH?*  
*Key terminology*  
*in the field*



**Module 2:**  
*The Digitization of*  
*Intangible Cultural*  
*Heritage.*  
*Background,*  
*strategies, best*  
*practices*



**Module 3:**  
*ICH digitization*  
*programs and*  
*projects at the*  
*national level*



**Module 4:**  
*How do I plan and*  
*implement an ICH*  
*digitization*  
*program/project at*  
*the local level?*



**Module 5:**  
*How can I use my*  
*ICH digitization*  
*skills?*

# MODULE 1

## WHAT IS ICH? KEY TERMINOLOGY IN THE FIELD

### 1.1. Intangible cultural heritage

(often abbreviated ICH) means the traditional knowledge that has been passed on to us generation after generation. It includes practical observations on various aspects of life, old craft techniques, folk literature, magic thinking and performances. The 2003 Convention on Safeguarding Intangible Cultural heritage issued by UNESCO mentions five domains for what the general public calls “folklore”, acknowledging it is in fact much more than that:

#### **a. oral traditions and expressions, including language as a vehicle of the intangible cultural heritage**

E.g. *Thessalian dialect from Greece*. People from Northern Greece, Thessaly, especially the elderly, and the rural population still use an Aeolic dialect that results in ‘cut’ words, meaning that the last vowels are not pronounced. They simplify everyday communication, making the words shorter, and more immediate. It is a cultural code that implies belonging to a certain type of heritage and it allows social cohesion among the members of the community. Moreover, traditional knowledge is better passed on in Thessalian dialect, since it implies a safe, familiar environment.



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## WHAT IS ICH? KEY TERMINOLOGY IN THE FIELD

### b. performing arts

E.g. *Căluș dance*. Found in the South of Romania, mostly in Oltenia, the Căluș ritual features a series of games, skits, songs and dances, and was enacted by all-male Călușari dancers with the accompaniment of two violins and an accordion. Young men used to be initiated into the ritual by a master-dancer who had inherited the knowledge of charms and the dance steps from his predecessor. Groups of Călușari dancers, sporting colourful hats, embroidered shirts and trousers adorned with small jingling bells, perform complex dances, which combine stamping, clicking of the heels, leaping and swinging of the legs. According to tradition, groups of dancing and chanting Călușari, who were thought to be endowed with magical healing powers, went from house to house, promising good health and prosperity to villagers. Until today, Călușari meet to celebrate their dancing and musical prowess on Whit Sunday.



© Romanian National Heritage Institute



# MODULE 1

## WHAT IS ICH? KEY TERMINOLOGY IN THE FIELD

### c. social practices, rituals and festive events

E.g. *The Festivity of Saint Tryphon and the Kolo (chain dance) of Saint Tryphon*, traditions of Croats from Boka Kotorska (Bay of Kotor), Croatia. The element was inscribed in 2022 on the UNESCO Representative List of Intangible Cultural Heritage of Humanity. It defines the identity of the people coming from Kotor, where Saint Tryphon has been worshiped since 809, the year when they have been brought to the bay. Before mass on the Saint's Day, the 3rd of February, a boy of young age called the "Little Admiral" recites praise to Saint Tryphon. A chain dance is performed after religious service in front of the church. The members of the Boka Navy are dressed in traditional uniforms and dance the Kolo of St. Tryphon. On the following two months the bearers meet in every city in which the Boka Navy is situated, to celebrate the "Boka Nights". The general public is thus made aware of the cultural heritage of Boka.



<https://min-kulture.gov.hr/nematerijalna-dobra-upisana-na-unesco-ov-reprezentativni-popis-nematerijalne-kulturne-bastine-covjecanstva/st-tryphon-s-day-festivity-and-kolo-of-st-tryphon-traditions-of-boka-croats-in-croatia/23193>



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## WHAT IS ICH? KEY TERMINOLOGY IN THE FIELD

### d. knowledge and practices concerning nature and the universe

E.g. *Gold panning in Transylvania*. The active practice is found in the most important geographical region for gold extraction in Romania. It is called the auriferous quadrangle, virtually drawn by the following localities on the map: Brad – Săcărâmb – Zlatna – Baia de Arieș. A bucket of sand from the river bed is washed thoroughly, until the water becomes clear. The sand is then poured in *șaitroc* (the pan is usually made out of sycamore wood, but plastic shovels are also used today), and winnowed repeatedly, until pebbles and mud are removed. The gold flour is heavy and it would stay on the bottom. Knowledge and practices concerning nature can assure environmental sustainability. Wood crafters make pans, experimented gold prospectors offer training, people earn some income and tourism in the area develops – all these without harming the natural setting.



*Gold panning in Stănița – Hunedoara*  
© Georgeta Dulgheru

# MODULE 1

## WHAT IS ICH? KEY TERMINOLOGY IN THE FIELD



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### e. traditional craftsmanship

E.g. *Basket weaving in Cyprus*. In the beautiful community of Choirokitia a renovated old traditional house of 1850 was converted into a Basket Weaving Workshop and Museum. The Basket Weaving Museum is a local museum in the village of Ineia in the district of Paphos and is one of the many regional museums in Cyprus. The site houses a large collection of basketry items, and traditional handicrafts with baskets and weaves, preserving and presenting to tourists the tradition of the village. A second use of the Basket is for the 'Groom and Bride' clothes-changing tradition. According to the tradition, the family of the groom and bride must dance around them holding a traditional basket with their clothes. This ritual blesses the rest of the wedding process.

All these types of elements are intangible, if we compare them with the heritage we all know by seeing and touching: monuments, natural sites like Danube Delta or mere objects, such as a wooden spoon that we are not told anything about. Stories and the know-how revolving around active folk manifestations are ICH.



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## WHAT IS ICH? KEY TERMINOLOGY IN THE FIELD

### 1.2. Living heritage

refers to *active* practices and beliefs. The major difference between the term “folklore” and intangible cultural heritage lies in the fact that the latter only deals with customs, crafts and performances that are *in current use*. For example, a folklorist may study underground hovels that were built up until mid-19th century in Romania, but an expert in intangible heritage culture can only find vernacular architecture in his/her fieldwork. In this case, living heritage consists in clay/ wooden houses that people still live into. Efforts are put into transmitting traditional building techniques and preservation methods of the existent houses, and never into revitalizing constructions that people stopped building decades ago.

### 1.3. Community

One of the main pillars of working with ICH is to involve the community that recognizes certain elements as part of their local identity. In old rural societies, members of the community would notice immediately when strange clothes or customs would enter their lives and efforts were made to contain them. Nowadays, the community consists in bearers of traditional knowledge, individuals or groups that received the cultural information from their families and crafts masters and wish to pass it on. The community is composed of all the stake-holders involved in maintaining the local intangible heritage. For example, Batana boat from Rovinj was saved from oblivion by the local enthusiasts who founded an association.

Craftsmanship methods continued to be handed down by families, and associated practices such as the old local dialect and traditional songs were safeguarded through community efforts. See more: <https://www.batana.org/en/home>



# MODULE 1

## WHAT IS ICH? KEY TERMINOLOGY IN THE FIELD

### 1.4. Bottom-up approach

Deriving from community-based actions, the approach starts from this individual level and works its way up to local authorities, experts and national decision makers. Thus, safeguarding of intangible cultural elements is efficient, since it responds to the actual needs of the bearers. People and not specialists in ethnography decide what matters to them most, and how they can achieve sustainable goals through ICH. For example, in the village of Schitu Stavnic – Iași, Romania, there is only one potter left from about 50 that performed this craft half a century ago. It is he who asked the local County Centre for the Conservation and Promotion of Traditional Culture that several incentives are necessary to support the continuation of pot-making: transportation vouchers to get his vessels to fairs, fire wood for properly burning the ceramics, visibility of his craft in various contexts (school extracurricular activities, public events, summer camps workshops etc.) Only by consulting the bearers of ICH, whether they are individuals, groups or entire communities, safeguarding measures can have fruitful results.



*Daniel Irim, the last potter from Schitu Stavnic*

### 1.5. Safeguarding

The term is preferred to conservation, since ICH is about *living heritage*, active customs, practices and beliefs. The 2003 UNESCO Convention for the Safeguarding of Intangible Cultural Heritage and its Operational Directives mention that museification and freezing of the elements are not suitable for actions designed to raise awareness on the great value of traditional knowledge. Proper safeguarding involves both socio-economic objectives and educational agenda in order to successfully transmit cultural information. The key safeguarding measures are inventorying, presenting information on ICH in a systemic way, awareness raising, encouraging people to understand and appreciate ICH, and revitalization, strengthening of endangered practices.

## WHAT IS ICH? KEY TERMINOLOGY IN THE FIELD

### 1.6. In conclusion, ICH is more than:

**folklore:** intangible cultural heritage deals with present customs, practices and superstitions, which are acknowledged by individuals and communities who participate in their transmission and define themselves through these elements. Folklore also implies lost beliefs and crafts, traditional knowledge that no longer proved useful in the contemporary socio-economic context;

**tangible:** The World Heritage Convention from 1972 mentions natural and/ or cultural sites of outstanding universal value. There is no hierarchy, however, in appreciating cultural heritage, and the resulting objects are part of a context that involves social transmission and acknowledging, spiritual information revolving around the making, economic benefits, and educational purposes. Tangible heritage is often defined by authenticity, thus restricting change, whereas ICH is constantly evolving and adapting to people's needs;

**nature:** in 1992, the concept of “cultural landscape” appeared as a necessity to define the interdependent relationship between nature and culture, according to The World Heritage Convention. It illustrates “the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment, and of successive social, economic and cultural forces, both external and internal”. For example, Roşia Montană Mining Landscape, located in the Metalliferous range of the Apuseni Mountains in the west of Romania, features the most significant, extensive and technically diverse underground Roman gold mining complex known at the time of inscription.

Mining on the site was also carried out between medieval times and the modern era. The ensemble is set in an agro-pastoral landscape which largely reflects the structures of the communities that supported the mines between the 18th and early 20th centuries.

© Radu Sălcudean, World Heritage Convention



# MODULE 2

## THE DIGITIZATION OF INTANGIBLE CULTURAL HERITAGE. BACKGROUND, STRATEGIES, BEST PRACTICES

### DIGITAL PRESERVATION

is “the active management of digital content over time to ensure ongoing access” (according to Library of Congress of the U.S.A.)

- Digital preservation – not just back-ups, not just storing, not just open-access
- From physical items to born-digital items OR from analogue format to digital format



Galleries, Libraries, Archives and Museums (GLAM) or “memory institutions” are the main places where cultural heritage is collected, organized, stored, preserved, and disseminated. During the last decade, great epistemic changes brought by the digital technology in the preservation methodology employed by GLAM institutions determined new and complex developments, both in terms of IT infrastructure and of staff training. The broader use of digital technology for GLAM institutions to achieve their preservationist goals is perceived as a revolution that should be acknowledged and prepared. Of course, this revolution does not imply starting over with entirely new preservation strategies and models, but is approached as a step-by-step adaptation of the already existing archiving strategy that defines the aim of GLAM. This module focuses on how the existing administrative framework and working protocol of GLAM should be used as an asset for setting up the new digital format.







## THE DIGITIZATION OF INTANGIBLE CULTURAL HERITAGE. BACKGROUND, STRATEGIES, BEST PRACTICES

### 2.1. Digitization +/- digitalization of ICH?

#### **DIGITIZATION ("made digital")**

According to the Oxford English Dictionary, digitization is "the process of changing data into a digital form that can be easily read and processed by a computer". For our topic, digitization consists in transforming ICH content originally created and stored as a physical, analogue (non-digital) format to a digital format. Most of the GLAM institutions collect information that are created in the physical conventional environment, and only at a later moment digitize it.



#### **WHAT type of analogue format is specific to ICH archiving?**

- handwritten papers, mechanical typewriter documents, photographic prints, audio cassettes, video tapes, etc.

For the last few decades, ICH archiving experts have been emphasizing the existence of a long waiting list of analogue materials to be digitized.

- Why digitizing analogue documents? Because of the ephemeral nature of analogue materials in traditional archives and also because of the difficulties in accessing them as often as necessary.

# MODULE 2

## THE DIGITIZATION OF INTANGIBLE CULTURAL HERITAGE. BACKGROUND, STRATEGIES, BEST PRACTICES

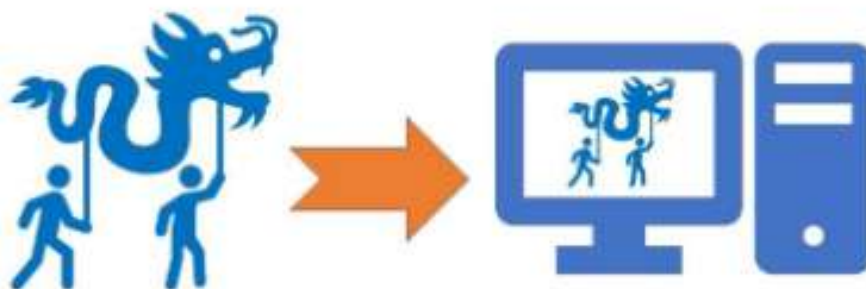
### DIGITALIZATION ("born digital")

Though in some contexts, digitalization is used as a synonym with digitization, the more exact, content-specific meaning of digitalization involves directly using digital technology to record, document, and safeguard ICH.

- Embracing the digital technology's potential for collecting ICH data and identifying communities of performers, enables new improved ways of disseminating, transmitting and learning about ICH.
- The tendency nowadays is towards a new "philosophy" of ICH storing and using archival information: more collaborative, interactive, sustainable.



DIGITIZATION



DIGITALIZATION

### THE DIGITIZATION OF INTANGIBLE CULTURAL HERITAGE. BACKGROUND, STRATEGIES, BEST PRACTICES

#### 2.2. From paper to cloud. From traditional folklore archives to the digital revolution

##### What is an ARCHIVE?

It is a collection of information on a specific or a broader array of topics that are stored and organized for long-term preservation and use. Sometimes, this includes also the institutional framework associated with the collection and a physical space where the archival items are stored.

The ARCHIVE is not necessarily a “place” of the past, a mere storage of information belonging to a more or less distant past.

FOLKLORE itself is not necessarily a product of the past, as it also involves a reflection or a proof of the present.

In many European countries, the folklore archive (with regional branches or not) has been the main institution for the documentation, storing and researching of traditional culture since the end of the 19th century. Given the early times of their establishment and the existing resources for drafting information, folklore archives are to a large extent formed of handwritten manuscripts. Additionally, and on a smaller scale, they host depositories of audio and video recordings, drawing and photographs.

# MODULE 2

## THE DIGITIZATION OF INTANGIBLE CULTURAL HERITAGE. BACKGROUND, STRATEGIES, BEST PRACTICES

*"Archival" memory exists as documents, maps, literary texts, letters, archaeological remains, bones, videos, films, CDs, all those items supposedly resistant to change. Archive, from the Greek, etymologically refers to "a public building", "a place where records are kept". From arkhe, it also means a beginning, the first place, the government. By shifting the dictionary entries into a syntactical arrangement, we might conclude that the archival, from the beginning, sustains power. Archival memory works across distance, over time and space; investigators can go back to reexamine an ancient manuscript, letters find their addresses through time and place, and computer discs at times cough up lost files with the right software. [6]*



The importance of folklore archives for documenting ICH is given by the fact they manage to provide the proofs of the continual dynamics of living heritage, connecting therefore past and present. Written texts allow scholars to trace literary traditions, sources, and influences. The folklore archive, as any archive, contains materials that endure and that find relevance in historical studies, providing background for phenomena of the present.

6. *Ibidem*, p. 18.



### THE DIGITIZATION OF INTANGIBLE CULTURAL HERITAGE. BACKGROUND, STRATEGIES, BEST PRACTICES

#### **A regional folklore archive in Romania: AFMB – the Folklore Archive of Moldavia and Bucovina**

- established in 1970, within the Department of Ethnology of the “Alexandru Philippide” Institute of Romanian Philology at the Romanian Academy – Iasi Branch;
- the third largest folklore archive in Romania;
- contains around 300.000 documents, created since the 1930s: handwritten fieldwork notes, magnetic tapes of sound recordings, video tapes, photography on celluloid;
- a part of the archive is digitized: the magnetic tapes were transferred to mp3 files and audio CDs;
- as in the majority of Romanian folklore archives, the digitization process is still at the very beginning.

#### **An entirely digitized typical folklore collection: The National Folklore Collection (NFC) of Ireland**

- ca. 2 million manuscript pages, ca. 500,000 index cards, ca. 12,000 hours of sound recordings, ca. 80,000 photographs, ca. 1,000 hours of video material

<https://www.duchas.ie/en/info/cbe>

- inscribed in the UNESCO Memory of the World Register.





# MODULE 2

## THE DIGITIZATION OF INTANGIBLE CULTURAL HERITAGE. BACKGROUND, STRATEGIES, BEST PRACTICES

### **The first computer-readable folklore archive: University of Detroit**

It contains over 42,000 folklore traditions, gathered between 1964 and 1993

It was founded by Professors Frank M. Paulson and James T. Callow in 1964.

[The James T. Callow Computerized Folklore Archive | University of Detroit Mercy Libraries \(udmercy.edu\)](http://www.udmercy.edu/udmercy/folklore/)

### **An initiative for digitally connecting separate folklore archives: SAMLA (National Infrastructure for Cultural History and Tradition Archives)**

- an infrastructure project aiming to digitize all the main ethnological and folkloristic archives in Norway and to provide one search engine for accessing their holdings
- contains three tradition archives: The Folklore Archive of the University of Oslo, The Norwegian Ethnological Research (NEG) at the Norwegian Museum of Cultural History, and The Ethno-Folkloristic Archives at the University in Bergen
- the purpose of the digital archive is to open for more research on continuities and change within Norwegian, as well as Nordic and European cultural history. The digital database will provide advanced search possibilities across institutions and material categories. In addition, the project will be coordinated with similar digital infrastructures in other countries.

<https://samla.w.uib.no/about-samla/>



### THE DIGITIZATION OF INTANGIBLE CULTURAL HERITAGE. BACKGROUND, STRATEGIES, BEST PRACTICES

#### An early anthropological archive: The U.S. National Anthropological Archives

- began as the Archives of the Bureau of American Ethnology (BAE), the Smithsonian Museum's first research bureau;
- founded in 1879 by John Wesley Powell to promote anthropological research and to serve as the permanent repository for manuscripts and photographs concerning American Indians that had been collected earlier by the US geographical and geological surveys of the western United States;
- in 1965, the BAE merged with the Smithsonian's Department of Anthropology and its archives became the archives of the Smithsonian Office of Anthropology;
- from documenting the American culture, it started to document cultures throughout the world;
- in 1968, the archive was renamed "the National Anthropological Archives";
- the collections include more than 8,500 linear feet of manuscripts (2.5 km), 635,000 ethnographic photographs (including some of the earliest images of indigenous people worldwide), 21,000 works of native art, more than 11,000 sound recordings, and more than 8 million feet of original ethnographic film and video.



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*Another reason why we collect so much ethnographic material is because we're committed to preserving everything an anthropologist creates, plus items that illuminate his or her public career and private life. In addition to common ethnographic materials such as fieldnotes, diaries, photographs, sound recordings, and moving images, we also strive to collect lecture notes and class notes, grant applications, manuscript reviews, editorial business, personal and professional correspondence, and personal diaries. As a consequence, we not only collect ethnography, but materials that could be used to produce biographies of American anthropologists. [7]*

### An open digital repository of anthropological materials: Registry of Anthropological Data Wiki

- a project conducted by the American Anthropological Association;
- a resource for anthropologists and any other researchers interested in culture, history, language, and human life in general;
- it represents a wide-ranging list of fieldnotes, ethnographic source materials, and data in countless digital and physical archives, produced by scores of anthropologists over the last century;

[https://anthroregistry.fandom.com/wiki/Registry\\_of\\_Anthropological\\_Data\\_Wiki](https://anthroregistry.fandom.com/wiki/Registry_of_Anthropological_Data_Wiki)



7. Leopold, Robert: "The second life of ethnographic fieldnotes", in *Ateliers du LESC*, 2008: <https://journals.openedition.org/ateliers/3132>.



## THE DIGITIZATION OF INTANGIBLE CULTURAL HERITAGE. BACKGROUND, STRATEGIES, BEST PRACTICES

### FOLKLORE ARCHIVE METADATA

**METADATA** (metainformation) = data that provides information about other data

The organization and identification of data in a folklore archive is of utmost importance, as it is in any archive or any GLAM institution. Traditionally, in a folklore archive, the holdings are organized following the thematic-typological criterion and complying with the systematization imposed by the history of the discipline: folklore texts according to the literary criteria of genres (narrative, lyrical and dramatic), ethnographic information about various aspects of folklife (architecture, occupations, handicrafts), family and calendric rituals and so on.

The traditional indexing system of analogue folklore archives is a mandatory task not just to organize the material in such a vast repository of information, but also and most importantly for the sake of easy retrieval. The early projects of classic folkloristics inspired the emergence of different categories of metadata. One of the main purposes for folklore collecting at the beginning of folkloristics as a professional field of study, which was the historical-geographical and comparative endeavor motivated the organization of folktales collected either from old documents or newer collections according to place and content. The classificatory system of the world's folk narratives devoted to the assembling of the international folktale typology which was a global project of drafting local, regional, national typology of tales, of narrative types and motifs. Narrative folklore scholars created specific systems for ordering large masses of tale material according to genres, actors and incidents. The resulted classification was the international catalog of the folktale ATU (Aarne/Thompson/Uther) – after the names of the main scholars who devoted their careers for managing such a complex project at different times of the last century, an endeavor that continues today.

Identification details of the magnetic tape		Ethnological category	Title of the material	Type of performance (sung, narrated, recited)	Place and date of collecting	Collected by	Informant
Nr. materialului	Nr. pânzei	Genul	TITLUL	Cîntat, povestit, recitat	Locul și data înregistrării	Cules de:	Informator
74 I 15		Obiceiuri	De Paști	povestit	Indrileari febr. 1972	Lucia Berdan Lucia Cîșeș	Năstăsă C. Gegea
74 I 16		Indelet-nicuri	Albinașii, găsit	-	-	-	-
74 I 17		Linic coborât	Prin cel verde de visinel	cîntat	Reghiu febr. 1972	-	Namă Neacșa
74 I 18		-	Trece Ios Căciua călare	-	Reghiu febr. 1972	-	Udrea Stan
74 I 19		-	Moș ambliu de coborât	-	-	-	-
74 I 20		-	-	-	-	-	-
74 I 21		-	„Trecuta” de la răi	-	-	-	Beaus Toader
74 I 22		Credințe	larba fierului s.a.	povestit	Corbata sept. 1972	Lucia Cîșeș	Buța Silvia

The Folklore Archive of Moldavia and Bucovina (AFMB) catalogue for storing audio recordings

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Another type of massive systematization and visualization of folklore data that inspired eventually the use of the digital technology in the folkloristics' works and the careful drafting of metadata systems were the cartographic projects. The national or regional folklore atlases, drafted since the mid of the last century, generated a fervent work of compiling information of traditional culture in many European countries in a way that would showcase geographical distribution. The few such projects that are still continuing today at a smaller scale and concentrated on specific topics are using digital mapping programs.

### From “pen and pencil” cataloguing to digital metadata

The folklore taxonomies of the 20th century built up the expertise of “pen and pencil” cataloguing which was basically creating metadata by handwriting. Transferring this physical metadata system into the digital world did not profoundly change the main purpose of any metadata strategy, i.e. the need to establish the relationship (the hierarchy) between different categories of “objects” in a folklore collection. For example, the AFMB uses two parallel indexing systems: a geographical and a thematical one. Other folklore collection may also employ the chronological indexing.



*The card division of the Library of Congress (1920s)*

[https://upload.wikimedia.org/wikipedia/commons/f/f0/Card\\_Division\\_of\\_the\\_Library\\_of\\_Congress\\_3c18631u\\_original.jpg](https://upload.wikimedia.org/wikipedia/commons/f/f0/Card_Division_of_the_Library_of_Congress_3c18631u_original.jpg)



### THE DIGITIZATION OF INTANGIBLE CULTURAL HERITAGE. BACKGROUND, STRATEGIES, BEST PRACTICES

The most frequently used metadata system for GLAM institutions is the **Dublin Core**, also known as the **Dublin Core Metadata Element Set** (DCMES), which is a set of fifteen main metadata items for describing digital or physical resources. The Dublin Core Metadata Initiative (DCMI) is a project of the Association for Information Science and Technology (ASIS&T), a not-for-profit organization.

1. **Contributor** – "An entity responsible for making contributions to the resource".
2. **Coverage** – "The spatial or temporal topic of the resource, the spatial applicability of the resource, or the jurisdiction under which the resource is relevant".
3. **Creator** – "An entity primarily responsible for making the resource".
4. **Date** – "A point or period of time associated with an event in the lifecycle of the resource".
5. **Description** – "An account of the resource".
6. **Format** – "The file format, physical medium, or dimensions of the resource".
7. **Identifier** – "An unambiguous reference to the resource within a given context".



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8. Language – "A language of the resource".

9. Publisher – "An entity responsible for making the resource available".

10. Relation – "A related resource".

11. Rights – "Information about rights held in and over the resource".

12. Source – "A related resource from which the described resource is derived".

13. Subject – "The topic of the resource".

14. Title – "A name given to the resource".

15. Type – "The nature or genre of the resource".

[https://en.wikipedia.org/wiki/Dublin\\_Core](https://en.wikipedia.org/wiki/Dublin_Core)



## THE DIGITIZATION OF INTANGIBLE CULTURAL HERITAGE. BACKGROUND, STRATEGIES, BEST PRACTICES

**METADATA:** can be stored either **internally**, in the same file or structure as the data (called embedded metadata), or **externally**, in a separate file or field from the described data. A data repository typically stores the metadata detached from the data but can be designed to support embedded metadata approaches.

**Internal storage** means metadata always travels as part of the data they describe; thus, metadata is always available with the data, and can be manipulated locally.

**External storage** allows collocating metadata for all the contents, for example in a database, for more efficient searching and management.





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### Digital scholarship, digital humanities, computational folkloristics

According to a report drafted by the American Council of Learned Societies, “digital scholarship” means:

- A. Building a digital collection of information for further study and analysis;
- B. Creating appropriate tools for collection-building;
- C. Creating appropriate tools for the analysis and study of collections;
- D. Using digital collections and analytical tools to generate new intellectual products;
- E. Creating authoring tools for these new intellectual products, either in traditional forms or in digital form [8].

In folkloristics, the emergence of the digital tools is not reduced to building and preserving information, but also extends to computer-assisted analysis of digital documents, the practice of digital fieldwork, which is the study of online communities and digitally mediated social environments, digital curatorial approaches to collections, etc. The growth of social media, of broad online communities, of various Internet databases, the availability of previously hard to access resources, the possibility of digital analysis of large datasets, the fast and efficient searching engines of digital data, the possibilities of digital mapping, the new 3D embedding techniques open so many paths to folklore research.

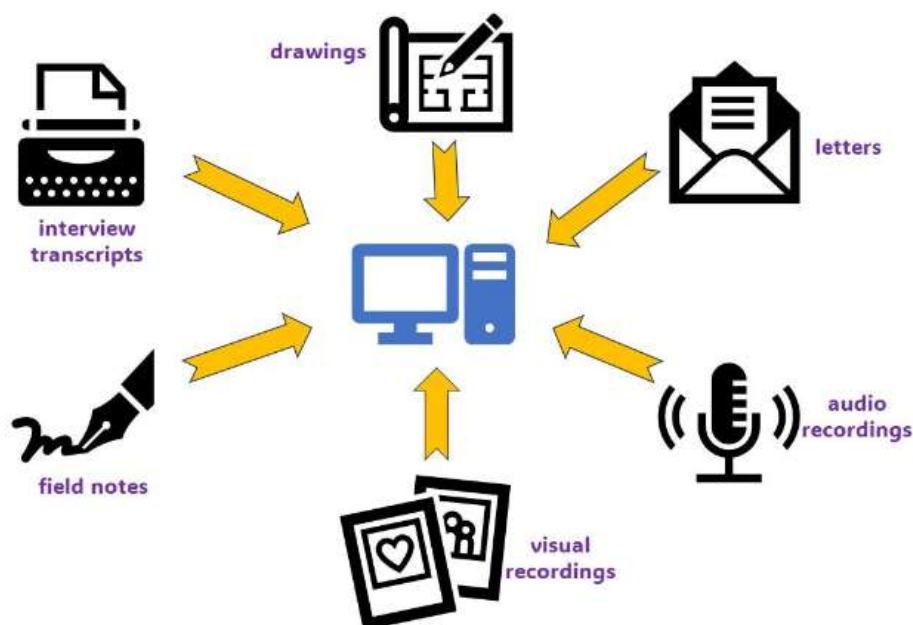
8. Courant, Paul N.; Fraser, Sarah E.; Goodchild, Michael F.; Hedstrom, Margaret; Henry, Charles; . Kaufman, Peter B.; McGann, Jerome; Rosensweig, Roy; Unsworth, John; Zuckerman, Bruce: “Our Cultural Commonwealth: The Report of the American Council of Learned Societies Commission on Cyberinfrastructure for the Humanities and Social Sciences”. American Council of Learned Societies, 2006, [www.acls.org/uploadedFiles/Publications/Programs/Our\\_Cultural\\_Commonwealth.pdf](http://www.acls.org/uploadedFiles/Publications/Programs/Our_Cultural_Commonwealth.pdf), p. 7.





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#### WHAT DO WE DIGITIZE IN THE ICH RESEARCH?

As identified by Timothy Tangherlini, an expert in computational folkloristics, there are four areas for "the digital" that could be game-changing in the field of folklore studies [9]:

- Collecting and archiving;
- Indexing and classifying;
- Visualization and navigation;
- Analysis.

In order for the digital archiving to achieve its full potential, it is important for the "digital objects" to ensure that cross-platform readability, to be retrievable, portable, sharable.

Digital technologies have brought about new possibilities and frameworks for the preservation, organization, and visualization of cultural heritage information. The way data is processed by these technologies has required a deeper understanding of concepts such as the archive, content, and context. The new digital world as a space of multidimensional databases allows for a process of permanent reconfiguration of our cultural sector.

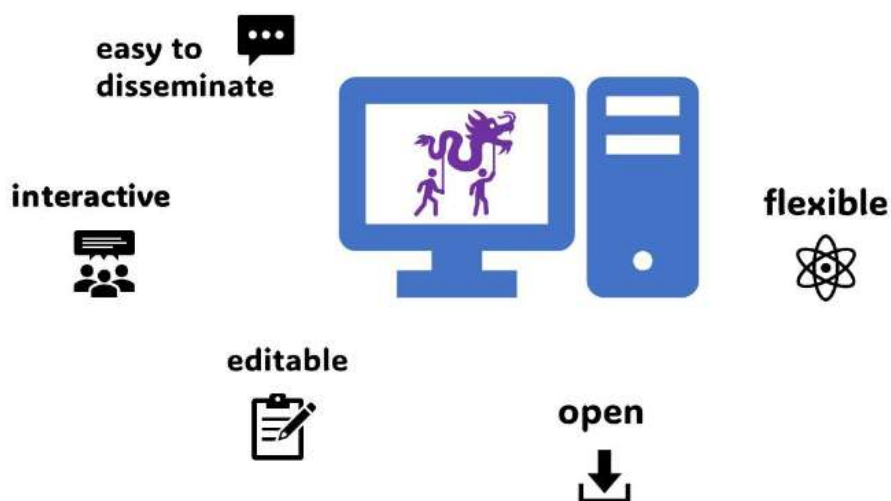
9. Tangherlini, Timothy T.: "The Folklore Macroscopic: Challenges for a Computational Folkloristics", in *Western Folklore*, 72 (1), 2013, p. 8.

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**We all need to create our own personal digital archive...**

Learning how to create digital archives in our professional environment could also motivate us to employ the free and user-friendly tools for digitizing and organizing the newly created digital objects in our personal life. The simplest collection that we may create corresponds to a physical collection of a library or an archive; we can archive photographs and videos of our important life-events, cherished messages for our loved ones, quotations from books we like, etc. Creating such a personal new collection could be similar to creating a blog or a Facebook album.



The advantages of a digital object

*Memory as a collective act is evident in our daily experiences with computers, which do make their memory seem – against physics – permanent and ubiquitous. If things remain now, it is not because digital memory is more robust than paper; the opposite is true. Silicon degrades far more quickly than paper; websites – even seemingly as solid and permanent as geocities – disappear. Clouds are clouds: mercurial mixtures of vapor, liquid and solid. Despite this, digitization can be considered a form of saving because it preserves content through a process of reformatting: a reading, which is writing elsewhere. All computers read by writing elsewhere... [10]*

10. Chun, Wendy Hui Kyong: *Programmed Visions: Software and Memory*, Software Studies, Cambridge, MA: MIT Press, 2011, p. 18–19.

## THE DIGITIZATION OF INTANGIBLE CULTURAL HERITAGE. BACKGROUND, STRATEGIES, BEST PRACTICES

### 2.3. European projects and recommendations

The EUROPEAN COMMISSION:

Cultural Heritage has been constantly present in EU policies, the trend being towards a European digital heritage.

"Digital technologies provide new opportunities to preserve cultural content and to make cultural heritage more accessible to all audiences. Museums and cultural organizations that embrace technology are able to offer innovative visitor experiences, as well as let the public access exhibitions remotely and see material that is not on display." [11]

**Institutional framework:** The European Commission's Directorate-General for Communications Networks, Content and Technology (CNECT) is in charge of policy, coordination and funding actions to support Member States' digitization and online access to cultural material and digital preservation.

#### **European Union Recommendations:**

"The online accessibility of cultural material will make it possible for citizens throughout Europe to access and use it for leisure, studies or work. It will give Europe's diverse and multilingual heritage a clear profile on the Internet, and the digitisation of their assets will help Europe's cultural institutions to continue carrying out their mission of giving access to and preserving our heritage in the digital environment" (The Commission Recommendation of 27 October 2011 on the digitisation and online accessibility of cultural material and digital preservation, 2011/711/EU, Art. 6, published in the "Official Journal of the European Union", L 283, of 29.10.2011).

In order to create a common European data space for cultural heritage, on 10 November 2021, the European Commission has published a new Recommendation with the aim to accelerate the digitisation of cultural heritage assets [12], in a standardized highly accessible format, making use of the development of new technologies, from 3D scanning to machine learning and artificial intelligence:

11. <https://culture.ec.europa.eu/cultural-heritage/cultural-heritage-in-eu-policies/european-digital-heritage>

12. <https://digital-strategy.ec.europa.eu/en/news/commission-proposes-common-european-data-space-cultural-heritage>



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*digitisation does not entail digital preservation by default. To ensure access to the digitised assets in the long term, Member States need to carefully plan and carry out the digital preservation of their assets, considering all the relevant financial, organisational and technical challenges over the long term. The digital preservation goals may include not only the cultural heritage assets that are considered a priority for digitisation (e.g. assets at risk, most visited monuments and sites, or under digitised domains) but also previously digitised assets. (The Commission Recommendation of 10.11.2021 on a common European data space for cultural heritage, C(2021) 7953 final, Art. 16)*

### Parliamentary Assembly of The Council of Europe

The Resolution 2269 (2019) "Safeguarding and enhancing intangible cultural heritage in Europe" [13] aims to:

- accommodate digital methods and tools for ICH inventories and for safeguarding practices, so that they can be harmonized in Europe (technically and methodologically) to further stimulate exchange and knowledge sharing;
- integrate ICH policy action into the announced 2020 #Digital4Culture strategy, using the digital potential to enhance the positive economic and societal effects of culture.

**UNESCO Charter on the Preservation of Digital Heritage** (issued on 15 October 2003): recognizes "digital heritage" as a new type of common legacy of humankind.

Though concentrated on the threat of loss, and not of the use of it, the Charter points out the importance of sharing this heritage: "Aware that access to this heritage will offer broadened opportunities for creation, communication and sharing of knowledge among all peoples".

<https://en.unesco.org/about-us/legal-affairs/charter-preservation-digital-heritage>

13. <https://assembly.coe.int/nw/xml/XRef/Xref-XML2HTML-EN.asp?fileid=26468>

## THE DIGITIZATION OF INTANGIBLE CULTURAL HERITAGE. BACKGROUND, STRATEGIES, BEST PRACTICES

### 2.4. International initiatives:

In addition to many thematic digital archives created for various cultural domains, there are broader portals which collect information on cultural heritage compiled from many GLAM institutions and provide integrated functions to find and access the cultural heritage data. The most important of such platforms is Europeana.

EUROPEANA – Europe's digital platform to empower cultural heritage

The mission of Europeana is to empower the cultural heritage sector in its digital transformation. It supports thousands of European museums, archives and libraries to offer free access to digitalised versions of artworks, books and music. Europeana has been funded since 2008 under the Connecting Europe Facility Programme.

<https://www.europeana.eu/en>

### ICH in Europeana

The **Europeana Collection "Making Culture"**: "Artisans and crafters have been #craftingheritage by shaping and remaking culture through the ages, passing down legacies of skill, knowledge and manufacture."

On **Europeana Pro**: the project "CRAFTED: Enrich and promote traditional and contemporary crafts" (2021–2023), coordinated by the National Technical University of Athens – Greece, partners: 13 institutions from various EU countries.

This project's aim is to enable the preservation of both material and immaterial aspects of craftsmanship and thus ensure a comprehensive understanding and appreciation of the communities and cultures it belongs to. For this, the project aggregated more than 186,000 new high-quality records that showcase tangible objects produced or used by artisans and document their immaterial contexts, such as techniques and knowledge. Additionally, it upgraded over 26,000 records already existing in Europeana.eu to an open license.

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It developed and deployed an innovative human-in-the-loop methodology (e.g. requiring human interaction) that repurposes and extends state-of-the-art digital tools, including AI tools, for image, audio and semantic analysis. The project enhanced existing crowdsourcing and aggregation tools to support a large-scale automatic enrichment of datasets made available through Europeana.eu. To this end, the project built upon the results of two previous Generic Services projects – CrowdHeritage and Europeana XX – and used the aggregation platform MINT developed by the National Technical University of Athens (NTUA).

The project enhanced awareness of tangible and intangible aspects of European crafts through editorial work. It hosted three ‘edit-a-thons’ to enrich Wikipedia pages with more comprehensive and diverse information about crafts heritage, including images and videos from Europeana.eu.

Example from the CRAFTED project: BLOG POST “Greek crafts, Greek identity. Four videos showing how Greek identities are embodied by the craft of weaving, weaving together past, present and future” [Greek crafts, Greek identity | Europeana](https://youtu.be/Gu7lbKOOV9k) (<https://youtu.be/Gu7lbKOOV9k>)

**ICH resources to access directly on the Europeana website:** Audio item “The Shepherd Song”: Bărbulescu, Tita – Voice; Busuioc, Alexandru – Conductor of “Doina Argeşului” Orchestra; Romanian Radio Broadcasting Company– Producer, 1959, INP, Culturalia project (The Digital Library of Romania): [https://www.europeana.eu/en/item/937/Culturalia\\_ab944307\\_4f02\\_4cf1\\_ae86\\_8cfd91f11fc6](https://www.europeana.eu/en/item/937/Culturalia_ab944307_4f02_4cf1_ae86_8cfd91f11fc6)



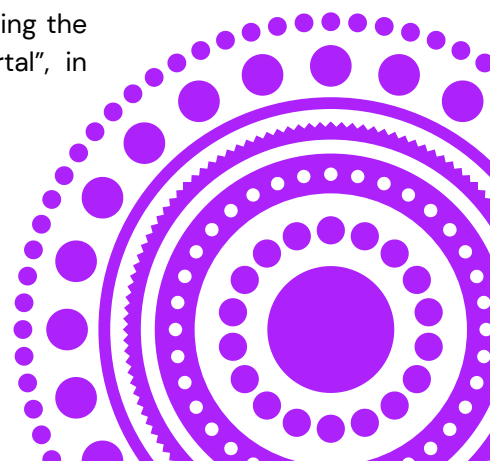
### THE DIGITIZATION OF INTANGIBLE CULTURAL HERITAGE. BACKGROUND, STRATEGIES, BEST PRACTICES

#### QueryLab:

- it is a prototype dedicated to the integration, navigation, searching and preservation of tangible and intangible heritage archives on the web, with the aid of themed paths, keywords, semantic query expansion and word cloud;
- the main advantage of this system is that it intends to connect the web “onthology” of ICH to the existing national and local ICH archives, at least for tagging as a tool for interested users to continue their search;

- some plans for the future development of QueryLab [14]:
  - *Creation of “near me” and “calendar” features, to allow the exploration of ICH assets around the user in place and time;*
  - *Creation of faceted indexes, to help in refining queries from inventories reached by web services;*
  - *Introduction of automatic keyword extraction algorithms to automatically structure thematic paths;*
  - *The creation of general word clouds for web archives, both on the tags and on the words of the title/description, in addition to those linked to specific queries.*

14. Artese, Maria Teresa, Gagliardi, Isabella: “Integrating, Indexing and Querying the Tangible and Intangible Cultural Heritage Available Online: The QueryLab Portal”, in *Information*, 2022, 13, 260. <https://doi.org/10.3390/info13050260>, p. 18.



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### 2.5. Report on the state of digitization of ICH archives in the partners' countries. Results of a survey conducted by the iNTANGIBLE project

In 2022, the project partners ran a survey via an on-line questionnaire with the aim to identify the specific needs and gaps of the infrastructure and training in the digitization of ICH archives in the four countries represented in the project, i.e., Croatia, Cyprus, Greece and Romania. The questionnaire contained 31 questions related to: the respondents' age, geographical area, gender, level of study, the respondents' workplace, information about the intangible cultural heritage archives owned by these institutions, their interest in participating in forthcoming training courses. Several types of questions were used: closed-ended questions, open-ended questions, multiple choice questions. The questionnaire was available in the four languages of the project and the analyses of the collected answers were undertaken by the specific partners in the four countries.



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While the survey did not necessarily follow the sociological sampling, we did reach a balance in terms of the variety of received responses from different geographical areas in the four countries, and also in terms of gender, age, levels of study in which concerns the individual features of the respondents. Therefore, we quickly obtained a good amount of information about the mainstream topics and the knowledge and interests of our target group of cultural professionals.

In **Croatia**, the questionnaire was sent especially to professionals working in the museum sector, primarily in museums that have an ethnographic collection within their institution. All respondents work in public institutions with national, municipal and county-based funding. The majority of these institutions uses or partakes at European funding calls. From seventeen participating institutions ten do not have archives for intangible cultural heritage, and eight have no digitized archives at all. Seven institutions have confirmed they have equipment for digitization, the rest do not have such an infrastructure. The answers show that the questioned cultural professionals are following activities on the domestic and international scene regarding digitization of cultural heritage, and they are interested in additional capacity building in this area.



In **Cyprus**, 50% of the respondents stated that their organizations have not digitized their respective archives, while 70% answered that they have not digitized their archive and do not know if and when the digitization will proceed. Those who mentioned the existing digitization process of their records feel uncertain about when that record might be operational for use both as an internal working tool or for open access. The majority of the participants stated that their organization is lagging behind in terms of funding, equipment and facilities in this field. 62.5% of the participants mentioned that it is very important for them and their colleagues to participate in training activities on digitizing intangible cultural heritage.





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According to the answers from **Greece**, we learnt that the majority of the respondents work in the ICH domain, and a majority work in the private sector. Most of the institutions where the respondents work have an established database dedicated to ICH. The sources of such databases derive from a combination of field and desk research, expert mapping, and bibliographic research. These archives contain in their majority various kinds of documents (manuscripts, audio-video, etc.). The sources for gathering information for carrying out their activity are diverse also: written documents (such as books) in physical format or in digital format, online sources (social media, YouTube, different cultural virtual platforms, cultural institutional websites of both domestic and foreign placement), and of course their own fieldwork research. 53.3% of the respondents claimed that their institutional record is at least partially digitized, 33.3% that it is entirely digitized, and 13.3% answered negatively, percentages that demonstrate that Greece has completed a significant progress in terms of ICH digitization.

Most of the answers indicated that, even though these institutional archives were not digitized, there are hopes and plans for doing so. On the other hand, a very high percentage of the Greek respondents (80%) answered that they are not aware of examples of best practices and initiatives in the field of ICH digitization. The few who knew such examples mentioned the UNESCO website, information on the subject or governmental funding for cultural heritage digitization offered by the Ministry of Culture of Greece. The respondents were keen to learn about such initiatives, and they would particularly be interested to know about existing ways of digitization, programs for funding such initiatives, the necessary equipment, trained staff for such projects, innovative tools of digitizing ICH, how to properly digitize and thus safeguard ICH data. Digitization initiatives, such as online archives, digital libraries, and virtual exhibitions, have been developed to safeguard and promote Greek intangible cultural heritage to a broader audience. The aim of these efforts is to ensure the preservation of traditional practices, customs, and expressions that form an integral part of Greece's cultural identity.



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In **Romania**, all respondents presently work in institutions in charge of intangible cultural heritage safeguarding, or performing research, documentation, promotion of traditional culture of Romanian or other ethnic groups in the country. Around 80% of the Romanian respondents answered that their institution owns an archive of interest to our project (with information on traditional culture or intangible cultural heritage), and most of these archives were created starting from the direct fieldwork undertaken by the hosting institution over the years.

According to the format of the stored documents, the majority of these archives include a big variety of documents (combination of written, visual, audio, video files). The sources of information which professionals use in their activity are mainly books in physical format. As the survey points out, around 50% of these archives are not digitized at all, while the rest are only partially digitized. Wherever this digitization process is already on the way, the starting moment goes back in time no later than the last decade. For the archives that are not yet digitized, almost 50% envisage plans of digitizing in the future, and have enough knowledge of the steps, staff and equipment necessary for achieving that. Only 40% of the respondents know good examples of digitization that could be inspiring for their own work in this direction. The topics that were indicated as of interest to the participants in the survey are: ways of increasing databases' visibility, digitizing field information, practices and techniques used in the digitizing process, projects related to digitization, financing sources for digitization projects, information concerning digitizing equipment, means of document recovering, methods and techniques used in archiving documents, information on archive digitization, how to digitize correctly, how can similar institutions be connected, enabling easy access of databases.



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**Conclusion.** Based on the collected answers received from cultural professionals in the four countries, we consider that the digitization of intangible cultural heritage in this region is gaining momentum, but its implementation remains a work in progress.

Efforts have been underway to document and preserve intangible cultural heritage using digital technologies, while challenges and opportunities coexisted. A good amount of the ICH archives in these countries are still far away from exhaustive and functional digitization. There is also an acknowledged need for adequate funding, technical and human resources, education and training in the field.

### 2.6. Best practices and successful solutions for ICH digital collections

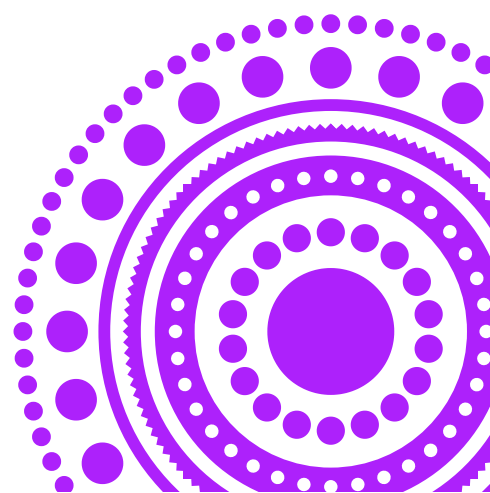
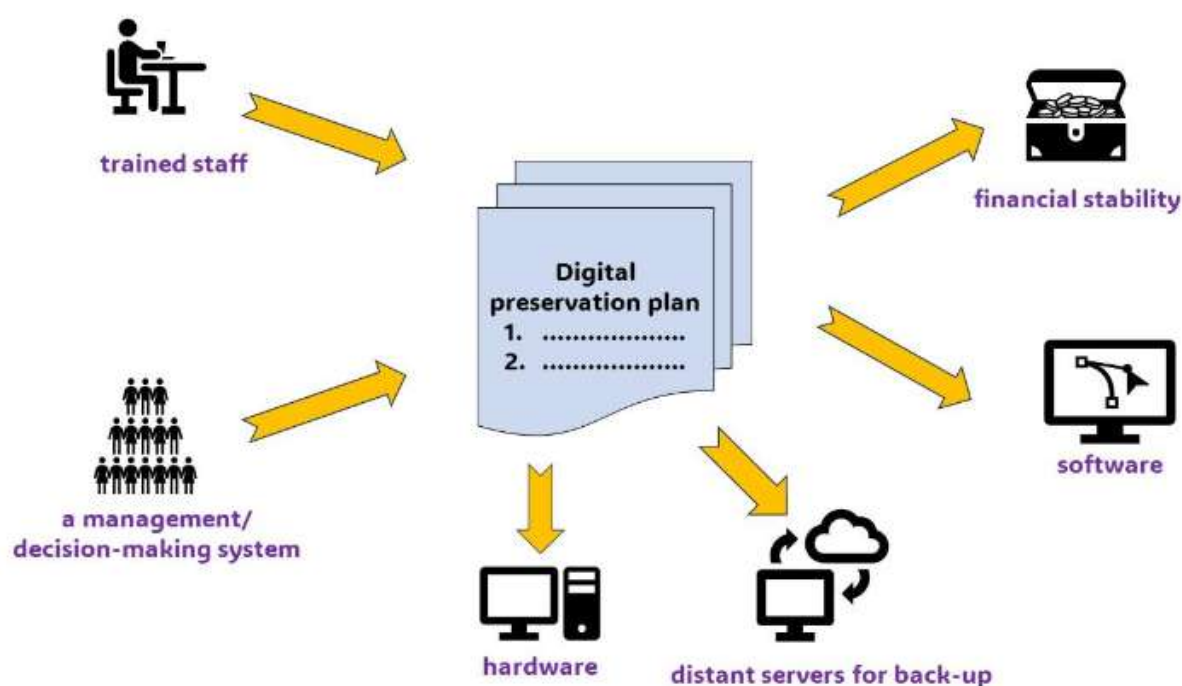
Starting a digitization project in an institution is a very daunting task. It does not involve only buying the right infrastructure (computers, scanners and so on), or best available software, but it also implies training people to use them, and first and foremost making a medium and long-term plan to create and maintain the new digital collection.

As experts of digital preservation often emphasize, institutional digitization is especially a management issue. The active management system that needs to be put in place when initiating a digitization plan would have to deal with the many challenges that such a projects brings about on the long term, such as: changes in the human resources and the additional training needed, the changes in the available software given the speed of upgrading of IT solutions, questions of being granted the copyright of digitized information and other intellectual property issues, lack of sufficient financial resources to maintain and update the system, etc.



## THE DIGITIZATION OF INTANGIBLE CULTURAL HERITAGE. BACKGROUND, STRATEGIES, BEST PRACTICES

An important matter that one should always have in mind is that the new digital objects that the user will create, store and organize in the new digital collection cannot be just kept there unattended forever without additional new interventions and updating. The main reason for intervening is dealing with the software obsolescence, so to avoid the risk that the format in which the digital object was coded is not usable anymore. Digital preservation is a continual and long-term task, and this is why it requires a strong commitment from the very start.



# MODULE 2

## THE DIGITIZATION OF INTANGIBLE CULTURAL HERITAGE. BACKGROUND, STRATEGIES, BEST PRACTICES

### DIGITAL OBSOLESCENCE

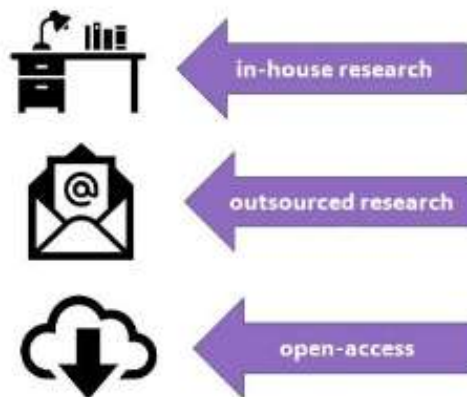
is the risk of data loss because of inabilities to access digital assets, due to the hardware or software required for information retrieval being repeatedly replaced by newer devices and systems.

#### The technical equipment and the importance of updating software

A video produced by the Library of Congress, "Why Digital Preservation is Important for Everyone", explains how digital content unlike content on traditional media depends on technology to make it available to future generations, and requires active management to ensure its ongoing accessibility.

<https://www.youtube.com/watch?v=qEmmeFFafUs>

### WHY DO WE NEED REGULAR ACCESS TO DIGITAL ARCHIVE DATA




**Open Preservation Foundation** (OPF) (previously called "Open Planets Foundation"):

- an organization started as a thanks to a EU-funded digital preservation project
- an international membership organisation sustaining technology and knowledge for the long-term management of digital cultural heritage, providing its members with reliable solutions to the challenges of digital preservation (<https://openpreservation.org>).

### THE DIGITIZATION OF INTANGIBLE CULTURAL HERITAGE. BACKGROUND, STRATEGIES, BEST PRACTICES

9 elements of a digital preservation plan:

- 
1. identification—of the plan in relation to the collection it defines, facilitating access to the plan at any moment by employees
  2. status and triggers—including documentation of the plan's status and the reason for its creation/revision
  3. description of the institutional setting—outlining the context in specific terms relevant to the collection at hand
  4. description of the collection—information about the objects themselves
  5. requirements for preservation—such as information to evaluate potential impacts, costs, and, potentially, rights issues
  6. evidence of decision for a preservation strategy—including documentation of alternative actions, objective evaluation, the decision, and the effect of the decision on the collection
  7. costs—arising from the preservation plan
  8. roles and responsibilities—including the re-evaluation of the plan
  9. preservation action plan [15].

15. Becker, Christoph; Kulovits, Hannes; Guttenbrunner, Mark; Strodl, Stephan; Rauber, Andreas; Hofman, Hans: "Systematic Planning for Digital Preservation: Evaluating Potential Strategies and Building Preservations Plans", in *International Journal of Digital Librarianship*, 10 (2009): 133–57.



# MODULE 2

## THE DIGITIZATION OF INTANGIBLE CULTURAL HERITAGE. BACKGROUND, STRATEGIES, BEST PRACTICES

### The Open Archival Information System (OAIS)

*The OAIS Reference Model describes how digital objects should be preserved for a certain group of users from the point when the objects are deposited into the system to the point when they are disseminated, including ongoing preservation and administrative activities in between. Because the OAIS Reference Model is meant to apply to a wide variety of situations, it is not specific in describing what the needs are of any one specific designated community. It is designed to be entirely context neutral. Instead, the task of determining the user group and its needs is left to the individual repository administrators. [16]*

#### 6 responsibilities of an OAIS Reference Model:

- Negotiating for and accepting information (an organization should decide beforehand what type of information it needs to store; collection development strategies)
- Obtaining sufficient control for preservation (Physical possession of documents does not necessarily mean owning the intellectual rights for handling those documents!)
- Determining which is the Designated Community (the intended end-users of the preserved digital data)
- Ensuring that information is independently understandable (ensure that the Designated Community would be able to understand and thus use the information)
- Following established preservation policies and procedures
- Making the information available (the ability to provide open access or access for authorized users.

16. Corrado, Edward M.; Moulaison-Sandy, Heather (eds.), *Digital Preservation for Libraries, Archives, and Museums* (second edition), Lanham, MD: Rowman & Littlefield, 2017, p. 54.

### THE DIGITIZATION OF INTANGIBLE CULTURAL HERITAGE. BACKGROUND, STRATEGIES, BEST PRACTICES

**METADATA – the core of a digital preservation plan!**

*Metadata is one of the fundamental technologies that digital preservationists use to organize and retrieve content in the digital preservation system. Like digital preservation systems or file formats, metadata is a complex topic, and decisions about metadata can drastically affect access and use in the long term. Metadata does not have to be intimidating, however, and even misguided metadata decisions are reversible if good documentation has been kept and the metadata has been consistently applied. [17]*



#### **PREMIS (Data Dictionary for Preservation Metadata):**

- the international standard for metadata to support the preservation of digital objects and ensure their long-term usability
- implemented in digital preservation projects around the world and used within a number of commercial and open-source digital preservation tools and systems.

Read about how to use PREMIS from the Library of Congress:  
<https://www.loc.gov/standards/premis/>

17. *Ibidem*, p. 177.

# MODULE 2

## THE DIGITIZATION OF INTANGIBLE CULTURAL HERITAGE. BACKGROUND, STRATEGIES, BEST PRACTICES

### HOW TO CREATE A DIGITAL COLLECTION?

#### **An example from the American Folklife Center: the “Occupational Folklife Project” Collection**

The Occupational Folklife Project (OFP) began in 2010 as a multi-year project by the American Folklife Center (AFC) based at the Library of Congress:

- documenting the culture of contemporary American workers during an era of economic and social transition;
- fieldworkers across the United States have recorded more than 1800 audio and audiovisual oral history interviews with workers in scores of trades, industries, crafts, and professions;
- the completed interviews have been incorporated into the American Folklife Center archive at the Library of Congress;
- the interviews were around 50–60 minutes in length;
- features workers discussing their current jobs and formative work experiences, reflecting on their training, on-the-job challenges and rewards, aspirations, and occupational communities.

#### **One of the many subcollections in the “Occupational Folklife Project” Collection: *Cultural Traditions of Ironworkers in America’s Upper Midwest***

- interviews of 26 ironworkers in Chicago, Illinois and Wisconsin during 2011–2012 by James P. Leary, from the Center for the Study of Upper Midwestern Cultures at the University of Wisconsin, Madison, and Clark D. Halker of Chicago, Illinois;
- the collection consists primarily of audio interviews, but is supplemented with substantial photographic documentation, including both images shot during the interviews and copies of informative historical on-the-job photographs taken between the 1950s and the 1980s, which were contributed by some of the interviewees.





## MODULE 2

### THE DIGITIZATION OF INTANGIBLE CULTURAL HERITAGE. BACKGROUND, STRATEGIES, BEST PRACTICES

One example of an interview in the Cultural Traditions of Ironworkers in America's Upper Midwest

"Harold Clausen interview conducted by James Patrick Leary, 2011-07-21"

[Share](#)

AUDIO RECORDING

#### Harold Clausen interview conducted by James Patrick Leary, 2011-07-21.

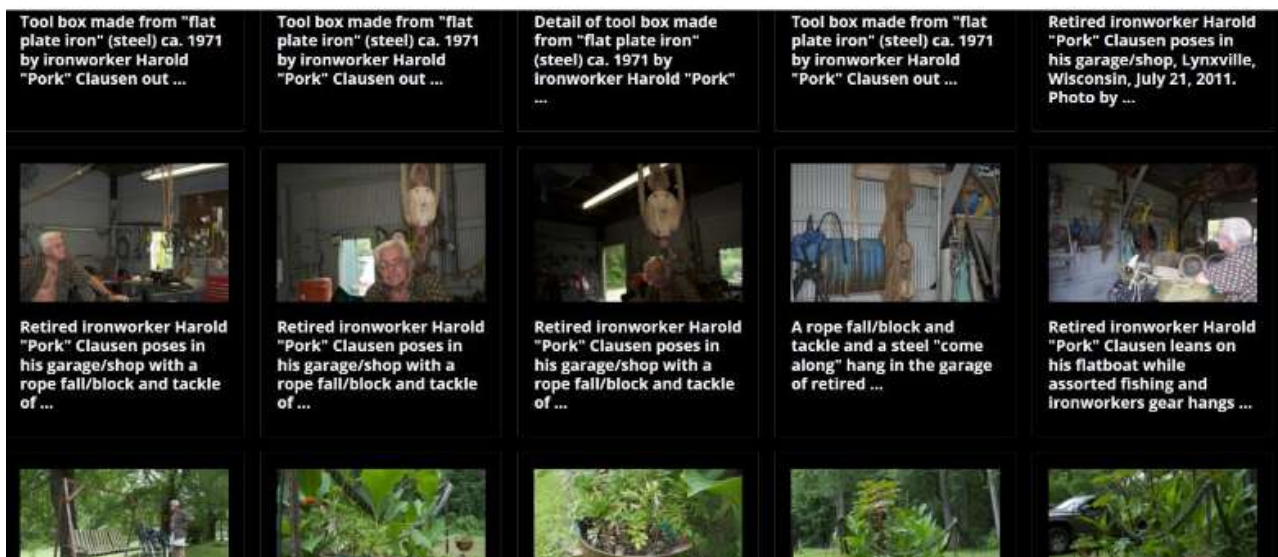
[« Back to Search Results](#)



Interview of Harold Pork Clausen. This Part 1 of a 2-part audio interview and contains the bulk of the interview.  
Interview of Harold Pork Clausen. This Part 1 of a 2-part audio interview and contains the bulk of the interview.

Download:  [Go](#) [Share](#)

- an audio interview divided in 2 parts;
- contains 55 images of the interviewee (Example of the metadata of one photo: Retired ironworker Harold "Pork" Clausen poses in his garage/shop, Lynxville, Wisconsin, July 21, 2011. Photo by Jim Leary. Images associated with interview);



- the section devoted to the interview also has attached a PDF document with the summary and the entire transcription of the interview.

# MODULE 2

## THE DIGITIZATION OF INTANGIBLE CULTURAL HERITAGE. BACKGROUND, STRATEGIES, BEST PRACTICES

### About this Item

#### Title

Harold Clausen interview conducted by James Patrick Leary, 2011-07-21.

#### Summary

Interview with Harold "Pork" Clausen focuses on his experiences as an ironworker. His wife, Sharon, joins in at the end of the recording session. The audio interview is in two parts: file afc2011062\_00168\_sr01 contains the main interview; afc2011062\_00168\_sr02 is an addendum containing a story about a fight between two foremen on a barge.

#### Names

Clausen, Harold Wayne, 1941- interviewee.  
Leary, James P., 1950- interviewer.  
Occupational Folklife Project, sponsor.

#### Created / Published

2011-07-21

#### Headings

- Clausen, Harold Wayne,--1941--interviews  
- Accidents  
- Amusements  
- Anger in the workplace  
-- Apprenticeship programs

#### Part of

Cultural Traditions of Ironworkers in America's  
Upper Midwest (26)  
Occupational Folklife Project (1,037)  
American Folklife Center (133,156)  
Library of Congress Online Catalog (1,467,040)

#### Format

Audio Recording

#### Contributor

Clausen, Harold Wayne  
Leary, James P.  
Occupational Folklife Project

#### Dates

2011

#### Location

Lynxville

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This project, as the entire collection of the American Folklife Center does, includes a very rich system of metadata. For example, the interview described above is identified by the following metadata:

- **Title** of the item
- **Summary** of the interview
- **Names** (of the interviewer, the interviewee, and the sponsor of the research)
- **Date** of creation/publication
- **Format** (in this case: audio recording)
- **Location** (where the interview was carried out)
- **Language**



Co-funded by  
the European Union

## THE DIGITIZATION OF INTANGIBLE CULTURAL HERITAGE. BACKGROUND, STRATEGIES, BEST PRACTICES

- **Genre** (of both type of documents produced: audio and visual): "Interviews (Sound recordings); Digital photographs--Color--2010-2020/ Interviews; Oral histories; Personal narratives"
- **Medium:** "2 sound files (WAV) (1:38:01): digital, sound; 55 photographs: digital, JPEG, color; 2 manuscripts: PDF, DOC, text files"
- **Headings** (compiled based on the content of the interview): Clausen, Harold Wayne,-1941-Interviews, Accidents, Amusements; Anger in the workplace; Apprenticeship programs; Blue collar workers; Clothing and dress; Families; Folklore; Handicraft; Hazardous occupations; Humor in the workplace; Jargon (Terminology); Joking; Labor unions; Manners and customs; Material culture; Practical jokes; Quality of work life; Storytelling; Rites and ceremonies; Ironwork; Iron and steel workers-Middle West - Interviews; Iron and steel workers Middle West-Social life and customs, etc.
- **Subject** (searchable keywords that make it easy to connect items in the collection): Accidents, Amusements, Anger in the Workplace, Apprenticeship Programs, Blue Collar Workers, Digital Photographs, Event Place, Families, Folklore, Handicraft, etc.
- **Repository:** "Library of Congress Archive of Folk Culture, American Folklife Center, 101 Independence Ave. S.E., Washington, DC USA 20540-4610 <http://hdl.loc.gov/loc.afc/folklife.home>"
- **Digital ID** and **control number** created for the internal classification system of the institution
- **Rights advisory** and **Access advisory**
- **Additional Metadata Formats:** MARCXML Record; MODS Record; Dublin Core Record.



# MODULE 2

## THE DIGITIZATION OF INTANGIBLE CULTURAL HERITAGE. BACKGROUND, STRATEGIES, BEST PRACTICES

### BEST FORMATS FOR PRESERVING TEXTUAL FILES

- **(Full support): CSV format** (comma-separated values file)
  - a plain text file that can contain numbers and letters only, and structure the data contained within it in a tabular, or table, form
  - generally used to exchange data, usually when there is a large amount of it and should be transferred between different applications
- **(Full support) PDF/A** : standardized version of the Portable Document Format (PDF) specialized for use in the archiving and long-term preservation of electronic documents.
  - PDF/A differs from PDF by prohibiting features unsuitable for long-term archiving
- **(Less support):** RTF, XML, HTML



### BEST FORMATS FOR PRESERVING AUDIO FILES

- **(Full support): FLAC** (Free Lossless Audio Codec):
  - an open-source audio compression format
  - it can be used to compress an audio file down to around half of its original size
- **(Less support) WAVE** (Waveform Audio File Format): the disadvantage of being large in size
- **(Less support) MP3** (MPEG-1 audio layer 3): lossy



## THE DIGITIZATION OF INTANGIBLE CULTURAL HERITAGE. BACKGROUND, STRATEGIES, BEST PRACTICES

### BEST FORMATS FOR PRESERVING (STILL) IMAGES

- Uncompressed **TIFF** (Tagged Image File Format) format
  - Lately, the TIFF 6.0 is considered the best file format for digitization
- **JPEG 2000** : the advantage of being significantly smaller than TIFF



### FROM PHYSICAL OBJECTS TO DIGITAL OBJECTS: WHAT FORMAT TO CHOOSE?

If one is interested in accessing a step-by-step guide for digitizing various type of ICH files, here is the link where it can be found:

<https://www.canada.ca/en/heritage-information-network/services/digitization/guide-digitizing-intangible-cultural-heritage.html#3>

### Specialized software for ICH digitization and archiving:

FEDORA (or Flexible Extensible Digital Object Repository Architecture) is a digital asset management (DAM) content repository architecture upon which institutional repositories, digital archives, and digital library systems might be built. Fedora is the underlying architecture for a digital repository, and is not a complete management, indexing, discovery, and delivery application. Fedora project started in 1997 using a grant offered by United States government agencies to the Cornell University. The Fedora system could include a variety of “digital objects”, from digital texts, publications, photos, videos, and datasets.

OMEKA (also known as Omeka Classic) is a free, open-source content management system for online digital collections, that allows users to publish, and exhibit cultural heritage objects. OMEKA is a lightweight solution in comparison to traditional institutional repository software like Fedora.

# MODULE 2

## THE DIGITIZATION OF INTANGIBLE CULTURAL HERITAGE. BACKGROUND, STRATEGIES, BEST PRACTICES

Omeka uses the Dublin Core metadata standard. It was originally developed by the Roy Rosenzweig Center for History and New Media at George Mason University. Since 2016, the Omeka project has been a project developed by the non-profit Corporation for Digital Scholarship. In 2017, the project released Omeka S, a new version of Omeka designed for institutional use, providing the capability to host multiple sites which draw from a common pool of resources. Omeka Classic, the original project, will continue to exist alongside Omeka S with a focus on serving individual projects and educators.

<https://omeka.org/classic/docs/>

### LIBNOVA:

- the most advanced digital preservation platform;
- created in 2009 to provide next-generation digital preservation platforms that allow; organizations to safeguard their content in a better way;
- used by large and small institutions around the globe, applying the most advanced digital preservation technology available;
- providing the most advanced digital preservation platform;
- helping users to be more efficient in several phases of the digital preservation cycle;
- was awarded a European Union Research Grant;
- "Our mission is to safeguard the world's research and cultural heritage. Forever."

*Ultimately, what is revealed by digital option in their new impact on archival actions is an older but unminded perception: archives expose not a finished past society, but, as always, and as Raymond Williams pointed out, our own, present society, which does the selecting, the keeping, the using, and the constituting of its many stories in continuous and contingent re-making. It is a present society, and a present generation of archivists, which will shortly, in the digital age, mine the future in has helped to circumscribe, searching out pre-determined raw materials, rather than only the more random survivals and selections of the past. Which archives, I wonder – those we have created of the past or those we propose to create of the future – will we delight more? [18]*

18. Koltun, Lilly: "The Promise and Threat of Digital Options in an Archival Age", in *Archivaria*, 47, 1999, p. 134.





## ICH DIGITIZATION PROGRAMS AND PROJECTS AT THE NATIONAL LEVEL

### 3.1. National plans of digital protection

Countries around the world currently put into practice digitization masterplans in various sectors, an ambitious initiative that intends to capitalize the advantages of the digital revolution. Although it does not enjoy similar recognition in different geopolitical regions, cultural heritage is an important domain that engages such national strategies.

A main reason for the relevance of cultural heritage digitization is the threat of loss, and this is the original and constant motivation of the whole philosophy of cultural heritage preservation under UNESCO [19]. Both tangible and intangible cultural heritage of national and international value need to be put under protection, for they are a frail resource, always affected by time, natural or man-made disasters. While before the digital turn, the protection strategy was rather based on material means (renovation, collecting, archiving, etc.), the tools enabled by digital technology created an additional opportunity of digital storing.

This embedded fragile nature of cultural heritage and the available capacities to virtually store it for the future provide strong motivation for national programs aimed at digitizing cultural heritage.

19. Betts, Paul: "Humanity's new heritage: UNESCO and the rewriting of the World history", in *Past & Present*, No. 228 (August 2015), Oxford University Press, p. 250.





## MODULE 3

### ICH DIGITIZATION PROGRAMS AND PROJECTS AT THE NATIONAL LEVEL



#### **Action Plan for the Digitisation of Cultural Heritage by the Ministry of Culture of Estonia**

The State-run memory institutions have a total of more than 900 million heritage objects of significance for the Estonian culture. To date, only about a tenth of them have been digitised. Digitisation is one of the best and, in some cases, the only way to ensure that heritage is preserved in the most appropriate manner and made available to as many people as possible.

The Estonian Ministry of Culture prepared an action plan for the digitisation of cultural heritage. Its objective is to make one third of the cultural heritage stored by the memory institutions digitally accessible by 2023, and to upgrade their infrastructure for storing information.

The action plan largely focuses on the heritage from 1900 to 1940. Documents, publications, photographs, films and objects are being digitised, keeping in mind that key choices need to be made in terms of cultural heritage digitization.

As in the specified timeframe it is not feasible to digitise the entire available cultural heritage, the objective of the action plan is to make the following digitally accessible by 2023: 3% of the documentary heritage; 32% of artefacts; 60% of both film and photographic heritage and 28% of printed heritage.



## ICH DIGITIZATION PROGRAMS AND PROJECTS AT THE NATIONAL LEVEL

### 3.2. National inventories of ICH and the implementation of the 2003 UNESCO Convention

In terms of the general almost global instrument managing the implementation at the country-level of digitization of ICH, the most important one is the system of national inventories. These inventories have a strong institutional, normative and even political value as they are created based directly on the requirements of the 2003 UNESCO Convention. Article 12 of the 2003 Convention features the need of State Parties to build up inventories of the ICH being performed within their national territories: “To ensure identification with a view to safeguarding, each State Party shall draw up, in a manner geared to its own situation, one or more inventories of the intangible cultural heritage present in its territory. These inventories shall be regularly updated”. There are at least two different circumstances by which UNESCO is assessing that this recommendation was fulfilled by the States:

- The description of structure and updating system of the national inventories that is mandatory on the forms a State must fill in for inscribing new elements on the Representative List, and if the inventory is available online, the submitting State should provide hyperlinks (URLs) to pages dedicated to the nominated element
- The description of the inventory system should be done within the periodic reporting on the implementation of the Convention that all States Parties should submit to UNESCO every 6 years.

These mandatory descriptions should inform on the design and format of inventories of intangible cultural heritage, on how communities, groups and individuals and other stakeholders participate in inventorying and how inventories contribute to safeguarding, for example by recording intangible cultural heritage viability or being updated.

# MODULE 3

## ICH DIGITIZATION PROGRAMS AND PROJECTS AT THE NATIONAL LEVEL

These inventories should reflect the diversity of intangible cultural heritage present within the territory of the respective State, and communities, groups and relevant NGOs should participate inclusively in inventorying. A very important condition that needs to be fulfilled is that these inventories should be updated during the reporting period, in particular in order to reflect the current viability of elements included.



The philosophy behind the 2003 UNESCO Convention being the empowerment of communities and heritage bearers, the inventorying process should involve as much as possible the participation of the first-hand actors in performing and safeguarding their own ICH. National inventorying should therefore consist mainly in grassroots work, an extensive dialogue and consultation with local communities which perform and transmit living heritage. However, in practice, the majority of States have adopted inventorying protocols that imply a stricter or a lighter system of central decision-making. The way this centralized system should be working, while still respecting the participatory feature of inventory-making, would mean establishing viable communication channels and partnerships among public and private stakeholders.

### ICH DIGITIZATION PROGRAMS AND PROJECTS AT THE NATIONAL LEVEL

These communication channels should transmit an easy-to-follow protocol of contributing to the inventory, a protocol that should be followed by non-expert members of heritage communities. The expectation is that the State finds appropriate means to disseminate inventorying know-how and work on building up the national inventory through a steady connection between the central and the local level. Therefore, the entire inventorying system benefits greatly of the digital means of communication, both in the process of calling for new entries in the national inventory and in the updating of already existing ones.

A well working digital system would be the best way to set up a collaborative and inclusive process including bearers, researchers, national or regional culture institutions, advisory bodies, independent experts, intangible cultural heritage curators, museums, NGOs, etc.



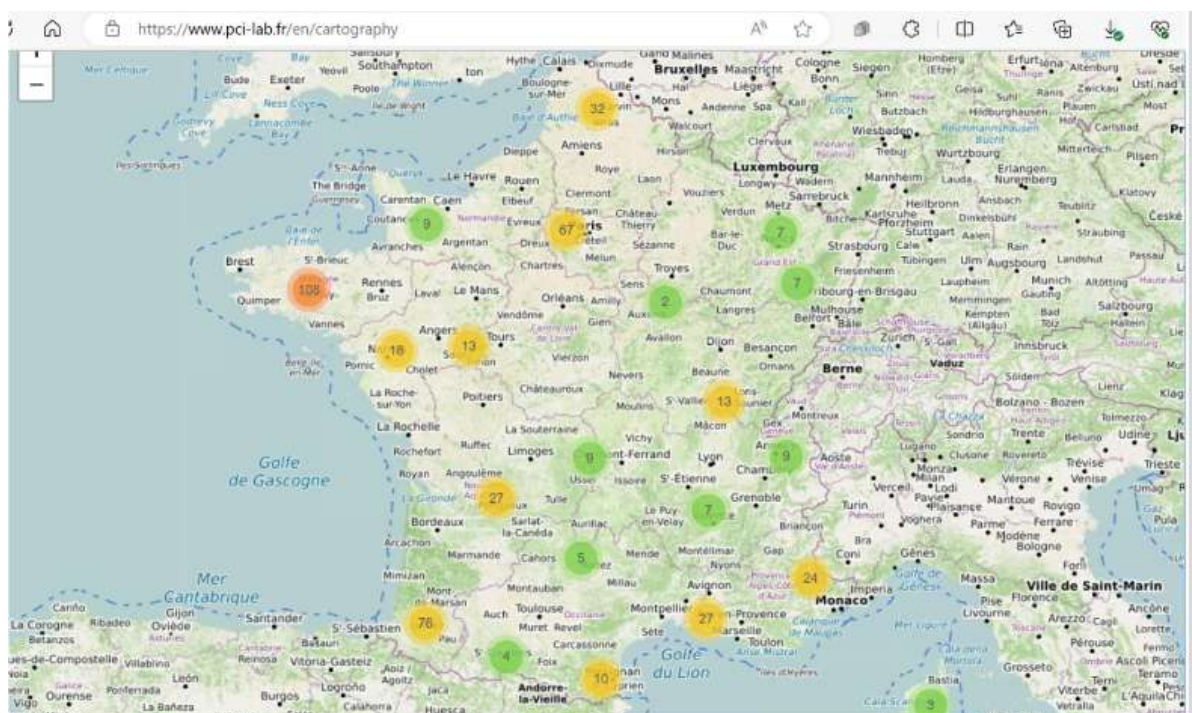


# MODULE 3

## ICH DIGITIZATION PROGRAMS AND PROJECTS AT THE NATIONAL LEVEL

### What is the national inventories' format?

- **Ordering principle of ICH elements:** The elements of ICH inscribed on most national inventories in Europe are organized by domain, some are placed cartographically, and some chronologically, according to the date of entry or approval, and some only based on alphabetical order.
  - **Example of Slovakia:** the national ICH inventory (organized as an electronic encyclopaedia "The Folk Culture of Slovakia by Word and Image" (<https://www.ludovakultura.sk/encyklopedia/>) uses alphabetical order, and also offers a very useful search engine that allows users to find elements by ICH categories and other content-related criteria.
  - **Example of Hungary:** the elements in the national ICH inventory website are presented according to the year of entry: [http://szellemikulturalisorokseg.hu/index0\\_en.php?name=en\\_f22\\_elements](http://szellemikulturalisorokseg.hu/index0_en.php?name=en_f22_elements)
  - **Example of France:** the elements inscribed in the French ICH Inventory are placed on a digital map: <https://www.pci-lab.fr/en/cartography>. The French inventory is a relevant example on how to achieve data visualization and relational mapping, and the entire website dedicated to the inventory is meant to also invite participation of the public, to assist with updating and data analysis.



## ICH DIGITIZATION PROGRAMS AND PROJECTS AT THE NATIONAL LEVEL

- **Analogue or digital:** Most of the inventories in Europe are also placed online on a specialized website or a division of a government institutional website, given that fact that online open platforms often ensure access, open consultation and in some cases direct participation. Some countries have also publications of the inventory or of some generic big picture of the inventory as downloadable e-books or academic issues. Though such dissemination materials serve the goal of accessibility, they involve a more intricate process for updating, because any updating in the configuration of an element would involve re-editing the publication. There are many cases of countries that decide to transfer the online inventory in the structure of a physical publication, a book or a brochure. This clearly provides a strategic snapshot in the “life” of the inventory, because a new entry would make the publication obsolete.



### EXAMPLE: e-publication of Cyprus' national ICH inventory with a digital touch!

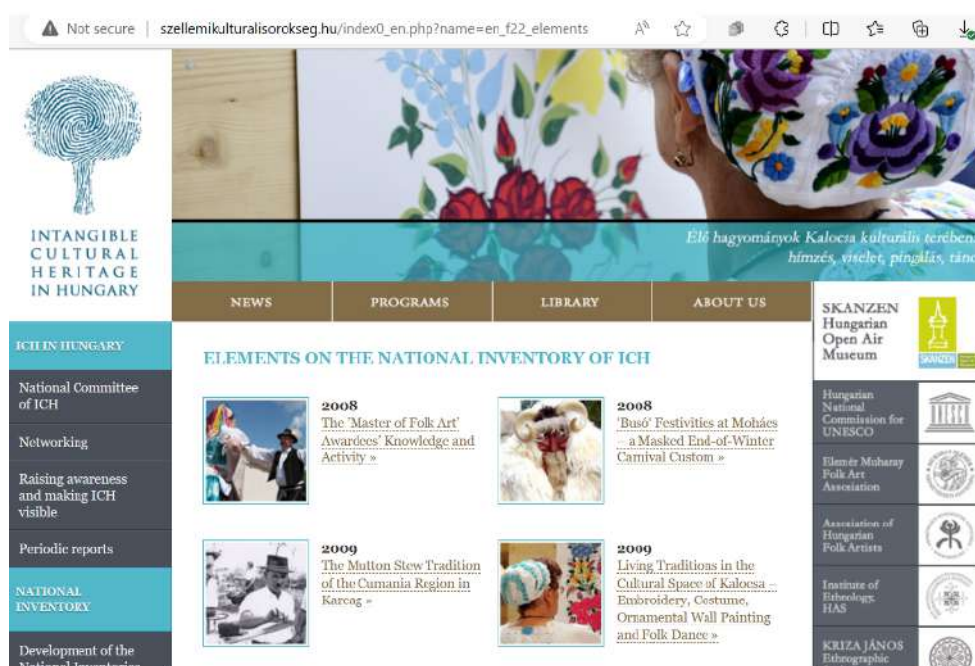
Until now, the Cyprus administrative structure responsible with the implementation of the Convention published twice the national ICH inventory as an e-book. The most recent was issued in 2020, and it was an initiative of the Cyprus National Commission for UNESCO, which is the body currently responsible with managing the National Inventory of Intangible Cultural Heritage of Cyprus.

# MODULE 3

## ICH DIGITIZATION PROGRAMS AND PROJECTS AT THE NATIONAL LEVEL

“Entitled *Intangible Cultural Heritage of Cyprus – National Inventory*, the interactive publication presents the wealth of traditions and customs that have been preserved across generations and are linked to the lives and activities of Cypriots. This is the most recent on-site photographic documentation of people, places, traditions, practices, techniques, tools and objects, related to the first thirty elements inscribed on the *National Inventory of Intangible Cultural Heritage* (between 2009–2017) and on the UNESCO’s Representative List of Intangible Cultural Heritage of Humanity (between 2009 – 2019).”

<http://www.cyprusdigitallibrary.org.cy/files/original/26f56deab6d16748849017bc3d17f3df.pdf>



A great solution implemented by the publisher, in order to make use of the digital format of the e-book, is featuring links that take the reader to YouTube videos with the element described; these are videos that are posted on the YouTube channel of the Cyprus UNESCO Commission. This allows an easy and engaging way of displaying the active performance of ICH!



## ICH DIGITIZATION PROGRAMS AND PROJECTS AT THE NATIONAL LEVEL



A very important advantage of a digital national ICH inventory is the richness of datasets that could be used to document and showcase the respective ICH element. Analogue inventories normally contain text and pictures, as the digital ones could also include, specially made audio and video recordings.

### A global map of national ICH inventories

In 2017, thanks to a project implemented by a Portuguese organization, the existing online ICH inventories were placed on the same platform based on the geographical distribution:

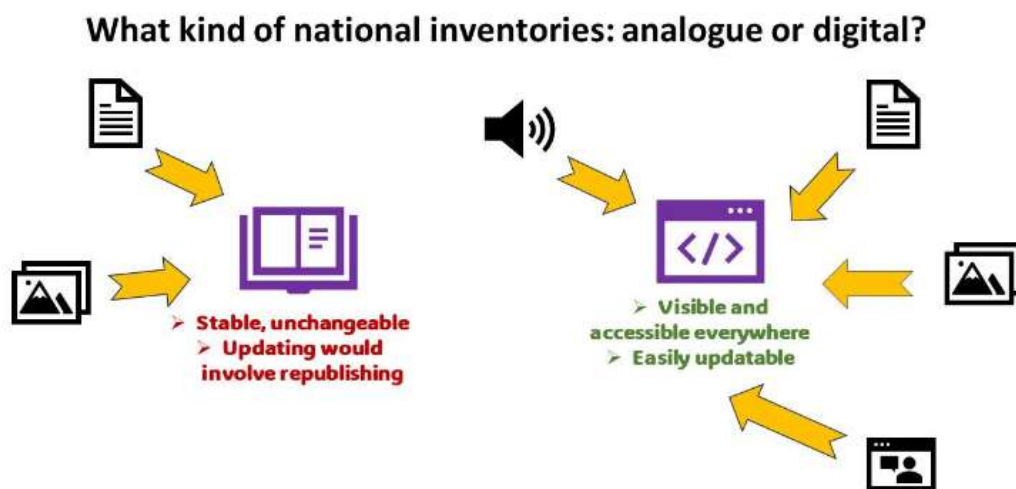
<https://review.memoriamedia.net/index.php/map-of-e-inventories-of-intangible-cultural-heritage>

In the currently available version of the **Map of e-Inventories of Intangible Cultural Heritage** (2017) there are 158 ICH inventories: 88 national, 41 regional/local and 29 transnational.

## MODULE 3

### ICH DIGITIZATION PROGRAMS AND PROJECTS AT THE NATIONAL LEVEL

The “Map of e-Inventories of Intangible Cultural Heritage” presented in this paper enables direct access to the 158 e-inventories through the links marked in countries where these were carried out. This paper presents a preliminary analysis of some of the data that characterize these inventories, and calls for the participation in the review and update of this mapping. (The research was funded by FCT- Fundação Para a Ciência e Tecnologia – Foundation for Science and Technology in Portugal, and was led by Filomena Sousa.)



*The inventories present, in its majority, database formats (74%) and include cultural expressions related to the 5 domains of the ICH (84%). Among these inventories (with database format), the majority, in addition to using different software and different default templates, present a “traditional” organisation divided into data fields. More frequently they display 5 information fields about the element: name, the ICH domain, location, description (summary or detailed) and pictures. The majority of these inventories organised in databases are searchable in 3 ways, by using: keywords, name of the element and/or the ICH domain). [20]*

20. Sousa, Filomena: “Map of e-Inventories of Intangible Cultural Heritage”, in *Memoriamedia Review* 1, 2017, p. 4.

## ICH DIGITIZATION PROGRAMS AND PROJECTS AT THE NATIONAL LEVEL

Digital tools for safeguarding (according to the document LHE/22/17.COM/6.b, Paris, 31 October 2022, an examination of the periodic reports submitted by the European State-Parties by the implementation mechanism of the 2003 UNESCO Convention:

- Countries reporting in this cycle provided evidence of the important role played by digital tools in the implementation of the Convention. Digital platforms have allowed broader and more cost-effective information sharing and collaboration, especially where internet access was made widely available, and where provisions were made for users with disabilities.
- The use of digital tools for safeguarding increased during the COVID-19 pandemic (discussed in the following section).
- Reporting countries frequently provided online access to intangible cultural heritage inventories and related research data; some have had policies and programmes supporting this for many years.
- Digital access has promoted greater community involvement in inventorying, especially with the use of easily updated wiki inventories, search tools, multimedia information and social media links.
- Creation of online repositories of intangible cultural heritage-related information has allowed for greater synergies with environmental and tangible heritage planning.



# MODULE 3

## ICH DIGITIZATION PROGRAMS AND PROJECTS AT THE NATIONAL LEVEL

**The living “life” of an element in the national inventory? How can the digital help?**

Experts preoccupied with the underpinning implications of the design and functioning of the national inventories of ICH pointed out the challenge States have in managing this task without harming the dynamic nature of living heritage inscribed on this national lists.

For example, Marta Severo, professor in Communication at the University of Paris Nanterre, focusing in her research in the use of digital tools in social sciences, is an advocate of digital platforms for ICH inventorying. In her view, the digital medium would solve some of the constraining problems in ICH safeguarding at the national level, such as:

- The dominant top-down approach in ICH safeguarding, given the high role that the state heritage institutions play in the process
- The risk of simplification and “fossilisation” connected with the documentation and archiving of ICH [21].

The danger that the inventorying entails by the unavoidable reification of a living heritage manifestation and the separation of that performance from the complex social and cultural environment that supports it was also emphasized by other scholars. Alessandra Broccolini for example criticizes the Italian national inventory of ICH (Beni Demoetnoantropologici Immateriali) due to that tendency of oversimplification and decontextualization of heritage items that are being processed and catalogued:

21. Severo, Marta: “Avant-propos, in Severo, Marta; Cachat, Séverine (dir.): *Patrimoine culturel immatériel et numérique*, Paris, L’Harmattan, 2016, p. 8.



## ICH DIGITIZATION PROGRAMS AND PROJECTS AT THE NATIONAL LEVEL

“The BDI (Beni Demoetnoantropologici Immateriali) form not only forces cataloguers to objectify a complex event by reducing it to a standard that shares the same homogenous language with other types of heritage (each asset has its own general cataloguing number that is unique at the national level), but it also functions to fragment complex events, such as rituals, into multiple separate forms (kinetic behaviours, songs, specific forms of knowledge, individual ritual moments, etc.). Each of these elements is to be considered a single asset, for instance, if a feast takes place over several days and consists of multiple moments and various ritual subevents (the blessing of animals, food preparation, proxemic behaviours, etc.), the form forces cataloguers to produce one form for each “asset” represented by these individual elements, although they are then reunited in a form field in which all sub-events can be identified as components of a single main event.” [22]



### 3.3. Wiki-inventories of ICH: the solution for unlimited inclusion?

Wiki-inventories is a solution chosen by some States for managing their national inventories in order to ensure the desired participatory framework. These inventories use MediaWiki, a collaboration and documentation platform (<http://www.mediawiki.org>), which has the main quality of providing a democratic tool for any individual to post data about their own ICH.

22. Broccolini, Alessandra: "Intangible Cultural Heritage Scenarios within the Bureaucratic Italian State", in Nicolas Adell et al., *Heritage Regimes and the State*, Göttingen University Press, Göttingen University Press, 2017, p. 29.

# MODULE 3

## ICH DIGITIZATION PROGRAMS AND PROJECTS AT THE NATIONAL LEVEL

The Wiki system is currently used by the following national or regional ICH web inventories:

- Senegal: the “WikiFatick” – Inventory of the Intangible Cultural Heritage of the region of Fatick;
- Switzerland: the Wiki Portal of the Intangible Cultural Heritage of Valais
- Finland: the Wiki-inventory of Living Heritage
- Republic of Korea: the ICHPEDIA – Encyclopedia of the Intangible Cultural Heritage in the Republic of Korea
- Scotland: the Inventory of Living Culture in Scotland
- India: the Sahapedia.

### **Scotland:** Wiki-inventory of ICH in Scotland

- established in 2008 by Edinburgh Napier University and Museums Galleries Scotland
- relies on a customized MediaWiki software, first for any type of users, but then restraining access for specific users [23].

### **Finland:** The Wiki-inventory for Living

Heritage:<https://wiki.aineetonkulttuuriperinto.fi/>

- was created and is administered by the Finnish Heritage Agency in 2016
- practitioners and heritage communities produce the contents to the Wiki by talking about the element, its history and safeguarding
- The Wiki can be modified only by registered users, but the registration form is open to all
- The managing institution serves as moderator and administrator of the platform, and the inscription of elements on the wiki-inventory on the actual national inventory of ICH of Finland needs to go through a process of selection and approval from a group of experts acting outside of the digital platform.

23. Orr, Joanne; Thomas, Sara: "From First Footing to Faeries: An Inventory of Scotland's Living Culture", in Severo, Marta; Cachat, Séverine (dir.): *op. cit.*, Paris, L'Harmattan, 2016, p. 199–206.



## ICH DIGITIZATION PROGRAMS AND PROJECTS AT THE NATIONAL LEVEL

### 3.4. The future is... open and digital!

**“Dive into intangible cultural heritage!”: <https://ich.unesco.org/en/dive>**

An important entry of digital tools for visualizing and connecting ICH worldwide under the 2003 UNESCO Convention is the online tool released in 2018, a digital visualization of all the elements inscribed on the Convention’s lists. It marked a turning point for using the possibilities of the digital world in fulfilling the mission of ICH promotion and in encouraging communication about living heritage.

- it uses web-semantics and graphic visualization, and offers a broader conceptual and visual navigation through to almost 500 inscribed elements, but visualisations are constantly evolving as new elements get inscribed and the indexing is refined;
- it explores the various elements across domains, themes, geography and ecosystems and makes it possible to visualize deep inter-connections among them;
- the visualizations of the project are built upon the foundation of an extensive and open dataset.



# MODULE 3

## ICH DIGITIZATION PROGRAMS AND PROJECTS AT THE NATIONAL LEVEL

### **Towards open possibilities of moving images: the newest nomination forms for inscribing ICH elements on the 2003 UNESCO Convention's Lists**

In 2017, the 2003 UNESCO Convention mechanism started an overall reflection on the intent and purpose of the listing mechanisms, and in 2022 these long processes ended, among other decisions, in a revised version of the nomination forms for the Convention's lists.

The new form for the Representative List includes an encouragement of submitting states to include audio-visual materials showcasing the support, opinions and feedback of the heritage communities performing that respective element:



### **Nomination form ICH-O2 (revised on 17 January 2023):**

States are encouraged to submit audiovisual materials that convey the communities' voice in support of the statements made above.

- Materials (written, audio-visual or any other way) are submitted
- (Instructions): States Parties are encouraged to submit videos allowing communities, groups and individuals to express themselves in the language(s) of their choice.

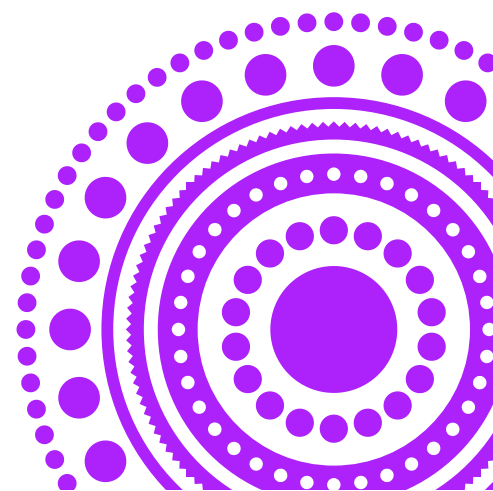
### ICH DIGITIZATION PROGRAMS AND PROJECTS AT THE NATIONAL LEVEL

#### **Towards the creation of an online platform for sharing good safeguarding experiences of ICH**

During the last years, the 2003 UNESCO Convention mechanism is trying to identify better ways for intercultural communication and promotion of safeguarding activities around the world, and for generating more direct involvement of people and communities in the implementation of the Convention. One recently discussed solution to this objective is building up an online platform for sharing and dissemination of safeguarding experiences across national divisions. This solution was first discussed by a group of experts in April 2023, and then the recommendations issued by them were further analysed by the states in July 2023. It is expected that soon these plans are approved and materialized, though the Convention administrative body acknowledges the complex planning, designing, infrastructure and human resources required to achieve such a target.

The creation of the online platform would take advantage of all the benefits of digital communication:

- wider participation of heritage communities beyond the states' official communication
- unlimited and direct exchange of information about ICH
- use of widely accessible technology
- improved visibility of the 2003 UNESCO Convention lists.





# MODULE 4

## HOW DO I PLAN & IMPLEMENT AN ICH DIGITIZATION PROGRAM/PROJECT AT THE LOCAL LEVEL?

### 4.1. Going back to the grassroots

Though it may seem that the main objective of the States which accepted the 2003 UNESCO Convention is building up collections of as many ICH topics as they could possibly be gathered from their national territory, the main attention of ICH safeguarding should be directed towards the groundwork of discovering the many varieties and intricate performances of living heritage at the local level. The important work around the living heritage is not about quantity, but about quality and sustainability. Since bottom-up approach and community-based research are the recommended strategies for the implementation of the 2003 UNESCO Convention, this module will provide readers with some tips and tricks to document and archive living heritage.

The following plan may be implemented both for a place, a locality, or a topic, as well as for a category of ICH that is being performed in various places.

The plan proposed below follows the spirit of the 2003 UNESCO Convention for **community-based inventorying**! It is devoted to assist the user in discovering the living heritage that is currently performed, deeply valued, and carefully transmitted by a local community, and representing their local cultural identity. The central role played by the community in the implementation of the 2003 UNESCO Convention and the safeguarding of living heritage was already explained in Module no. 1. Although one's main purpose would be documenting ICH and setting up a digital collection of data, it is important to always act in such a way as to connect inventorying activities with a future plan of safeguarding, which is the core message of the Convention.









## HOW DO I PLAN & IMPLEMENT AN ICH DIGITIZATION PROGRAM/PROJECT AT THE LOCAL LEVEL?

### 4.2. How to carry out community-based inventorying and create a dedicated digital inventory:

- **First step: Compile the existing theoretical documentation about the traditional culture of the locality/ about the specific ICH element:**
  - Do not forget to get information about the history, geography, social, ethnic and professional structure, cultural life, religion, administrative data, and everything that you find on that topic -> create a digital documentation folder in your digital archive with the outcomes!
  - You may search for Information about the local traditional culture in ethnographic volumes, folklore treatises, cultural atlases of the larger area or region where the locality is placed. Documentation about that specific ICH element you are interested in may already have begun some time beforehand thanks to other researchers or cultural activists -> create a digital documentation folder in your digital archive with the outcomes!
  - Important documentation could be also available locally, in a small local library, in the archive of small history or ethnographic museums -> add such information to the digital documentation folder you created.





# MODULE 4

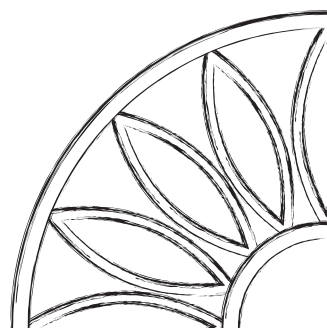
## HOW DO I PLAN & IMPLEMENT AN ICH DIGITIZATION PROGRAM/PROJECT AT THE LOCAL LEVEL?

- **Second step: Prepare a questionnaire based on the documentation you collected in the first step:**
  - The questionnaire should include questions on all the domains of traditional local culture that were mentioned in the theoretical documentation collected at the first step.
  - Do not forget to ask detailed information from your respondents and to be sure you understand well the designing of an ethnographic questionnaire!
  - Try to find a model of such a research instrument in the academic literature that use qualitative research tools such as cultural anthropology, ethnology, folklore studies.
  - For example, if you want to learn about a local festive event, be sure to ask about the timing of different activities, festive spaces, connected rituals, festive dress, timely sequences of the celebration, trajectory of processions that may be performed, traditional foods, etc., but also about the meanings and values that the event entails for individual participants which you will have the chance to interview!
  - In the planning phase, it would be helpful to consult with representative members of the concerned community who could verify the pertinence of the questions. They may give you ideas, test your suppositions, correct some of your misunderstanding on the topics or only assure yourself that you are on the right track.
  - Be mindful at all times that, even if your questionnaire is a well-thought tool, you need to stay open and flexible when you carry out interviews, be ready to add further questions as appropriate. A questionnaire is not a standard-setting instrument, it is only a partial preparation for the encounter with real life situations and variations!



## HOW DO I PLAN & IMPLEMENT AN ICH DIGITIZATION PROGRAM/PROJECT AT THE LOCAL LEVEL?

- **Third step: Run and record the interviews!**
  - The inventorying process should be as participative and inclusive as possible! In order to be able to decide whom you should invite to answer your questions, try to have normal, spontaneous conversations with people in the community. Information sessions and discussions about your project with the community representatives will be highly helpful! You may find out in these preliminary discussions that you should avoid asking questions about cultural sensitivities or practices that the community members have deep ritual or cultural reasons not to disclose to third parties. Run initial consultations and apply the questionnaire to one or two people to see how it works and use the positive or negative feedback obtained to improve the latest version.
  - Make a list of people who will be your main respondents, such as key-actors (community members working in the cultural field, administration, church, school, craftspeople etc.) and just regular residents; for inventorying a specific ICH, do not interview only direct performers, but also people who are less directly involved in it.
  - Try to include inhabitants of all ages, genders, and of different professional backgrounds, not only the most influential and articulate members of the community! Of course, depending on the specificities of the living heritage of the community concerned, you may have to choose respondents belonging more than one specific category of people.
  - Before starting each interview, ask for the free, prior, sustained and informed consent of the interviewee to be recorded and for you to be able to make the recording public. Note if permission has been obtained for public or online access.



# MODULE 4

## HOW DO I PLAN & IMPLEMENT AN ICH DIGITIZATION PROGRAM/PROJECT AT THE LOCAL LEVEL?

- Carefully prepare the equipment for the recording the interviews, either audio and/or video. And do not forget to take photos not just of the interviewed people (if they allow it), but also of the objects and artifacts connected with the concerned practices you document.
- Write down the names of all the people whom you interviewed and also carefully record the use of local names for practices, instruments, crafts, etc.
- Do not be surprised if you will get a lot of questions unanswered even if you have included topics that were documented earlier in the locality in the questionnaire. Disappearance of cultural forms is a natural phenomenon and your main purpose is to find information about living heritage, not about passive cultural forms. Always stay focused on the present!
- Do not be puzzled if you receive divergent and different opinions on the same issue from different respondents! Living heritage is a complex phenomenon and people may see it differently according to their own life circumstances, taste, interests! There is no single truth about it! Be open to hear even dissenting voices about the topic within the community!





## HOW DO I PLAN & IMPLEMENT AN ICH DIGITIZATION PROGRAM/PROJECT AT THE LOCAL LEVEL?

- **Fourth step: Create your digital archive!**

- Figuring out the basic architecture (systematization principles, domains, categories of metadata, etc.) of your digital archive should start before you carry out interviews. If you know beforehand the generic categories of the content that you intend to inventory will help you not return with an overwhelming amount of material or irrelevant information.
- Establish a protocol of data entering for the gathered information, which is like a set of rules or steps to follow when new datasets will be uploaded in the archive.
- Design and follow a classificatory system or systems for the resulted materials: from scanned documentation to recently made videos. The metadata should be as detailed as possible and should suit the type of information obtained. Try to find the most efficient ways to group the data gathered, and to collate the connected materials.
- Make your own digital inventory indexing the datasets on more than one criterion: ICH domains, respondents, file formats, etc. In terms of the types of data, your archive should normally contain: audio recordings, video recordings, photographs, notes or observations. Resulted paper, print materials or objects concerning ICH practices should also be digitised through scanning or photography.
- Make a plan for accessing and updating of the obtained information.
- Is the archive going to stay in your computer, an external hard-drive or/and on an Internet database? The answer depends on your resources, future plans, etc.



# MODULE 4

## HOW DO I PLAN & IMPLEMENT AN ICH DIGITIZATION PROGRAM/PROJECT AT THE LOCAL LEVEL?

- **Fifth step: Communicate your results! Do not think that inventorying and digitizing is an end in itself!**
  - Design a communication plan to generate public awareness on the availability of the material in your archive! Do not forget to always grant access to the interviewed people!
  - Create a social media platform dedicated to the locality's ICH!
  - Invite local people to connect, starting with your respondents, comment and share their feedbacks on the information that you post. Remember that their input on the topic is always more valuable than yours or other people's!
  - Invite ICH expert to learn and evaluate your results and further research the topic. Your findings could contribute to fostering new academic studies on the topic. Organize expert-practitioner pilot meetings.
  - Invite mass media outlets to disseminate the information, help designing a media campaign that would be sustainable and respectful to the image of the community!



## HOW DO I PLAN & IMPLEMENT AN ICH DIGITIZATION PROGRAM/PROJECT AT THE LOCAL LEVEL?

- Do not forget that your results could be useful to local development plans, community development and community participation strategies. In this respect, you may consult local action groups, rural development experts and other types of institutions, etc.
  - Do not forget to involve members of the community in dissemination activities as much as possible since they offered you the information! They are the stewards of the ICH you would be presenting! Any awareness raising event on their own ICH should include some of their representatives. Their presence at these dissemination events will also guarantee that their ICH is not misrepresented or disadvantaged.
- 
- **Sixth step: Create a safeguarding plan!**
    - Use the suggested safeguarding activities listed in the next unit.
    - Ask the feedback, suggestions or correction from the local people, incorporate their ideas, needs, expectations into the safeguarding plan!
    - Ask for assistance from informal groups of practitioners, specialized NGOs, local authorities, local cultural institutions.
    - There is no safeguarding plan that works for all! Try to tailor the plan to the specific circumstances and features of the place or the element.
    - If the ICH of the documented community has some commercial value, it is okay for the plan to envisage solutions for income generation that would support the livelihood of local heritage performers and bearers but be careful on how this plan could objectify and commodify the living heritage! Your main intention should be highlighting the symbolic and cultural value, not the commercial value of ICH!





# MODULE 4

## HOW DO I PLAN & IMPLEMENT AN ICH DIGITIZATION PROGRAM/PROJECT AT THE LOCAL LEVEL?

- **Seventh step: Go back!**
  - When creating your inventorying plan, envisage the necessity to return and continue your research or even redo parts of it. Community-based inventorying is always a work-in progress endeavour! If you want to be sure that your digital collection of data reflects the “living”, you need to regularly update it!
  - Updating the inventory is a must-do strategy in the spirit of the Convention and would also help you make use of the full potential brought by the digital format of your archive.
  - Your continual interest for inventorying will act as positive recognition and will boost local people’s pride in their ICH, reinforcing their sense of identity and continuity and thus they will become more motivated to engage in the continued performing and transmission of the concerned elements. This is one of the many positive unexpected consequences of your work!



## HOW DO I PLAN & IMPLEMENT AN ICH DIGITIZATION PROGRAM/PROJECT AT THE LOCAL LEVEL?

**4.3. Main safeguarding measures recommended by the 2003 UNESCO Convention' s capacity-building materials belong to 3 main categories:**

### **A. Identification, Inventorying, Documentation, Research**

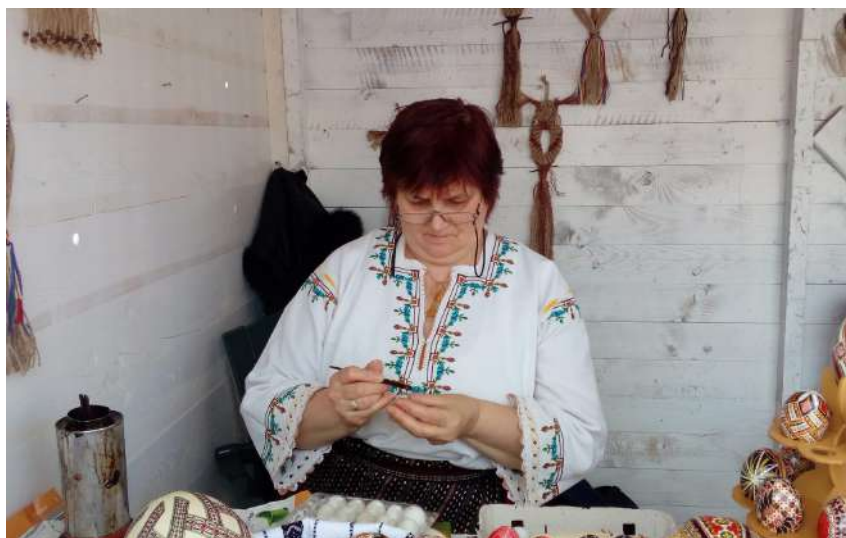
A.1. Carrying out a field survey to assess the viability of the ICH element(s).

A.2. Assembling a dedicated research team and/or a practitioner association that would regularly monitor the element

A.3. Organizing and participating in workshops and scientific conferences

A.4. Investigating various domains connected to the ICH element(s): local (rural) development, tourism strategy, sociological research, mass media communication, heritage education, etc.

A.5. Inventorying and monitoring the element(s).



### **B. Transmission, Education**

**B.1. Formal education:** designing pedagogical tools; drafting materials about the element(s) for the school curriculum; inviting craftspeople or performers in the classroom; creating temporary exhibitions or workshops about the element in local schools; thematic university research or internships for students in local universities, etc.

**B.2. Non-formal education:** organizing interactive workshops in cultural institutions dedicated to the element(s) and carried out by ICH bearers; encouraging events and trainings with the bearers, organized by youth organizations, cultural mediators, cultural brokers, cultural activists, etc.

# MODULE 4

## HOW DO I PLAN & IMPLEMENT AN ICH DIGITIZATION PROGRAM/PROJECT AT THE LOCAL LEVEL?

### C. Awareness-raising, Dissemination, Media communication, Publication

C.1. Drafting educational and promotional materials

C.2. Organizing guided visits, thematic itineraries at the places of performance of the ICH element

C.3. Exhibitions

C.4. Demonstrations

C.5. Designating ambassadors of the element

C.6. Editing informative publications about the element(s), for the general public

C.7. Creating audio-visual documentation posted regularly on social media

C.8. Creating sustainable strategies for local tourism.

### 4.4. A digital ICH archive of a place

As mentioned at the beginning of this module, a small project of ICH digitizing could be devoted to document not one ICH element, but all ICH elements that could be mapped in one place, from one locality to a region that is characterized by similar cultural, ethnic, linguistic features.





## HOW DO I PLAN & IMPLEMENT AN ICH DIGITIZATION PROGRAM/PROJECT AT THE LOCAL LEVEL?

**EXAMPLE: The digital collection of Catalan folk literature: The web portal of the Folklore Archive of the Universitat Rovira I Virgili in Tarragona, Spain**

- founded in 1994, and computerized in 2010: "Since 2012, the Archive has had an Internet portal that is intended to serve 2 aims: to publicize the activities carried out by the Archive's staff and to provide a single online point of access to its specialized database".
- it contains 3 databases: ArxiuFolk – Database of the Folklore Archive, RondCat – the Catalan Folktale Search Engine and the BiblioFolk – the Bibliographic Repository of Catalan Popular Literature;
- at first, the archive's portal (the 3 databases) was for internal use only, for research projects run in the university, but later it became available on the Internet;
- the archive also communicates its activities and updating on dedicated social media platforms (Facebook and Twitter);
- each file on the Folklore Archive database contains the following information:
  - (1) Details of the person who provided the information: name and surname, gender, age, profession, place of birth, place of residence, and language;
  - (2) Details of the document: date of collection, genre, title, text of the document, and contextual information and interpretation;
  - (3) Details of the collector: name, surname and age.



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## HOW DO I PLAN & IMPLEMENT AN ICH DIGITIZATION PROGRAM/PROJECT AT THE LOCAL LEVEL?

*The file allows us to add textual or graphic documents in pdf format (such as a piece of graffiti, a musical score, or a Screenshot from a mobile phone) and sound documents (such as a song or folktale).*

– the RondCAT database currently includes information on 6,127 folktales and may be queried by title, name of collector, collection, region, country, municipality, type, and so forth.

<https://www.arxiufolk.arxiudefolklore.cat>

### **A local archive emerging with community inventorying: Newfoundland and Labrador (Canada) ICH Inventory**

– a pilot inventorying project was launched in 2006 in the capital of the Canadian province of Newfoundland, supported by Heritage Foundation of Newfoundland and Labrador;

– scholars and students from the local university interviewed residents and collected personal stories, images and artefacts, they took photos and gave residents disposable cameras;

– Memorial University's Digital Archive Initiative (DAI) offered its central repository for the enterprise, storing the information collected under the project (<http://collections.mun.ca/>). DAI supports participants in the digitization of the inventory data and manages the long-term preservation of digitized content (image, audio, video, etc.) and regulates access to it. The materials collected in the pilot project were digitized.



Co-funded by  
the European Union

## HOW DO I PLAN & IMPLEMENT AN ICH DIGITIZATION PROGRAM/PROJECT AT THE LOCAL LEVEL?

- more than 2000 entries have been entered into the ICH inventory at DAI for this project by 2010;
- the inventory is organized by community and by topic:  
<http://www.mun.ca/ich/inventory/profiles.php>,  
<http://www.mun.ca/ich/inventory/ICHtopic.php>.

### 4.5. A digital ICH archive of an element

#### EXAMPLE: The Prometheus Project

- the project started as a safeguarding measure of Summer solstice fire festivals in the Pyrenees, an ICH element inscribed in the Representative List of the Intangible Cultural Heritage of Humanity in 2015 by Andorra, France and Spain;
- in order to research and promote the fire festival as performed by communities in a region divided among 3 countries, scholars from 8 academic institutions in those countries, coordinated by the University of Lleida, started implementing a project co-financed by the European Regional Development Fund (ERDF) through the Interreg V-A Spain-France-Andorra Program (POCTEFA 2014 to 2020);
- the planned results included a festival website, international symposiums and a virtual museum;
- the incidence of the COVID-19 pandemic offered a stronger motivation to urgently build up the virtual museum, due to the obvious loss of the festival spirit in its social structure;



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## HOW DO I PLAN & IMPLEMENT AN ICH DIGITIZATION PROGRAM/PROJECT AT THE LOCAL LEVEL?

- a big team of experts in various fields (anthropology, museology, journalists, artists, computer scientists, videographers, web designers) and people in the representative communities were interviewed and offered their skills, knowledge, opinions, impressions;
- in early 2021, the provisional “Prometheus Museum” soon became a meeting virtual place for interaction and sharing information among members of the concerned communities across the Pyrenean region;
- now, the museum has different exhibition and explanatory spaces about the festival, participative spaces such as an interactive map to search for the different towns where the festival is being performed, as well as a museum for children, where you can find readings and games related to the festival, and a section in which contributions of the communities are collected through social networks and the use of hashtags;
- a virtual interactive map offers information about all the locations where the festival takes place and the calendar of events.

<https://prometheus.museum/en/museum-production/>

The Prometheus Project Results:

1. a communication kit: to connect more people with the festival;
2. a virtual museum: to allow visitors to (re)live the spirit and the energy of the festival;
3. an international academic symposium to disseminate expert knowledge on the topic;
4. a pedagogical portal for teaching local school children about the festival;
5. videos showcasing the festival;
6. newsletter for interested recipients to regularly receive news on the festival and every year the calendar of the events.

More at: <https://www.prometheuspoctefa.eu/fr/bienvenue/>



## HOW DO I PLAN & IMPLEMENT AN ICH DIGITIZATION PROGRAM/PROJECT AT THE LOCAL LEVEL?

### 4.6. What about a digital ICH archive of existing datasets? The Wijesundara–Sugimoto model

After presenting above a plan for creating a digital archive of newly documented intangible cultural heritage information, we need to acknowledge the question of compiling a special ICH digital archive containing information already existing on the Internet. Wijesundara and Sugimoto [24] drafted a series of recommendations for dealing with such a case. The difficult task that Wijesundara and Sugimoto wish to solve is not the compiling process itself, but the homogenous aggregation of heterogenous metadata edited in multiple systems, demands, schemas:



24. Wijesundara, Chiranti; Sugimoto, Shigeo: "Metadata model for organizing digital archives of tangible and intangible cultural heritage, and linking cultural heritage information in digital space", in *Libres*, 28(2), 2018, p. 58–80.

# MODULE 4

## HOW DO I PLAN & IMPLEMENT AN ICH DIGITIZATION PROGRAM/PROJECT AT THE LOCAL LEVEL?

**Objectives.** The objective of this study is to develop a metadata model for digital archives of diverse cultural resources and dispersed communities, where metadata aggregation from different sources is required. This paper presents a model called Cultural Heritage in Digital Environment (CHDE) for organizing various digital cultural heritage information as a digital archive.

**Methods.** The CHDE model is created as a generalized metadata model. It clearly distinguishes an intangible cultural heritage entity and its instantiation to model digital archives for intangible cultural heritage like those for tangible cultural heritage. The CHDE model is defined using the One-to-One Principle of metadata, and is used to clearly identify the relationships between metadata and the entities described by the metadata.

**Results.** CHDE enables the organization of digital cultural heritage information related to tangible and intangible cultural heritage. It identifies the physical and digital information environment of cultural heritage, and further supports the modelling of digital archives built by aggregating cultural heritage information on the Web.





## HOW CAN I USE MY ICH DIGITIZATION SKILLS?

### 5.1. Challenges, paradoxes and revelations of ICH digitization

This module will offer only a limited insight on what ICH digitization can achieve. The archiving of digital data about living heritage is not mere preservation, but it is from the start a work of creation and of selection. Whenever is backed up by thorough documentation and selection, the digitized ICH can constantly be an inspiration for future projects, thus reconfirming and redefining its value thanks to its inherent polysemic condition.

Though they may seem homogenous and repetitive, too individualized, or ephemeral pieces of life, digital data about ICH will prove their overabundance of meanings and discrete precious particularities at the right time and within the right project.

Advocating for the benefits of ICH digitization does not mean a shift in focus from the living heritage to the production of digital objects. A lot of the digital solutions that are being created and used to preserve cultural heritage information are “object-centric” and are especially devoted to administering the “material-based knowledge bases”, while they are not being concerned enough with preserving the dynamic nature of ICH [25].

As pointed out in the previous modules, any ICH digitization program should be strategically included in a safeguarding plan. Digital ICH information could be part of the dissemination, educational settings or communication projects. Besides being a professional resource, digital ICH archives should be societal resources! Digital collections of ICH need to prove they can be more than recordkeeping, or a dusty storehouse of old things, but engaging and powerful tools for the future of cultural identity.

25. Hou, Yumeng; Kenderdine, Sarah; Picca, Davide; Egloff, Mattia; Adamou, Alessandro: "Digitizing Intangible Cultural Heritage Embodied: State of the Art", in *Journal on Computing and Cultural Heritage*, 15(3), February 2022, p. 1–20.





# MODULE 5

## HOW CAN I USE MY ICH DIGITIZATION SKILLS?

To say it with the words of Terry Cook, an expert in archival science, a pioneer in explaining the new current paradigm of archival projects, an advocate of the shifting of archive from product to process:

***At the heart of the new paradigm is a shift away from viewing records as static physical objects, and towards understanding them as dynamic virtual concepts; a shift away from looking at records as the passive products of human and administrative activity and towards considering records as active agents themselves in the formation of human and organizational memory; a shift equally away from seeing the context or record creation resting within stable hierarchical organization to situating records within fluid horizontal networks of workflow functionality. [26]***

The digital objects should not stay quite in the virtual shelf, but emulate new knowledge and new ideas, reminding society of the importance of ICH, of core values and identity landmarks.



26. Cook, Terry: "Archival science and postmodernism: new formulations for old concepts", in *Archival Science*, 1(1), 2001, p. 4.



## HOW CAN I USE MY ICH DIGITIZATION SKILLS?

They should also incentivize collaborative approaches between heritage experts, craftspeople, civil society organizations. In the following pages, we will provide some examples on how digital data could be the starting point and offer content for creative projects in various fields and with different aims. Co-opting digital ICH into otherwise conventional ethnographic exhibitions, assembling, and retelling the narratives in the archive within new contexts and in front of new audiences have the power to become an essential part of curatorial projects, educational tools, communication kits for presenting local ICH, etc.

The creative engagement and reuse of digital ICH collections should not necessarily imply creating far-reaching applications or new highly impactful programs, but could only inspire small projects undertaken by individuals in close-knit communities who want their peers to better engage with their local ICH.

### 5.2. The role of digitized ICH within the participatory museum framework

The presence of digital ICH has to support creative reuse, artistic refiguring of collections in order to engage audiences of ethnographic museums in new ways, enrich experiences of visitors with the physical museum collections, especially since integrating hybrid technologies for new immersive museum experiences becomes almost the rule nowadays, and it is meant to bring more participation, public communication and citizen engagement to the world of museums.

The Covid-19 pandemics brought about solid steps towards a digital shift. It showed that digitization is not only about keeping up with modern times, providing online accessibility and reaching out to younger public, but about social inclusiveness, being part of something bigger, being connected to one another in spite of (temporarily) lock downs/lack of interaction.

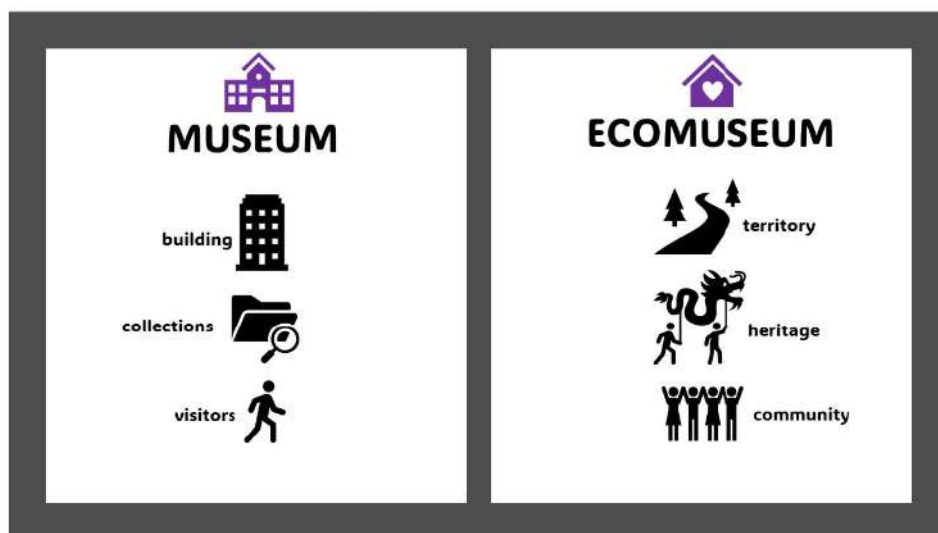
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## HOW CAN I USE MY ICH DIGITIZATION SKILLS?

Being closed for the visitors, the public institutions used their personnel and equipment to begin consistent work in the field, digitizing and making available online what used to be seen/ attended physically. It was an attempt to keep in touch, to reach the community to which they addressed.

The way the topic of the digital ICH in museums should be approached is not restricted to the digitizing (from mere photographing to 3D visualization) of the valuable artefacts. In 2023, many museum institutions have digitized at least parts of their collections, but this does not automatically mean that they are, in case they are of ethnographic specialization, already actively engaged in using the full potential of digitized ICH.

Moreover, the main issue to be taken into account is how much the conventional museums are committed to keeping in touch with **the living** heritage, for creating up “spaces where a participatory and future-oriented safeguarding ICH paradigm meets the museum context” [27]. One particular example of museums with a strong ethnographic component that are more likely inclined to include the local ICH and the local community ICH into their main projects are the eco-museums.



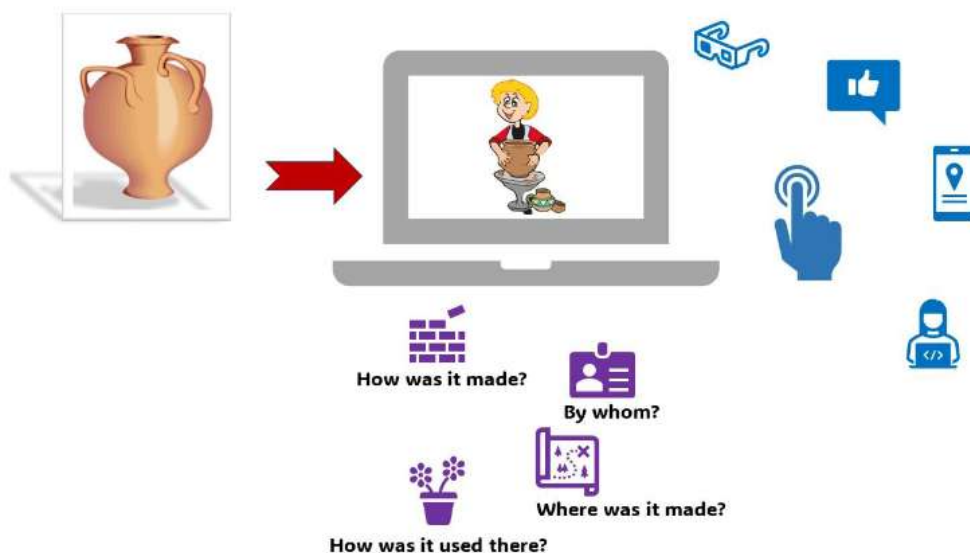
The difference between a *museum* and an *ecomuseum* according to Hugues de Varine, former Secretary General of the International Council of Museums

27. Nikolić Đerić, Tamara: "How to use this book", in Nikolić Đerić, Tamara; Neyrinck, Jorijn; Seghers, Eveline; Tsakiridis, Evdokia (eds.): *Museums and intangible cultural heritage. Towards a third space in the heritage sector. Companion to discover transformative heritage practices for the 21st century*, editors , Werkplaats immaterieel erfgoed, Bruges, 2020, p. 16–17.

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The most recent museum definition, approved in Prague, on 24 August 2022, by the Extraordinary General Assembly of ICOM (International Council of Museums) calls for museums to become facilitators of community action and a gathering space. The presence of living heritage in museums as a place where communities, performers and the objects they create are important to a similar degree would actually bring forth this new vision exactly. Even more so, this is true for community-museums [28] or eco-museums which have showcased their own heritage as a main purpose, communicating the history of a place and its people from the community's point of view and supporting community-led sustainable development, protecting the community's lifestyle. These represent accurate representations of traditional local knowledge, living customs and traditions.

But the evident emerging field of the digital in museums is not only positively received by analysts: "While digital collections provide a rich asset for hybrid museum experiences, any solution focused on digital collections runs the risk of overshadowing the physical encounter with museum objects" [29].



28. Davis defines ecomuseums as "community-driven museums or heritage projects that aid sustainable development". Davis, Peter: "Ecomuseums and sustainability in Italy, Japan and China: adaptation through implementation", in Knell, Simon; MacLeod, Suzanne; Watson, Sheila (eds.): *Museum Revolutions: How Museums Change and Are Changed. Proceedings of The Museum: A World Forum*, London, Routledge, 2007, p. 199.

29. Waern, Annika; Sundnes Løvlie, Anders: "Remediating, Reframing and Restaging the Museum", in *Hybrid Museum Experiences. Theory and Design*, Amsterdam University Press, 2022, p. 204.



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## HOW CAN I USE MY ICH DIGITIZATION SKILLS?

A solution to that risk would be transforming objects into what Nina Simon calls “social objects”: “A social object is one that connects the people who create, own, use, critique and consume it. Social objects are personal, active, provocative, relational” [30].

As some of the projects described below will show, the digital technology has the potential to transform museum static objects into social objects. The main input that the perspective of ICH safeguarding could bring to the museum world would be to further encourage holistic representations of museum artifacts, including more information about the social and cultural contexts in which they were created and originally used.

The aim of ICH digitization is not to simulate, to replace real objects with virtual objects, but to generate multilayered knowledge of past and present attributes of these real objects. This type of contextual support for understanding the hidden messages of displayed objects is very relevant for visitors with visual impairments, too in the form of included electronic aids.



30. Simon, Nina: *The Participatory Museum*, Santa Cruz, California, Museum 2.0, 2010, p. 129.

## HOW CAN I USE MY ICH DIGITIZATION SKILLS?

The already common museum solution to connect the “digital natives” with an exhibition is the invitation to send photos, messages, feedbacks to a social platform or an electronic mail of the museum. Consequently, the institution is encouraged to integrate and display these spontaneous, non-expert contributions into the exhibition itself.



The more complex type of this sort of experience are the co-creative, intense participatory projects that strive to include as much as possible the visitors' point of view and vision. Using living heritage as an entry point for the connection between the public and the artifacts is a strategy for ethnographic participatory approach in heritage-making processes.

Reaching out to the visitors' own ICH could help the museum create customized content and empower visitors to identify themselves with the objects, as Geismar also points out: “We need to explore how digital objects are used to constitute reality effects, creating object lessons by altering and participating in how we both see and understand the world” [31].

31. Geismar, Haidy: *Museum Object Lessons for the Digital Age*, UCL Press, 2018, p. 19.

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## HOW CAN I USE MY ICH DIGITIZATION SKILLS?

Afsin Altayli, coordinator of Museum and Society Section at ICOM:

*Are museums individual institutions separate from communities, are they spaces through which communities value their own collections held in trust by museums on their behalf, either in tangible or intangible forms? (...) How can museology and museum practice reflect diverse epistemologies and worldviews? How can museums make sure that their collection policies value the intangible elements that are not necessarily part of their material collections, but remain outside of their walls as embedded within the diverse community they serve? [32].*

### Intangible Cultural Heritage and Museums Project

– co-funded by the Creative Europe program of the European Union (2017–2020)

– explored the variety of approaches, interactions and practices on intangible cultural heritage in museums in Belgium, The Netherlands, Switzerland, Italy and France

<https://www.ichandmuseums.eu/en/about/about-imp>



32. Altayli, Afsin: "The social role of museums", in Nikolić Đerić, Tamara; Neyrinck, Jorijn; Seghers, Eveline; Tsakiridis, Evdokia (eds.): *op. cit.*, p. 46.



## HOW CAN I USE MY ICH DIGITIZATION SKILLS?

### **CraftsLab Project (2018): a result of the IMP Project**

- implemented at the Dutch Open Air Museum in Arnhem, focuses on reflecting the Dutch daily life from 1900 up to approximately 1970 in exhibits of traditional housing, clothing, traditions, crafts, etc.
- in collaboration with the Dutch Centre for Intangible Cultural Heritage (Kenniscentrum Immaterieel Erfgoed Nederland)
- CraftsLab provided a meeting space and experimental platform for craftspeople to meet artists, designers and crafts students. This interaction allows visitors to explore the possibilities of particular crafts, to learn how various techniques derived from the crafts can function and find their place in today's world, and often give rise to ideas for innovation.
- the interactive meetings were filmed and photographed and eventually the photos and videos were displayed in the museum to encourage discussions, to connect the past, the present and the future.

Read more at: <https://www.ichandmuseums.eu/en/toolbox/book-museums-and-intangible-cultural-heritage>

### **Digital storytelling in museums to enhance participatory visitor experience**

**Digital storytelling** = the practice of incorporating digital text, imagery, video and audio into the presentation of a computer-mediated, multimedia story [33].

Dana Atchley is the one credited with initiating the digital storytelling movement and the Center for Digital Storytelling in Berkley, California.

33. Chung, Sheng Kuan: "Art Education Technology: Digital Storytelling", in *Art Education*, Mar., 2007, Vol. 60, No. 2 (Mar., 2007), p. 18.

# MODULE 5

## HOW CAN I USE MY ICH DIGITIZATION SKILLS?

### ICH hypervideos?

**Hypervideo (or hyperlinked video)** = a displayed video stream that contains embedded, interactive anchors, allowing navigation between video and other hypermedia elements.

It is analogous to hypertext, which allows a reader to click on a word in one document and retrieve information from another document, or from another place in the same document. It allows a user to make choices based on the content of the video and the user's interests.

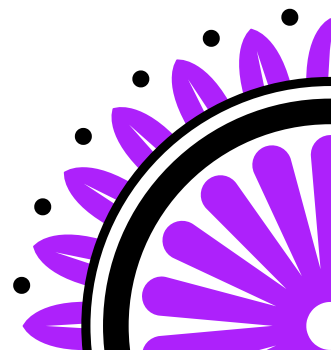
### **EMOTIVE Project: Emotive Virtual cultural Experiences through personalized storytelling**

- project financed within the Horizon 2020 Framework of the EU, and implemented by a consortium led by EXUS SOFTWARE LTD (U.K.) (2016–2019)
- the objective was to research, design, develop and evaluate methods and tools that can support the cultural and creative industries in creating Virtual Museums which draw on the power of emotive storytelling, providing the means to authors of cultural products to create high-quality, interactive, personalized digital stories
- storytelling can engage visitors, trigger their emotions, connect them to other people around the world, and enhance their understanding, imagination and, ultimately, their experience of cultural sites and content

<https://emotiveproject.eu/pages/summary/index.html>



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## HOW CAN I USE MY ICH DIGITIZATION SKILLS?

### Digital games for educational experiences inside museums

As acknowledged by the Network of European Museum Organisations (NEMO) in a report dated January 2023, "digital games in museums can be a valuable tool for interactive remote learning both for kids and adults. Museums employ digital gaming to interactively ease visitors into collections, to test their knowledge, or to enable them to develop new skills and cocreate in a playful manner. Gaming experiences accompanied by additional educational resources can become an engaging addition to the school or high school curriculum" [34].

Another useful resource to refer to when approaching the concept of gamification and its usage in museum environments is the handbook *When Museums Meet Videogames* created by the community of museum professionals We are Museums, as well as the respective collection of talks and collaborative workshops available at:

<https://wearemuseums.com/whenmuseumsmeetvideogames>



34. Barekryan, Kristina; Peter, Lisa: *Digital learning and education in museums. Innovative approaches and insights. A NEMO Report by LEM, the Learning Museum Working Group*, NEMO – The Network of European Museum Organisations, Berlin, January 2023, p. 70.

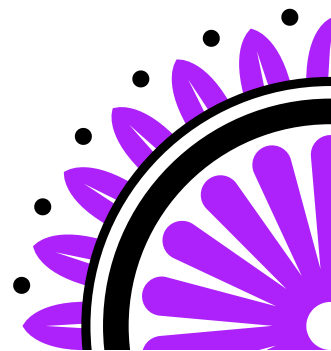


# MODULE 5

## HOW CAN I USE MY ICH DIGITIZATION SKILLS?

### **PLUGGY Project (Pluggable Social Platform for Heritage Awareness and Participation)**

- funded from the European Union's Horizon 2020 research and innovation programme (2016–2019)
- a social networking platform for cultural heritage, which gives voice to the citizens across Europe, enables them to safeguard and enrich the European cultural heritage landscape, empowering European citizens to be actively involved in cultural heritage activities and act not only as observers, but also as maintainers, creators, major influencing factors and more importantly as ambassadors of their country's culture
- tools dedicated to create, share and experience 3D models have been developed; the tools use the web and portable devices that have support for virtual and augmented reality:
- PlugSonic Soundscape and PlugSonic Sample – two web-based applications for the creation and experience of binaural interactive audio narratives and soundscapes
- a web-based application for 3D sonic narratives contributing to digital storytelling and 3D audio technology domains
- PLUGGY Pins – For creating self guided tours  
<https://www.pluggy-project.eu/>



## HOW CAN I USE MY ICH DIGITIZATION SKILLS?

**Specialized museums connected with ICH practices functioning as open digital collaborative platforms:**

The MIMO project 2009–2011 (musical instrument museums online) provides the world largest freely accessible database for information on musical instruments held in public collections. Its database now contains the records of 64259 instruments.

It provides very useful information on how to digitize a musical instrument collection, specification on the common data model to use, metadata mapping and implementation guidelines, and plenty of other particularly interesting data. More can be found at:

<https://mimo-international.com/MIMO/>

**Many ethnographic museums offer virtual tours that could also include more digital data featuring living traditions.** For example, visit the Virtual Open-Air Museum in Three Dimensions in Latvia The Latvian Ethnographic Open Air Museum, which is one of the oldest and largest of its kind in Europe:

<https://openvirtualworlds.org/omeka/exhibits/show/virtual-ethnographic-museum/virtual-ethnographic-museum>



# MODULE 5

## HOW CAN I USE MY ICH DIGITIZATION SKILLS?

### 5.3. Capturing living heritage with the help of technology

Within the relationship between digital technology and cultural heritage, besides the fact that digital technology is used for restoring, renovating, protecting, documenting and archiving our cultural heritage, more and more it is also used for capturing performance of living heritage, which involves the most sophisticated technical and curatorial solutions.

How to present in a curatorial context not just the static representation of a dance or of a craftsperson' at work? Capturing motion or the performative part of cultural heritage is one of the most captivating fields of new museology which requires multi and interdisciplinary work of museum professionals and computer science scholars.

Digital solutions such as touch interfaces, specially designed games, augmented and virtual reality have proliferated in contemporary exhibition practices. Among the current digital museum technology, the most suitable for integrating digital ICH data are the mobile applications that offer additional content to the physical artifacts and the complex "assemblies that integrate digital technology across multiple spaces and exhibits" [35].

In order to point out the complex nature of the interaction between visitors and a heritage site, Nadezhda Dimitrova Savova coined the term "heritage kinaesthetics", that she explained as "the moving bodily practices that people imagine and enact to enliven the built environment's static aesthetic looks, or the immobile quality usually ascribed to historic sites. The five main heritage kinaesthetics practiced by residents and visitors include visual (photographing; seeing vs looking), ambulatory (walking around as exploration), performative (enacting intangible cultural heritage such as samba, capoeira, football, and music; tour guides' performances), oral (telling stories/imagining history), and acoustic (re-creating place-specific sounds)" [36].

35. Hornecker, Eva; Ciolfi, Luigina: "Human-Computer Interactions in Museums", in *Synthesis Lectures on Human-Centered Informatics*, 12.2, p. 2019, p. 171.

36. Dimitrova Savova, Nadezhda: "Heritage Kinaesthetics: Local Constructivism and UNESCO's Intangible-Tangible Politics at a Favela Museum", in *Anthropological Quarterly*, Volume 82, Number 2, Spring 2009, p. 547.





## HOW CAN I USE MY ICH DIGITIZATION SKILLS?

Savova's detailed presentation of the complexity of people's engagement with embodied heritage offers only a clue to the even deeper participatory relationship that needs to be established with the performance-based heritage.

### Instantiation for ICH digitalizing

**Instantiation** is the creation of a real instance or particular realization of an abstraction or template, such as a class of objects or a computer process. To instantiate is to create such an instance by, for example, defining one particular variation of an object within a class, giving it a name and locating it in some physical place.

The underlying reason for using instantiation in digitalizing performance-based ICH starts from the realization that the real-life performance of ICH is only a surrogate of the real moment of performance: "A digital surrogate of intangible cultural heritage in a digital archive is not a surrogate of the intangible cultural heritage but a surrogate of a single performance" [37].

The use of instantiation was recommended by Wijesundara and Sugimoto as the best way to render dynamic movements specific to living heritage: "Unlike tangible cultural heritage, intangible cultural heritage does not exist as sole physical items and cannot be represented as items. However, an intangible cultural heritage entity can have many Instantiations.

37. Wijesundara, Chiranthi; Sugimoto, Shigeo: *op. cit.*, p. 76.

# MODULE 5

## HOW CAN I USE MY ICH DIGITIZATION SKILLS?

For example, a traditional dance performance can be performed in many places. Therefore, each performance is an Instantiation of the corresponding intangible cultural heritage entity. A specific intangible cultural heritage is represented by a combination of Instantiations and their associated resources. These intangible cultural heritage Instantiations can be based on temporal, location, category, agent, activity, or concept associated with the intangible cultural heritage entity” [38].

### Examples of how to digitally capture the ever-changing living heritage

#### Terpsichore Project: Transforming Intangible Folkloric Performing Arts into Tangible Choreographic Digital Objects

- project financed within the Horizon 2020 Framework Research Programme of the EU (2016–2020);
- its objective was to study, analyse, design, research, train, implement and validate an innovative framework for affordable digitization, modelling, archiving, e-preservation and presentation of ICH content related to folk dances, in a wide range of users (dance professionals, dance teachers, creative industries and general public);
- the project integrated innovative results of photogrammetry, computer vision, semantic technologies, time evolved modelling, combined with storytelling and folklore choreography, such as, for example, “the application of segmentation and classification algorithms to Kinect-captured depth images and videos of folkloric dances in order to identify key movements and gestures and compare them against database instances” [39];

38. *Ibidem*.

39. Protopapadakis, Eftychios; Voulodimos, Athanasios; Doulamis, Anastasios; Camarinopoulos, Stephanos; Doulamis, Nikolaos; Miaoulis, Georgios: "Dance Pose Identification from Motion Capture Data: A Comparison of Classifiers", in *Technologies*, 6/1, 2018, p. 3.

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- the final product included a set of services such as virtual/augmented reality, social media, interactive maps, presentation and learning of European folk dances.

### The digital and the socio-cultural aspects of the Argentinian Tango

The tango-danceability of Music in European Perspective Project – funded by the Austrian Science Fund FWF, Project V 423 Richter-Programme, and implemented by the Institute of Ethnomusicology at the University of Music and Performing Arts Graz (Austria). The project makes use of computer based analytical tools, in particular motion capture technology for dance movement analysis, and quantitative data acquisition and evaluation, methods borrowed from the field of communication science.

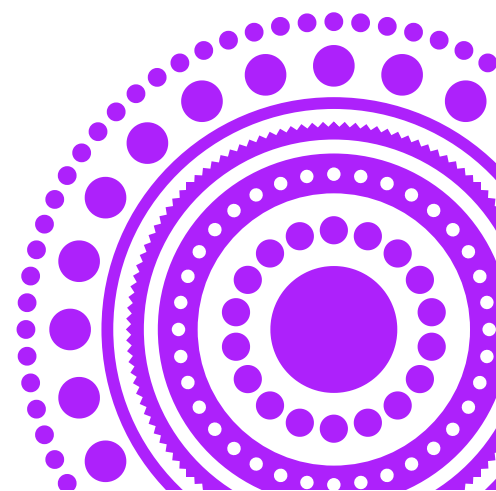
*The particular innovation occurs not in these digital methods themselves, which have been in use for some time, but in the adaptation for ethnochoreological and ethnomusicological research questions, and the combination of these methods into a holistic research initiative. The aim of this project is mainly to gain enriched information about tango argentino. But beyond that, preliminary results presented here show that this transdisciplinary approach, in which researchers from all disciplines involved constantly exchange information and develop analysis tools, approaches, and interpretations through continuous feedback in both directions, enables researchers to surpass the knowledge that could be gathered inside the boundaries of one discipline only. We hope that it will serve as an example for future projects in the field of intangible cultural heritage [40].*

<https://dancetangomusic.com/>

40. Stepputat, Kendra; Kienreich, Wolfgang; Dick, Christopher S.: "Digital Methods in Intangible Cultural Heritage Research: A Case Study in Tango Argentino", in *Journal on Computing and Cultural Heritage*, 12, 2, Article 12 (May 2019), p. 2.



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# MODULE 5

## HOW CAN I USE MY ICH DIGITIZATION SKILLS?

### 5.4. Presenting ICH practitioners by online participatory videos

**UNESCO 2003 Convention capacity-building materials: using audio and video recording techniques for a participatory mode of documenting:**

The features of a participatory video:

- ICH focuses on process and not product, capturing the living nature of ICH;
- Think about where close ups are needed, e.g. hand and foot movements for dance, facial expressions etc.;
- It allows the community to have its own voice;
- Participants and community members learn to use video recording themselves as opposed to being “shot” by experts or technicians;
- Utilizing the power of the visual medium to show genuine performance of ICH, and the material used to help craftspeople explain their works and disseminate the cultural value and the intrinsic “story” of their objects.

**Example: “I Like It!” Experiencing Mediascapes in the Artisanship of Prahova County** by Marin Constantin (Francisc Rainer Institute of Anthropology, Romanian Academy)



## HOW CAN I USE MY ICH DIGITIZATION SKILLS?

It is a program that started documenting traditional artisanship in Prahova County (Romania), with the support of Prahova Natural Science Museum, a county-level museum based in Ploiești.

It contains a series of short interviews with several local craftspeople: “In terms of the interview structure, the talks with the Prahova craftspeople generally followed the line of life histories, as my interlocutors evoked their childhood experiences in learning their arts, the development in time of their work, their family framework of activity, and current details of doing artisanship. As already mentioned, our discussions took place in the workshops set up inside the houses of the artisans (which thus became a distinct and productive component of local households)” [41].



During the Covid-19 pandemics, Constantin started to post the videos with the interviews on the Museum’s Facebook page:

*The PNSM Facebook page now offered satisfactory evidence, I concluded, for both the immediate realities of artisanship in Prahova County and the wider public interest in this category of virtual content. Above all, Prahova Natural Science Museum had placed itself at the crossroads of unseen and yet vibrant networks of people who were now maybe more willing than ever in the past to take a (physical) tour of the museum galleries [42].*

<http://martor.muzeultaranuluiroman.ro/wp-content/uploads/2022/11/11-Constantin.pdf>

41. Constantin, Marin: “‘I Like It!’ Experiencing Mediascapes in the Artisanship of Prahova County”, in *Martor*, 27, 2022, p. 141.

42. *Ibidem*, p. 148.

# MODULE 5

## HOW CAN I USE MY ICH DIGITIZATION SKILLS?



### 5.5. Digital data to revive ICH

#### Keeping wooden boatbuilding alive in Greece through a collaborative digital platform

The digital platform Boats and Boatbuilding in Modern Cultural Heritage is an initiative intending to safeguard the traditional knowledge and skills of wooden boatbuilding on the islands and coastal areas of Greece by recovering and disseminating information about this topic. The digital platform is connected with a thematical onsite museum: Museum of Aegean Boatbuilding and Maritime Crafts, a project of the Municipality of Eastern Samos created with EU funding.

The platform is managed by the following institutions: Friends of the Museum of Aegean Boatbuilding and Maritime Crafts, ELLINIKI ETAIRIA Society for the Environment and Cultural Heritage, Urban Planning Research Lab, School of Architecture of the National Technical University of Athens, Research Laboratory of Didactics of Mathematics and Learning Technologies, Department of Mathematics of the University of the Aegean.



## HOW CAN I USE MY ICH DIGITIZATION SKILLS?

It gathers different types of data that would help the preservation of the craft, such as: pictures of fishing boats that no longer exist from various archives, informative videos with interviews of boatbuilders, fisherman who use the boats, artists or scholars who support the cause of wooden boatbuilding.

For example, the museum collaborates with researchers at the Department of Mathematics of the University of the Aegean who use the material on the platform in the mathematical modelling laboratory. More at: <https://woodenboats.gr/en/home-en/>



### **Preserving the traditional Taiwanese cultural practice of shadow puppetry through digitisation**

It is a strategy to safeguard the shadow puppetry practice by providing a new appeal of this performative art with the contemporary public, enticing them to experience, engage with and learn about it.

The decline of the shadow puppetry is often attributed to the rise in popularity of new media, so the heritage experts from the Kaohsiung City Puppetry Museum have decided to include in their permanent exhibition the interactive digital technology. This is how the digital shadow play project came to life, resulting from combining the narrative, traditional practice, an ICH element still being performed in the area, with digital tools, thus creating “digital puppetry” to be then experienced by any visitor.

# MODULE 5

## HOW CAN I USE MY ICH DIGITIZATION SKILLS?

The project started with digitization of the museum collections of old video recordings of performances, consisting in video home system (VHS) tapes, and the construction of associated metadata, and was possible thanks to the cooperation between Shu-Te University and the Kaohsiung City Government. The project was presented at the 2010 Kaohsiung International Puppet Theatre Arts Festival.

The resulted digital archive was hosted online at the Department of Animation ; Game Design in Shu-Te University under the NSC project (NSC 99-2631-H-366-001), and partially also on the national archives website: Digital Taiwan—Culture Nature.

The project's "digital scene" is a multitouch LCD screen that allows people to use their fingers to operate directly a pair of touchscreens and combine performance techniques with music and other elements, just like performing realistic shadow plays, and not just watching passively.

***Audiences can now interact with and influence visuals on the screen through natural communicative body gestures. This has some promising implications for shadow puppetry, as the spirit of traditional shadow puppetry performance is to express rich stories and emotion through changes in action controlled by the artists. By combining human-controlled puppetry practice of shadow plays and modern forms of human-computer interaction like gesture interaction, the cultural legacy can be retained through digital forms of shadow puppetry characters and performance. [43]***

As such, the project encouraged the active connection between the public and this ICH element, and additionally brought more attention for the actual puppetry artists in the area.

43. Chen, Tin-Kai: "Preserving Chinese shadow puppetry culture through digitisation", in Lewi, Hannah; Smith, Wally; vom Lehn, Dirk; Cooke, Steven (eds.): *The Routledge International Handbook of New Digital Practices in Galleries, Libraries, Archives, Museums and Heritage Sites*, Routledge, London, 2020, p. 213.



## HOW CAN I USE MY ICH DIGITIZATION SKILLS?

### **- SILKNOW. Silk Heritage in the Knowledge Society: from punched cards to big data, deep learning and visual / tangible simulations**

This is a research project that has received funding from the European Union's Horizon 2020, coordinated by the University of Valencia, and aimed to improve the understanding, conservation and dissemination of European silk heritage from the 15th to the 19th century, intending to preserve the tangible and intangible heritage associated to silk by extracting structured metadata from museum artifacts in the field of silk heritage.

Based on records from existing catalogues, it applies next-generation computing research to produce digital modelling of weaving techniques (in a "Virtual Loom"), through automatic visual recognition, advanced spatio-temporal visualization, multilingual and semantically enriched access to digital data.

Starting from the image of a historical silk fabric (defined thanks to close collaboration of experts in computer graphics, art history and historical fabrics), the Virtual Loom automatically subtracts the design, and allows the user to apply different weaves and weaving techniques. More at: <https://silknow.eu/>





# ANNEX 1

## The landscape of intangible cultural heritage safeguarding in Croatia, Cyprus, Greece, and Romania

### CROATIA

The Republic of Croatia has been implementing an active approach to the valorisation, inventory making, documenting and promoting of intangible cultural heritage through its cultural institutions and public bodies. The ratification of the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage in 2005 is considered the turnover when the role of the intangible heritage took a stronger stance in the national policies. The Ministry of Culture and Media of the Republic of Croatia is the central implementation body of the 2003 Convention and it has inscribed so far over 160 intangible cultural goods in the Cultural Property Register of the Republic of Croatia, out of which 17 have been inscribed on three UNESCO lists of the Intangible Cultural Heritage of Humanity. The inscribed files are the results of the collaborative practices between the Ministry of Culture and Media, more precisely the Directorate for the Protection of Cultural Heritage and the Service for UNESCO jointly with the Croatian Commission for UNESCO, the Commission for Intangible Heritage, as well as experts from various scientific institutions and holders of these traditions.

The Ministry performs the administrative and other tasks that are related to the following: research, examination, monitoring, recording, filing and promotion of cultural heritage; the central information and documentation service; determining the characteristics of the protected cultural property; setting the measures for definition of the public needs programs in the segment of culture in the Republic of Croatia; care, harmonization and supervision of the financing programs related to the protection of cultural heritage; foundation and supervision of institutions responsible for the work of legal and natural persons engaged in restoration, conservation and other tasks related to the protection of cultural heritage; providing conditions for education and training of professionals in the tasks related to the protection of cultural heritage; definition of the purpose, requirements for the use of the cultural property and management of the cultural property in accordance with the regulations; definition of special building conditions required for the protection of cultural heritage; performance of inspection tasks related to the protection of cultural heritage.



# ANNEX 1

## The landscape of intangible cultural heritage safeguarding in Croatia, Cyprus, Greece, and Romania

### CROATIA

On the initiative and in agreement with the Croatian Commission for UNESCO, in 2002 the first special Commission for Intangible Cultural Heritage was established in the Ministry of Culture. The committee members are ethnologists, external collaborators from scientific institutes, faculties and museums, experts in Croatian traditional cultural heritage. The task of the Commission is to propose measures for the protection, preservation and promotion of intangible cultural heritage, such as the selection, consideration and preparation of proposals for the registration of intangible cultural assets in the Register of Cultural Assets of the Republic of Croatia. The committee submits the adopted programs and proposals to the Minister of Culture and Media.

Every year, through public calls, the Ministry of Culture and Media supports a number of activities ensuring long-term inclusion of intangible heritage in formal and non-formal education, development projects, an adequate supply of traditional products on the market, various research and documentation activity, sustainable development planning, development of creative approaches to heritage, etc. This process is also taking into perspective the necessity and need to engage diverse sectors and all levels of the societal bodies as a whole in a variety of activities of planning and implementation of the protection measures; the preservation of the intangible cultural heritage in Croatia is carried out systematically and with all professional levels included, with an active participation of local, municipal and regional communities, as well as relevant stakeholders.

High education programs in fields connected with ICH safeguarding and management are offered by University of Zagreb, Faculty of Humanities and Social Sciences in Zagreb, Department of Ethnology and Cultural Anthropology; University of Zagreb, Faculty of Croatian Studies; Zagreb University of Zadar, Department of Ethnology and Anthropology, etc.

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### CROATIA

As some of the objectives of the UNESCO 2003 Convention are to raise public awareness of the value and frailty of the intangible heritage, which is exposed to a number of different socio-historical influences leading to its disappearing, a series of exhibitions were created with an aim of presenting the intangible cultural heritage of Croatia on the UNESCO lists, as a very valuable contribution to the preservation of intangible cultural heritage. Guidelines for digitization of cultural heritage were created as part of the project "e-Culture – Digitization of cultural heritage" co-financed within the Operational Program Competitiveness and Cohesion 2014–2020, from the European Fund for Regional Development. The Ministry of Culture and Media implemented the project in cooperation with the Croatian Radio and Television, the Croatian State. The aim of the Guidelines for digitization of cultural heritage is to establish and encourage a systematic and uniform approach to the digitization of materials in cultural institutions and to create unique and harmonized norms and specifications regarding the digitization process and parameters.

#### Examples of ICH digitization projects in Croatia:

**Croatian National State Archive – Croatian Archives** are in the continuous process of digitizing vital registers and various other records and making them available through their online digital archive ARHiNET (Central National Register of Archival Fonds and Collections of the Republic of Croatia). ARHiNET is the central national record of archival material maintained by the Croatian State Archives. The On-line Register is an integral part of the ARHiNET system and enables access to data on archival sources that are kept in state and other archives and other institutions holding archival material.

**Institute of Ethnology and Folklore Research** is a center for ethnological, cultural-anthropological, folkloristic, ethnomusicological and similar scientific research, with emphasis on interdisciplinary and transdisciplinary critical research of culture, fully encompassing traditional, popular, everyday and other aspects and articulations. The Institute has a rich library and collection of ethnographic materials, where a number of manuscript collections, audio and video recordings, photographs and films are held. The activity of the Institute encompasses empirical and theoretical research; gathering and critical processing of data and ensuring their availability; writing, presenting at gatherings and publishing of scientific and professional work;





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### CROATIA

participating in higher education and educational projects; publishing parts of prepared material in printed and electronic form and on CDs and DVDs; services of the specialized library etc.

Through the Digital repository of the Institute of Ethnology and Folklore, the institute takes care of a unique collection of documents (text, sheet music, audio, video, photo) about traditional and contemporary culture and society through documentation service. The files are available online to researchers and other users through digital platform – repository (dief.eu) which has been prepared with the aim to connect similar institutions and to assure simple data exchange.

**Project “Cultural heritage digitalisation”** – eKultura portal was developed within the eKultura project “Cultural heritage digitalisation”, funded by the European Regional Development Fund within the implementation of the Operational Programme “Competitiveness and Cohesion 2014–2020”. The project is implemented by the Ministry of Culture and Media in cooperation with partner institutions, the Croatian State Archives, the Croatian Radio–Television, the Museum of Arts and Crafts, and the National and University Library in Zagreb. The aim of the Project is to contribute to an increased use of information and communication technologies in communication between citizens and public administration by establishing an information system for coordinating communication and by developing a central software solution in the cultural heritage sector (<https://ekultura.hr/>).

**ICARUS CROATIA** is a non-profit association dedicated to researching historical heritage, promoting the availability of archival sources through modern technologies and developing inter-institutional and international cooperation in the field of cultural, scientific and professional activities. One of the projects recently implemented by ICARUS was *BoostDigiCulture – A sustainable framework for improving the digital upskilling of adult cultural professionals* (2022–2023).



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### CYPRUS

The Republic of Cyprus ratified the convention in 2006. Cyprus National Commission for UNESCO set up as a direct result of the convention. The organisation coordinating with other governmental and non-governmental actors, are working on archiving and other related materials.

The Cyprus National Commission for UNESCO is the body created specifically for these tasks. It coordinates with the Cultural Services of the Cyprus Ministry of Education, Culture, Sport and Youth, and Cyprus Research Centre. There are also a number of Non-Governmental Organisations which carry out these activities separately but in contact with the governmental bodies (e.g. The Leventis Municipal Museum, The Folk Art Museum, Cyprus Handcraft Service).

There is an inventory managed by the Cyprus Research Centre; it allows governmental and non-governmental institutions to create entries to the inventory. It also presents an opportunity to ponder possible nominations for the UNESCO Representative List of the ICH of Humanity. The website had faced problems before and was criticised before. It has been substantially improved (<http://www.unesco.org.cy/>).

In 2013, Cyprus University of Technology established the Digital Heritage Research Lab having one very crucial goal: the research on the digitization, documentation, archiving, and promotion of the tangible and intangible cultural heritage of Cyprus. Nowadays, the Digital Heritage Research Lab serves as the coordinator for three significant European Research Programmes and takes part as a partner in five additional similarly significant initiatives.

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### CYPRUS

The research of the institution focuses on four thematic areas, the recording, access, management and conservation of cultural heritage assets. Some examples are: research collaborations on the use and impact of digitization in the field of preservation of cultural heritage and the memory of the past; methods for the 2D/3D Digitization of Cultural Heritage such as system development, large-scale databases, virtual representations, 3D visualisations; digitisation of audiovisual records; standards in Digital Cultural Heritage; knowledge management and memory; semantic enrichment of artifacts, metadata encoding, reasoning, and inference; operation of interactive technologies that allow user interaction with the content; development of new applications and mash-ups over existing knowledge and data sets; hosting of new research projects; organizing activities, events, seminars, and conferences to discuss new fundamental research capabilities; use and reuse of digitized collections.

After the ICH inventory was formed, a number of public initiatives (both by NGOs, and individuals and communities) were made to create entries to be presented to UNESCO. Besides, communities are directly involved with ICH activities both as part of tourism but also their everyday life. Grassroot projects of dissemination, commercialization, hybridization, filling the gap between the academic and the small community initiatives, the family/community digital archives: [http://www.unesco.org.cy/Programmes-Intangible\\_Cultural\\_Heritage\\_of\\_Cyprus,EN-PROGRAMMES-04-02-03,EN](http://www.unesco.org.cy/Programmes-Intangible_Cultural_Heritage_of_Cyprus,EN-PROGRAMMES-04-02-03,EN)

#### Examples of ICH digitization projects in Cyprus:

##### Virtual dance museum – Folk Dances

<http://andreasaristidou.com/CYdigitization.html>

##### Imaging Centre for Archaeology and Cultural Heritage – Paintings, Photography

<https://www.cyi.ac.cy/index.php/education/phd-programs/digital-cultural-heritage.html>

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### CYPRUS

#### ***SCHEDAR – Safeguarding the Cultural Heritage of Dance through Augmented Reality***

<http://digiphotolab.survey.ntua.gr/?project=terpsichore-transforming-intangible-folkloric-performing-arts-into-tangible-choreographic-digital-objects>

#### ***Digital Cultural Heritage – Imaging Center for Archaeology and Cultural Heritage***

<https://castorc.cyi.ac.cy/research/digital-cultural-heritage>

#### ***V-MusT.net: Virtual Museum Transnational Network***

<https://www.cyi.ac.cy/index.php/starc/research-information/completed-projects/v-must-net-virtual-museum-transnational-network.html>

#### ***A metadata application profile for collection-level description of digital folklore resources***

<https://lekythos.library.ucy.ac.cy/handle/10797/13715>

– Public and creative use of the intangible cultural heritage metadata (for example, encouraged by the recent COVID-19 constraints):

[http://www.unesco.org.cy/Programmes-](http://www.unesco.org.cy/Programmes-Intangible_Cultural_Heritage_of_Cyprus,EN-PROGRAMMES-04-02-03,EN)

[Intangible\\_Cultural\\_Heritage\\_of\\_Cyprus,EN-PROGRAMMES-04-02-03,EN](http://www.unesco.org.cy/Programmes-Intangible_Cultural_Heritage_of_Cyprus,EN-PROGRAMMES-04-02-03,EN)

– ICH (ethnographic) exhibitions in the digital space or conventional exhibition using also digital resources (multimedia exhibitions), the role of digital media in ethnographic museums:

[https://www.visitcyprus.com/index.php/en/discovercyprus/rural/museums-galleries;](https://www.visitcyprus.com/index.php/en/discovercyprus/rural/museums-galleries)

<http://foodmuseum.cs.ucy.ac.cy/web/guest/home;>

[https://www.instagram.com/explore/locations/274150229/cyprus-museum/?utm\\_source=ig\\_embed&ig\\_rid=3a5f0110-f6a8-492f-8312-](https://www.instagram.com/explore/locations/274150229/cyprus-museum/?utm_source=ig_embed&ig_rid=3a5f0110-f6a8-492f-8312-016711b8bf8f&ig_mid=4F528131-8F88-4BBD-9F95-FB56313B029E;)

[016711b8bf8f&ig\\_mid=4F528131-8F88-4BBD-9F95-FB56313B029E;](https://www.instagram.com/explore/locations/274150229/cyprus-museum/?utm_source=ig_embed&ig_rid=3a5f0110-f6a8-492f-8312-016711b8bf8f&ig_mid=4F528131-8F88-4BBD-9F95-FB56313B029E;)

<https://www.instagram.com/cyprusfolkartmuseum/>



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### CYPRUS

**EIKONOLOGION:** which serves as Cyprus's digital repository for its natural and cultural treasures. Academic researchers and university students can now upload their own iconographic content on this global network. It serves as a research tool for the students, the general public, and the global academic community. EIKONOLOGION is a crucial tool for managing Cyprus's natural and cultural heritage and gives post-graduate students from UCY and other universities the chance to gain expertise in this field. The Anastasios G. Leventis Foundation and Total Energies Foundation are the sponsors of this project.

**FLORA CYPRIA:** It contains a list of the native flora to Cyprus and the Mediterranean. In order to know and use these plants in public and private landscaping and prevent the traditional view of our historic centers, the built and natural landscapes, from being altered by the contemporary invasion of tropical and sub-tropical plants and others, it seeks to raise the appropriate awareness and sensitivity among the people of Cyprus and all Mediterraneans. Many organizations, namely the Ministry of Agriculture, Rural Development and Environment, Total Energies Foundation, and The Anastasios G. Leventis Foundation, have financed this initiative.

**UNESCO Chair for Digital Cultural Heritage at the Cyprus University of Technology** was established at the Department of Electrical Engineering, Computer Engineering and Informatics at the Cyprus University of Technology (CUT) in 2018. The establishment of the Chair at the University of Technology constitutes an international recognition of the important contribution of the Digital Heritage Research Laboratory of the Cyprus Technological University in the field of digitization, preservation and promotion of the cultural heritage of Humanity. The main aim of this unique Chair is to define, extend and carry out a program of research in digital heritage which will further UNESCO's cultural heritage agenda in the wider region.

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### CYPRUS

The Chair carries out a wide-reaching program of awareness raising and knowledge-sharing projects on the role of Digital Cultural Heritage (DCH) in the Eastern Mediterranean region and beyond. In addition, it introduces model DCH curricula ('Cultural Informatics') at vocational, undergraduate and postgraduate levels and extends course availability, teaching and study facilities to students internationally through state-of-the-art e-Learning. The Chairholder is Dr. Marinos Ioannides, Director of the Digital Heritage Research Laboratory, established in 2013, Department of Electrical Engineering, Computer Engineering and Informatics at the Cyprus University of Technology (<https://digitalheritagelab.eu/>).



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### GREECE

Greece has been a State Party to the 2003 UNESCO Convention since 2007. The Directorate of Modern Cultural Assets and Intangible Cultural Heritage (MCAandICH) of the Ministry of Culture and Sports, as well as a National Scientific Committee for Intangible Cultural Heritage, are the primary organizations responsible for carrying out the Convention. It was also established how the Convention would be implemented. This Directorate oversees the general planning as well as the execution of numerous actions for the preservation of intangible cultural goods listed in the various Catalogs and the National Index of Intangible Cultural Heritage of Greece (EEAPKE) in accordance with the pertinent UNESCO Convention provisions. A comprehensive framework for the management and preservation of heritage, including living heritage, is provided by the Law for the Protection of Antiquities and Cultural Heritage in General (2002).

Although there are no specific training programs for managing intangible cultural heritage, many universities and other higher education institutions are beginning to teach this topic, and the Directorate of MCA&ICH has had discussions about these issues with university staff, researchers, and postgraduate students. Also, the Directorate arranged a capacity-building conference for more than 40 Ministry personnel who are involved in the Convention's implementation. The Hellenic Folklore Research Centre, the Academy of Athens, as well as a number of other institutes, folklore and cultural organisations, specialized museums, and so forth, all have documentation on hand. Public access is granted to some of these archival collections that have been digitized.

### Examples of ICH digitization projects in Greece:

One of the largest digitization projects of our country's cultural heritage and historical relics is funded by the Operational Programme "Competitiveness, Entrepreneurship and Innovation 2014-2020" and in particular the Priority Axis "Development of entrepreneurship support mechanisms", with a total budget (public expenditure) of 26 million euros.

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### GREECE

In particular, digital guides, virtual tours, storytelling applications, interactive educational applications, interactive chronology, digital portraits and digital visitor books are coming to 53 museums, theatres, libraries, sacred metropolises with temples of great historical value, the Athens Academy, the Athens-Epidavros Festival and HELEXPO-DETH.

Referring to the Greek national means of implementation of ICH digitization strategies, according to the Open public consultation on the Digital Transformation Paper 2020–2025, the sector's inevitable digital transformation is inextricably linked to the autonomous growth potential of culture.

At the nexus of the arts, business, and technology, the cultural and creative sectors are strategically positioned to mobilize productive forces in other sectors of production. They promote the demand for specialized consumer electronics and communications equipment as well as the content for IT applications. The cultural and creative industries are embedded throughout the value chains of other industries, having a direct impact on industries like tourism. Additionally, as the pandemic also showed, the digital aspect of culture has grown to be essential for both facilitating citizen access to culture and transforming the structure and operation of cultural institutions. Today, technology is a crucial component of planning at all phases of cultural policy implementation as well as in all value chains of the cultural and creative sector.

Many digital initiatives and projects have been carried out during the past ten years, strengthening Greece's position on the map of digital culture. While funding through European co-funded programs, such as Digital Convergence, has led to the implementation of digitization projects for historical archives and libraries, art collections, and archaeological collections, new technologies in culture and its management have started to be introduced as the subject of research programs and government projects.



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### GREECE

These initiatives include the Ministry of Culture and Sports' website ([culture.gov.gr](http://culture.gov.gr)), the National Index of Intangible Cultural Heritage's digital platform ([ayla.culture.gr](http://ayla.culture.gr)), the permanent catalog of Greece's declared archaeological sites and monuments ([listedmonuments.culture.gr](http://listedmonuments.culture.gr)), and the website for digital collections of mobile monuments ([collections.culture.gr](http://collections.culture.gr)), the website for documenting, studying, and promoting the cultural activity of the region ([festival.culture.gr](http://festival.culture.gr)), the website and digital repository for the Acropolis Monuments Conservation Service ([ysma.gr](http://ysma.gr)), the website and digital educational platform "Follow Odysseus" (<http://followodysseus.culture.gr/>), and the website for recording, studying ([drasis.culture.gr](http://drasis.culture.gr)).

The complete list of ongoing, and future government initiatives regarding safeguarding ICH in Greece, can be found here:

<https://digitalstrategy.gov.gr/sector/politismos>

DIGITAL EXHIBITIONS OF THE NATIONAL ARCHAEOLOGICAL MUSEUM:

[https://www.namuseum.gr/digital\\_exhibition/](https://www.namuseum.gr/digital_exhibition/)

DIGITAL MUSEUM OF ACROPOLIS:

<https://www.theacropolismuseum.gr/psifiako-mouseio>

"Visualizing humanity": the first action of the Network of Contemporary Culture Museums of the Hellenic Ministry of Culture:

<https://www.emst.gr/exhibitions/optikopoiontas-tin-anthropotita>

GOVERNMENT SUGGESTIONS FOR VIRTUAL CULTURAL VISITS DUE TO COVID-19: <https://covid19.gov.gr/draseis-politismou/>

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### ROMANIA

Romania accepted the UNESCO 2003 Convention in 2006. The Ministry of Culture of Romania is the main governmental institution that managed the preparation of this report, through its subordinated divisions and institutions dealing with intangible cultural heritage and UNESCO activities. The Law no. 26 issued on the 29 of February 2008 established the definition of intangible cultural heritage and its connected concepts, and describes the specific means for safeguarding this heritage in Romania. The law also decided the establishment of the National Inventory and of the National Commission for Safeguarding of the Intangible Cultural Heritage (assembled by Order 2236/2008 of the Ministry of Culture), and indicates the need for drafting the National Program for the Safeguarding of the Intangible Cultural Heritage. It also names the main institutions entrusted with the protection, documentation and promotion of intangible cultural heritage.

The National Commission for the Safeguarding of the Intangible Cultural Heritage (21 members) is appointed by the Minister of Culture at the proposal of specific institutions dealing with the field of intangible cultural heritage and connected domains. The commission offers expertise to the government in all matters concerning the intangible cultural heritage's legislation and management. One of the important tasks of the Commission is to manage *The National Inventory of the Intangible Cultural Heritage*, which involves receiving at any time proposals of new elements submitted by communities, NGOs, institutions, etc. After analyzing the received proposals, the Commission may request additional information from the proposing entity, may offer advice or appoint one or more experts-members of the Commission to work together with the interested parties in order to generate a final form of the proposal.

The National Commission of Romania for UNESCO (NCR UNESCO) was established as of the date of Romania's accession to UNESCO in 1956. By Government Decision 624/1995, The Commission was reorganized. The normative act establishes the character of the Commission as a public institution with a legal personality coordinated by the Ministry of Education.

There are a few research institutions in Romania that implement constantly projects of documentation of intangible cultural heritage. The Department of Ethnology of the "A. Philippide" Institute of Romanian Philology of the Romanian Academy – Iasi Branch is a research unit that carries research in the field of ethnography and folklore since 1968, and it currently hosts a broad archive with documents registering the traditional

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### ROMANIA

culture of Eastern and Northeastern Romania. The "Constantin Brailoiu" Institute of Ethnography and Folklore of the Romanian Academy in Bucharest hosts the main folklore archive in the country and gathers a broad expertise on the research of traditional culture in Romania.

The National Institute of Heritage is the main central institution that applies the government public policies in the field of cultural heritage in the country. The Intangible Heritage and Traditional Culture Section carries out programs and projects designed to preserve, protect and promote the intangible cultural heritage and the contemporary traditional culture in Romania, as well as undertakes specific research on the main issues connected with traditional culture, and in particularly traditional customs and handicrafts.

Some universities include study programs involving intangible cultural heritage topics. The Ethnology Program within the Cultural Studies Department at the Faculty of Letters of the University of Bucharest organizes all study levels (bachelor, master, PhD) for students interested to acquire degrees in ethnology. The Cultural Studies Department at the Faculty of Letters of the North University Centre of Baia Mare functioning under the Technical University of Cluj-Napoca provides courses in the fields of ethnology, folklore studies, cultural heritage and offers degrees under two study programs: a bachelor's in Ethnology and a Master in Ethno-tourism and Ethnology and cultural tourism.

At local level, there are several types of institutions which deal with intangible cultural heritage and can implement the measures recommended by the 2003 Convention for the Safeguarding of Intangible Cultural Heritage. These organizations are: county centres for the preservation and promotion of traditional culture, county directorates for culture, local ethnographic museums. The responsibility for the living elements existing in the respective county seems to fall to a greater extent within the tasks of the centres for the preservation and promotion of traditional cultures. The preservation, research, safeguarding, passing on to the next generations, promotion and valorization of the traditional culture and intangible cultural heritage is one of their responsibilities.

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### ROMANIA

Having this in mind, the following paragraphs will provide an overview of the information available on the web pages of the six centres existing in the region of Moldavia, corresponding to the six counties located in this north-eastern part of Romania: Suceava, Botoşani, Neamţ, Iaşi, Bacău, Vaslui, Vrancea and Galaţi. In terms of type of organisation, some of these county centres are part of bigger public organisms (cultural centres – Suceava, Galaţi, Vrancea, Neamţ), while the others are independent public institutions, subordinated to the local county councils.

The information provided by these web pages can be structured into two main categories: general data, including the mission, objectives, team, contact information, and specific information, related to the actions undertaken and events organized for the research, safeguarding and promotion of the living heritage. Specific information, the subject of the present overview, is to be found under different sections, dependent on how well structured, rich in content and easy to navigate the web pages are. Some pages enlist information under two or three sections, without further categorizing; others have a button on the start page for each and every activity; and others present a logical, tree-structured database, reflecting the main pillars and the framework for the activities carried out by these institutions.

Several fields are widely represented and well documented. One of them refers to winter customs. It is a field to which events are dedicated yearly in each county of Moldavia, and the web pages under present analysis are living prove for the continuity and vitality of these customs, including rich information, mainly text and photographs, but also video recordings of groups performing the customs or of the dedicated festivals, and a documentary (on “Vălăret” – in Vaslui).



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### ROMANIA

The content available online at present, in comparison with the situation existing a few years ago, shows a growing attention given to the importance of digital means for the safeguarding and promotion of intangible cultural heritage elements. While acknowledging the progress in finding ways to make better use of the present-time technology and means of reaching the public, it is only fair to point out the need of further steps to be taken towards richer content, better structured databases and easier navigation.

#### **Examples of ICH digitization projects in Romania:**

The National Inventory of Intangible Cultural Heritage is made available on the website of the National Institute of Heritage that functions under the Ministry of Culture. Also, other research results carried out by the experts from the department of intangible cultural heritage and traditional culture in the same institute are available online, such as the information about winter holidays practices or the Repertoire of Craftspeople and Traditional Practices (<https://repertoriulmesterilor.patrimoniu.ro/>). The website [e-patrimoniu.ro](https://e-patrimoniu.ro) is another rich online resource devoted to offer to all interested people data on different types of intangible cultural heritage in Romania, either as compiled data on specific holidays, rituals, customs, folk calendar, as well as books, albums in ethnology, ethnography, folklore. During the last years, cultural projects financed by the Ministry of Culture's main funding agency (AFCN – The Administration of the National Cultural Fund) offered grants to institutions and NGOs that carried out projects of documentation and promotion of intangible cultural heritage and in many cases these projects' aim was to make available their results to a very broad audience.

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### ROMANIA

An online platform was created for inventorying and selling traditional crafts, and thus aspiring to promote genuine craftspeople able to create authentic, unique and sustainable objects (<https://iarmaroc.com/collections/mestesuguri>).

#### **Rural Museums from Romania (Rom. "Muzee de la sat")**

- a platform for raising awareness about rural museums across Romania through 3D museum tours
- aims to offer a digital radiography of all the museums in the rural Romanian territory, in order to help these museums benefit from an improved online presence and image.

<https://muzeedelasat.ro/despre/?lang=en>

#### **Digitization of the Cultural Food Heritage of Bacău County – eCULTFOOD**

- a project aimed at promoting the gastronomic heritage of the country of Bacau through preservation in a digital geographical form of representative corpora of audio-visual documents, produced during the research field trips while interviewing subjects of different age groups from Bacău county. The result of this endeavor was the creation of the e-CULTFOOD digital platform as a complex database containing research results from field trips, archives and libraries of the practices and the traditions related to food from the region.

<http://ecultfood.ub.ro/geolocation/map/browse>



## Annex 2

### Projects of ICH digitization

**Table**

No.	Link of best practice available	Short description of best practice	Year of best practice	Country of best practice	Name of partner
1.	Applied Sciences   Free Full-Text   Methodology of 3D Scanning of Intangible Cultural Heritage&mdash;The Example of Lazgi Dance   HTML (mdpi.com)	description of 3D scanning methodology applied in the case of the Lazgi Dance	2021	Poland (the first author)	CMNM
2.	METHODOLOGY - The safeguarding of intangible cultural heritage in England: a comparative explor (library.net)	The Safeguarding of Intangible Cultural Heritage in England: A Comparative Exploration - PhD Thesis	2019	England, UK	CMNM
3.	Digitizing Intangible Cultural Heritage : A How-To Guide - Canada.ca			Canada	CMNM
4.	13e06d7e-eecc-492d-bf35-85b52cab57ff (diba.cat)	the inventorying of ICH in Catalunya		Spain	CMNM
5.	<a href="https://www.researchgate.net/publication/329878297_Digital_Preservation_of_Intangible_Cultural_Heritage">https://www.researchgate.net/publication/329878297_Digital_Preservation_of_Intangible_Cultural_Heritage</a>	Digital preservation of intangible cultural heritage	2018	Malaysia	CMNM
6.	(99+) Cultural Mapping: a Sustainable Methodology for Intangible Cultural Heritage   Sónia Moreira Cabeça - Academia.edu	Cultural Mapping: a Sustainable Methodology for Intangible Cultural Heritage	2018	Portugal	CMNM
7.	(99+) SEMINÁRIO INTERNACIONAL DE PATRIMÓNIO CULTURAL: PORTUGAL - BRASIL "Dez anos da Convenção do Património Imaterial 2003-2013" MESA DOS NOVOS PARADIGMAS   Vergílio Ferreira - Academia.edu	10 years of international intangible heritage convention	2013	Portugal-Brazil	CMNM
8.	Romani professions as important elements of intangible heritage - Strategy 21 - Good practices (coe.int)	strategy to encourage preservation of Romani professions	2018	Poland	CMNM
9.	Blockchain Technology for Management of Intangible Cultural Heritage (hindawi.com)	block and block chain for designing storage archives	2017	China	CMNM
10.	<a href="https://www.canada.ca/en/heritage-information-network/services/digitization/guide-digitizing-intangible-cultural-heritage.html">https://www.canada.ca/en/heritage-information-network/services/digitization/guide-digitizing-intangible-cultural-heritage.html</a>	Digitalization guide	2020	Canada	ARFI
11.	<a href="https://unesdoc.unesco.org/ark:/48223/pf0000179529.page=2">https://unesdoc.unesco.org/ark:/48223/pf0000179529.page=2</a>	Preservation of digital heritage	2009		ARFI
12.	<a href="https://amt-lab.org/blog/2021/11/intangible-cultural-heritage-context-and-digital-approaches-for-safeguarding-efforts">https://amt-lab.org/blog/2021/11/intangible-cultural-heritage-context-and-digital-approaches-for-safeguarding-efforts</a>	Safeguarding through digitalization	2021	UK	ARFI

## Annex 2

### Projects of ICH digitization

**Table**

13.	<a href="https://i-on.museum/books-catalogues/">https://i-on.museum/books-catalogues/</a>	Personal stories	2020	Norway	ARFI
14.	<a href="http://www.batana.org/en/home">http://www.batana.org/en/home</a>	Safeguarding batana boat	2011	Croatia	ARFI
15.	<a href="https://ich.unesco.org/dive/">https://ich.unesco.org/dive/</a>	UNESCO Global network of ICH elements	2019		ARFI
16.	<a href="https://australiacouncil.gov.au/investment-and-development/digital-culture-strategy/?fbclid=IwAR2joguBCVxSaR2wCDNGaeyl-3HRHlabMLpIE9ZWmpObIE8uzO22Q4IDWao">https://australiacouncil.gov.au/investment-and-development/digital-culture-strategy/?fbclid=IwAR2joguBCVxSaR2wCDNGaeyl-3HRHlabMLpIE9ZWmpObIE8uzO22Q4IDWao</a>	Digital culture strategy	2020	Australia	ARFI
17.	<a href="https://digital-ethnography.com/projects/indigeneity-identity-and-survival-through-ongoing-cultural-practices/?fbclid=IwARIWrWpjRpsKqeQznfMLIAWuGo9GqzFqUBMRb5-xWuKAL_fCytJpaKDwbk">https://digital-ethnography.com/projects/indigeneity-identity-and-survival-through-ongoing-cultural-practices/?fbclid=IwARIWrWpjRpsKqeQznfMLIAWuGo9GqzFqUBMRb5-xWuKAL_fCytJpaKDwbk</a>	PhD project		Australia	ARFI
18.	<a href="https://folkloradatbazis.hu/fdb/index.php?page=browse">https://folkloradatbazis.hu/fdb/index.php?page=browse</a>	Folklore archive		Hungary	ARFI
19.	<a href="http://bassebretagne-mnatp1939.com/pages/index.html">http://bassebretagne-mnatp1939.com/pages/index.html</a>	Folklore archive		France	ARFI
20.	<a href="https://www.pci-lab.fr/en/cartography">https://www.pci-lab.fr/en/cartography</a>	ICH Inventory of France		France	ARFI
21.	<a href="https://drustvozadtkb.org/2021/10/27/prvi-dariah-dogadaj-u-bih/">https://drustvozadtkb.org/2021/10/27/prvi-dariah-dogadaj-u-bih/</a>	Digitizing ICH project implemented by an NGO	2021	Bosnia & Herzegovina	ARFI
22.	<a href="https://www.bavarikon.de/object/bav:BSB-CMS-0000000000007551?lang=en">https://www.bavarikon.de/object/bav:BSB-CMS-0000000000007551?lang=en</a>	ICH regional digital inventory in Bavaria	2020	Germany	ARFI
23.	<a href="http://www.ichpedia.org/">http://www.ichpedia.org/</a>	ICH National Inventory of South Korea	2010	South Korea	ARFI
24.	<a href="https://ichscotland.org/">https://ichscotland.org/</a>	ICH National Inventory of Scotland	2008	Scotland	ARFI
25.	<a href="https://www.ethnosproject.org/i-treasures/">https://www.ethnosproject.org/i-treasures/</a>	International project of digitizing ICH	2013	multinational	ARFI



## Annex 2

### Projects of ICH digitization

**Table**

26.	<a href="https://www.sahapedia.org/">https://www.sahapedia.org/</a>	ICH National Inventory of India		India	ARFI
27.	<a href="http://digital-library.ulbsibiu.ro/jspui/simple-search?query=etnografie">http://digital-library.ulbsibiu.ro/jspui/simple-search?query=etnografie</a>	Ethnographic books and drawings from fieldwork		Romania	ARFI
28.	<a href="https://repertoriulmesterilor.patrimoniu.ro/">https://repertoriulmesterilor.patrimoniu.ro/</a>	Digital Inventory of Craftspeople in Romania	2016	Romania	ARFI
29.	<a href="https://projects2014-2020.interreg-europe.eu/fileadmin/user_upload/tx_tevpr_ojects/library/file_1509452255.pdf">https://projects2014-2020.interreg-europe.eu/fileadmin/user_upload/tx_tevpr_ojects/library/file_1509452255.pdf</a>	EU project for digitizing ICH in Bulgaria	2014	Bulgaria	ARFI
30.	<a href="https://www.aineetonkulttuuriperinto.fi/en/sopimus-suomessa/wikiluettelo">https://www.aineetonkulttuuriperinto.fi/en/sopimus-suomessa/wikiluettelo</a>	ICH National Inventory of Finland	2016	Finland	ARFI
31.	<a href="https://min-kulture.gov.hr/izdvojeno/izdvojena-lijeto/kulturne-djelatnosti-186/digitalizacija-kulturne-bastine-9828/projekt-e-kultura-digitalizacija-kulturne-bastine/15548">https://min-kulture.gov.hr/izdvojeno/izdvojena-lijeto/kulturne-djelatnosti-186/digitalizacija-kulturne-bastine-9828/projekt-e-kultura-digitalizacija-kulturne-bastine/15548</a>	National policy	2020	Croatia	Radiona
32.	<a href="https://djurdjevackipijesci.hr/">https://djurdjevackipijesci.hr/</a>	Interpretative centre	2021	Croatia	Radiona
33.	<a href="https://www.emi.hr/en/museum/istrian-center-intangible-culture/">https://www.emi.hr/en/museum/istrian-center-intangible-culture/</a>	The Istrian Centre for Intangible Culture of the Ethnographical Museum of Istria		Croatia	Radiona
34.	<a href="https://www.ief.hr/">https://www.ief.hr/</a>	Institute of Ethnology and Folklore		Croatia	Radiona
35.	<a href="https://www.turistickeprice.hr/en/a-virtual-tour-revived-the-old-plomin-and-its-cultural-heritage/">https://www.turistickeprice.hr/en/a-virtual-tour-revived-the-old-plomin-and-its-cultural-heritage/</a>	Tourist Board of the Municipality of Kršan		Croatia	Radiona
36.	<a href="http://en.crihap.cn/2016-10/27/content_27194499.htm">http://en.crihap.cn/2016-10/27/content_27194499.htm</a>	Training of Trainers on Digitizing Mongolian Intangible Cultural Heritage	2016	Mongolia	Innovation Hive
37.	<a href="https://review.memoriamedia.net/index.php/challenges-in-safeguarding-intangible-cultural-heritage-through-digitization-of-audio-visual-archival-material">https://review.memoriamedia.net/index.php/challenges-in-safeguarding-intangible-cultural-heritage-through-digitization-of-audio-visual-archival-material</a>	Digitization of audio-visual, archival material	2017	Norway	Innovation Hive
38.	<a href="http://www.euromed-dch.eu/">http://www.euromed-dch.eu/</a>	Conference on the digitization of cultural heritage	2021	Greece	Innovation Hive
39.	<a href="https://meus.gr/psifiopoiisi-politistikis-klironomias-dimoy-pyrgoy/">https://meus.gr/psifiopoiisi-politistikis-klironomias-dimoy-pyrgoy/</a>	Digitization of architectural, religious, and educational cultural heritage of the Pyrgos municipality	2018	Greece	Innovation Hive

## Annex 2

### Projects of ICH digitization

**Table**

40.	<a href="https://ndt.uniwa.gr/seminaria3d/">https://ndt.uniwa.gr/seminaria3d/</a>	Seminar of the 3D picturing and printing, as tools of the digitization of CH by the University of Athens	2022	Greece	Innovation Hive
41.	<a href="https://www.culture.gov.gr/el/service/SitePages/view.aspx?iID=4525">https://www.culture.gov.gr/el/service/SitePages/view.aspx?iID=4525</a>	Program for the digitization of Greek folklore music	2014-2020	Greece	Innovation Hive
42.	<a href="https://www.culture.gov.gr/el/service/SitePages/view.aspx?iID=4586">https://www.culture.gov.gr/el/service/SitePages/view.aspx?iID=4586</a>	Program for the digitization of paper documents of the Tatoi royal residence	2014-2020	Greece	Innovation Hive
43.	<a href="https://www.heritageresearch-hub.eu/project/schedar/">https://www.heritageresearch-hub.eu/project/schedar/</a>	SCHEDAR – Safeguarding the Cultural Heritage of Dance through Augmented Reality	2018-2021	Cyprus	STANDO
44.	<a href="http://digiphotolab.survey.ntua.gr/?project=terpsichore-transforming-intangible-folkloric-performing-arts-into-tangible-choreographic-digital-objects">http://digiphotolab.survey.ntua.gr/?project=terpsichore-transforming-intangible-folkloric-performing-arts-into-tangible-choreographic-digital-objects</a>	TERPSICHORE – Transforming Intangible Folkloric Performing Arts into Tangible Choreographic Digital Objects	2016-2020	Cyprus	STANDO

# BIBLIOGRAPHY

Altayli, Afsin: "The social role of museums", in Nikolić Đerić, Tamara; Neyrinck, Jorijn; Seghers, Eveline; Tsakiridis, Evdokia (eds.): *Museums and intangible cultural heritage. Towards a third space in the heritage sector. Companion to discover transformative heritage practices for the 21st century*, Werkplaats immaterieel erfgoed, Bruges, 2020

Artese, Maria Teresa; Gagliardi, Isabella: "Integrating, Indexing and Querying the Tangible and Intangible Cultural Heritage Available Online: The QueryLab Portal", in *Information*, 2022, 13, 260. <https://doi.org/10.3390/info13050260>

Becker, Christoph; Kulovits, Hannes; Guttenbrunner, Mark; Strodl, Stephan; Rauber, Andreas, Hofman, Hans: "Systematic Planning for Digital Preservation: Evaluating Potential Strategies and Building Preservations Plans", in *International Journal of Digital Librarianship*, 10 (2009)

Betts, Paul: "Humanity's new heritage: UNESCO and the rewriting of the World history", in *Past & Present*, No. 228 (August 2015), Oxford University Press

Broccolini, Alessandra: "Intangible Cultural Heritage Scenarios within the Bureaucratic Italian State", in Nicolas Adell et al., *Heritage Regimes and the State*, Göttingen University Press, Göttingen University Press, 2017

Chen, Tin-Kai: "Preserving Chinese shadow puppetry culture through digitisation", in Lewi, Hannah; Smith, Wally; vom Lehn, Dirk; Cooke, Steven (eds.): *The Routledge International Handbook of New Digital Practices in Galleries, Libraries, Archives, Museums and Heritage Sites*, Routledge, London, 2020

Chung, Sheng Kuan: "Art Education Technology: Digital Storytelling", in *Art Education*, Mar., 2007, Vol. 60, No. 2 (Mar., 2007)

Constantin, Marin: "'I Like It!' Experiencing Mediascapes in the Artisanry of Prahova County", in *Martor*, 27, 2022

Conway, Peter: "Preservation in the Age of Google: Digitization, Digital Preservation and Dilemmas", in *The Library Quarterly: Information, Community, Policy*, Vol. 80, No. 1 (January 2010), p. 65. <https://doi.org/10.1086/648463>

# BIBLIOGRAPHY

Cook, Terry: "Archival science and postmodernism: new formulations for old concepts", in *Archival Science*, 1(1), 2001

Corrado, Edward M.; Moulaison-Sandy, Heather (eds.), *Digital Preservation for Libraries, Archives, and Museums* (second edition), Lanham, MD: Rowman & Littlefield, 2017

Courant, Paul N.; Fraser, Sarah E.; Goodchild, Michael F.; Hedstrom, Margaret; Henry, Charles; Kaufman, Peter B.; McGann, Jerome; Rosensweig, Roy; Unsworth, John; Zuckerman, Bruce: "Our Cultural Commonwealth: The Report of the American Council of Learned Societies Commission on Cyberinfrastructure for the Humanities and Social Sciences". American Council of Learned Societies, 2006, [www.acls.org/uploadedFiles/Publications/Programs/Our\\_Cultural\\_Commonwealth.pdf](http://www.acls.org/uploadedFiles/Publications/Programs/Our_Cultural_Commonwealth.pdf)

Chun, Wendy Hui Kyong: *Programmed Visions: Software and Memory*, Software Studies, Cambridge, MA: MIT Press, 2011

Davis, Peter: "Ecomuseums and sustainability in Italy, Japan and China: adaptation through implementation", in Knell, Simon; MacLeod, Suzanne; Watson, Sheila (eds.): *Museum Revolutions: How Museums Change and Are Changed*. *Proceedings of the Museum: A World Forum*, London, Routledge, 2007

Dimitrova Savova, Nadezhda: "Heritage Kinaesthetics: Local Constructivism and UNESCO's Intangible-Tangible Politics at a Favela Museum", in *Anthropological Quarterly*, Volume 82, Number 2, Spring 2009

Dreyfus, Hubert: *What Computers Can't Do: The Limits of Artificial Intelligence*, Harper & Row, 1972

Geismar, Haidy: *Museum Object Lessons for the Digital Age*, UCL Press, 2018

Hornecker, Eva; Ciolfi, Luigina: "Human-Computer Interactions in Museums", in *Synthesis Lectures on Human-Centered Informatics*, 12.2, p. 2019



# BIBLIOGRAPHY

Hou, Yumeng; Kenderdine, Sarah; Picca, Davide; Egloff, Mattia; Adamou, Alessandro: "Digitizing Intangible Cultural Heritage Embodied: State of the Art", in *Journal on Computing and Cultural Heritage*, 15(3), February 2022

Koltun, Lilly: "The Promise and Threat of Digital Options in an Archival Age", in *Archivaria*, 47, 1999

Leopold, Robert: "The second life of ethnographic fieldnotes", in *Ateliers du LESC*, 2008, <https://journals.openedition.org/ateliers/3132>

Nikolić Đerić, Tamara: "How to use this book", in Nikolić Đerić, Tamara; Neyrinck, Jorijn; Seghers, Eveline; Tsakiridis, Evdokia (eds.): *Museums and intangible cultural heritage. Towards a third space in the heritage sector. Companion to discover transformative heritage practices for the 21st century*, Werkplaats immaterieel erfgoed, Bruges, 2020

Orr, Joanne; Thomas, Sara: "From First Footing to Faeries: An Inventory of Scotland's Living Culture", in Severo, Marta; Cachat, Séverine (dir.): *Patrimoine culturel immatériel et numérique*, Paris, L'Harmattan, 2016

Protopapadakis, Eftychios; Voulodimos, Athanasios; Doulamis, Anastasios; Camarinopoulos, Stephanos; Doulamis, Nikolaos; Miaoulis, Georgios: "Dance Pose Identification from Motion Capture Data: A Comparison of Classifiers", in *Technologies*, 6/1, 2018

Severo, Marta: "Avant-propos", in Severo, Marta; Cachat, Séverine (dir.): *Patrimoine culturel immatériel et numérique*, Paris, L'Harmattan, 2016

Simon, Nina: *The Participatory Museum*, Santa Cruz, California, Museum 2.0, 2010

Sousa, Filomena: "Map of e-Inventories of Intangible Cultural Heritage", in *Memoriamedia Review*, 1, 2017

Taylor, Diana: *The Archive and the Repertoire. Performing Cultural Memory in the Americas*, Duke University Press, 2003

Timothy T. Tangherlini: "The Folklore Macroscopic: Challenges for a Computational Folkloristics", in *Western Folklore*, 72 (1), 2013

# BIBLIOGRAPHY

Waern, Annika; Sundnes Løvlie, Anders: "Remediating, Reframing and Restaging the Museum", in *Hybrid Museum Experiences. Theory and Design*, Amsterdam University Press, 2022

Wijesundara, Chiranthi; Sugimoto, Shigeo: "Metadata model for organizing digital archives of tangible and intangible cultural heritage, and linking cultural heritage information in digital space", in *Libres*, 28 (2), 2018

\*\*\*\*

The Commission Recommendation of 10.11.2021 on a common European data space for cultural heritage, C(2021) 7953 final <https://digital-strategy.ec.europa.eu/en/news/commission-proposes-common-european-data-space-cultural-heritage>

The Resolution 2269 (2019): Safeguarding and enhancing intangible cultural heritage in Europe <https://pace.coe.int/en/files/26468/html>

Text of the Convention for the Safeguarding of the Intangible Cultural Heritage <https://ichunesco.org/en/convention>

\*\*\*\*

<https://www.agrotourism.com.cy>

<http://andreasaristidou.com/CYdigitization.html>

[https://anthroregistry.fandom.com/wiki/Registry\\_of\\_Anthropological\\_Data\\_Wiki](https://anthroregistry.fandom.com/wiki/Registry_of_Anthropological_Data_Wiki)

<https://assembly.coe.int/nw/xml/XRef/Xref-XML2HTML-EN.asp?fileid=26468>

<https://www.arxiufolk.arxiudefolklore.cat>

<https://ayla.culture.gr>

# BIBLIOGRAPHY

<https://ayla.culture.gr>

<https://www.batana.org/en/home>

<https://www.canada.ca/en/heritage-information-network/services/digitization/guide-digitizing-intangible-cultural-heritage.html#3>

<https://castorc.cyi.ac.cy/research/digital-cultural-heritage>

<http://collections.mun.ca/>

<https://covid19.gov.gr/draseis-politismou/>

<https://culture.ec.europa.eu/cultural-heritage/cultural-heritage-in-eu-policies/european-digital-heritage>

<https://culture.gov.gr>

<https://www.cyi.ac.cy/index.php/education/phd-programs/digital-cultural-heritage.html>

<https://www.cyi.ac.cy/index.php/starc/research-information/completed-projects/v-must-net-virtual-museum-transnational-network.html>

<http://www.cyprusdigitallibrary.org.cy/files/original/26f56deab6d16748849017bc3d17f3df.pdf>

<https://dancetangomusic.com/>

<https://digitalheritagelab.eu/>

<http://digiphotolab.survey.ntua.gr/?project=terpsichore-transforming-intangible-folkloric-performing-arts-into-tangible-choreographic-digital-objects>

# BIBLIOGRAPHY

<https://digital-strategy.ec.europa.eu/en/news/commission-proposes-common-european-data-space-cultural-heritage>

<https://digitalstrategy.gov.gr/sector/politismos> <https://drasis.culture.gr>  
[https://en.wikipedia.org/wiki/Dublin\\_Core](https://en.wikipedia.org/wiki/Dublin_Core)

<https://www.duchas.ie/en/info/cbe>

<http://ecultfood.ub.ro/geolocation/map/browse> <https://ekultura.hr/>

<https://emotiveproject.eu/pages/summary/index.html>

<https://www.emst.gr/exhibitions/optikopoiontas-tin-anthropotita>

<https://en.unesco.org/about-us/legal-affairs/charter-preservation-digital-heritage> <https://www.europeana.eu/en>

<https://www.europeana.eu/en>

-  
[https://www.europeana.eu/en/item/937/Culturalia\\_ab944307\\_4f02\\_4cf1\\_ae86\\_8cfd91f11fc6](https://www.europeana.eu/en/item/937/Culturalia_ab944307_4f02_4cf1_ae86_8cfd91f11fc6) <https://festival.culture.gr>

<http://followodyseus.culture.gr/>

<http://foodmuseum.cs.ucy.ac.cy/web/guest/home>

<https://iarmaroc.com/collections/mestesuguri>

<https://www.ichandmuseums.eu/en/about/about-imp>

<https://www.ichandmuseums.eu/en/toolbox/book-museums-and-intangible-cultural-heritage>

[https://www.instagram.com/explore/locations/274150229/cyprus-museum/?utm\\_source=ig\\_embed&ig\\_rid=3a5f0110-f6a8-492f-8312-016711b8bf8f&ig\\_mid=4F528131-8F88-4BBD-9F95-FB56313B029E](https://www.instagram.com/explore/locations/274150229/cyprus-museum/?utm_source=ig_embed&ig_rid=3a5f0110-f6a8-492f-8312-016711b8bf8f&ig_mid=4F528131-8F88-4BBD-9F95-FB56313B029E)



# BIBLIOGRAPHY

<https://www.instagram.com/cyprusfolkartmuseum/>

<https://lekythos.library.ucy.ac.cy/handle/10797/13715>

<http://hdl.loc.gov/loc.afc/folklife.home>

<https://www.loc.gov/standards/premis/>

<https://www.ludovakultura.sk/encyklopedia/>

<http://martor.muzeultaranuluiroman.ro/wp-content/uploads/2022/11/11-Constantin.pdf> <http://www.mediawiki.org> <https://mimo-international.com/MIMO/> <http://www.mun.ca/ich/inventory/profiles.php>

<https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/europes-digital-migration-during-covid-19-getting-past-the-broad-trends-and-averages>

<http://www.mun.ca/ich/inventory/ICHtopic.php>

<https://muzeedelasat.ro/despre/?lang=en>

[https://www.namuseum.gr/digital\\_exhibition/](https://www.namuseum.gr/digital_exhibition/)

<https://omeka.org/classic/docs/>

<https://openpreservation.org>

<https://openvirtualworlds.org/omeka/exhibits/show/virtual-ethnographic-museum/virtual-ethnographic-museum> <https://www.pci-lab.fr/en/cartography> <https://www.pluggy-project.eu/>

<https://prometheus.museum/en/museum-production/>

<https://www.prometheuspoctefa.eu/fr/bienvenue/>

<https://repertoriulmesterilor.patrimoniu.ro>

# BIBLIOGRAPHY

<https://review.memoriamedia.net/index.php/map-of-e-inventories-of-intangible-cultural-heritage>

<https://samla.w.uib.no/about-samla/>

<https://silknow.eu/>

[www.stemajourneys.com/people-of-thessalia](http://www.stemajourneys.com/people-of-thessalia)

[http://szellemikulturalisorokseg.hu/index0\\_en.php?name=en\\_f22\\_elements](http://szellemikulturalisorokseg.hu/index0_en.php?name=en_f22_elements)

<https://www.theacropolismuseum.gr/psifiako-mouseio>

<http://www.unesco.org.cy/>

[http://www.unesco.org.cy/Programmes-Intangible\\_Cultural\\_Heritage\\_of\\_Cyprus,EN-PROGRAMMES-04-02-03,EN](http://www.unesco.org.cy/Programmes-Intangible_Cultural_Heritage_of_Cyprus,EN-PROGRAMMES-04-02-03,EN)

[https://upload.wikimedia.org/wikipedia/commons/f/f0/Card\\_Division\\_of\\_the\\_Library\\_of\\_Congress\\_3c18631u\\_original.jpg](https://upload.wikimedia.org/wikipedia/commons/f/f0/Card_Division_of_the_Library_of_Congress_3c18631u_original.jpg)

-

<https://www.visitcyprus.com/index.php/en/discovercyprus/rural/museum-s-galleries>

<https://wearemuseums.com/whenmuseumsmeetvideogames>

<https://woodenboats.gr/en/home-en/>

<https://www.ysma.gr>

<https://youtu.be/Gu7lbKOOV9k>

<https://www.youtube.com/watch?v=qEmmeFFafUs>

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