

# Experiment with Digital Technology in Arts and Culture, the Case of Latvia

Gita Senka

Latvia Culture College at Latvian Academy of Culture, Riga, Latvia  
gita.senka@lkk.gov.lv

**Abstract.** Accessibility of Latvian cultural heritage to the public via digital environment is a major challenge for the cultural sector, where the priorities are effective digital stock management and long-term preservation of the cultural content, ensuring widespread online availability. Current situation with availability of Latvian cultural content and services in the digital environment does not contribute to the appropriate cultural institutions' activities within information society conditions. In order to solve the situation, there are several successful projects, which can be taken as a basis and best practice tools for further digitization process, where the main challenges are copyright issues, technological follow-up and development of user-attractive digital products for all audiences, particularly educational and science sector.

**Keywords:** arts digitization, culture industries

## 1 Introduction

Cultural resources digitization is one of the most important aspects in building and development of the knowledge society and a knowledge-based economy, so it is important to use information and communication technologies for accessing the culture products and promoting of diverse presence of them in the global network, as well as ensuring the conservation and distribution of cultural heritage. Accessibility of Latvian cultural heritage to the public via digital environment is a major challenge for the cultural sector, where the priorities are effective digital stock management and long-term preservation of the cultural content, ensuring widespread online availability.

Deployment and use of digital content nowadays plays an important role, as it offers new opportunities for the expansion of access to cultural resources, as well as provides new facilities for the creation of new cultural products and services. The importance of it is stressed in the cultural industries guidelines "Creative Latvia" 2014-2020, in the Information Society Development Guidelines 2014- 2020 as well as in the "Digital Agenda for Europe 2020", which calls for supporting the digitization of cultural heritage in order to develop a joint digital services' market [1].

Latvian culture has a rich heritage and it is crucial to prioritize the digitization of documents of high cultural or historical value and documents of high demand. Important quality factor is the balanced digitization of different types of cultural content,

covering collected library and archive material, museum objects, films and other audiovisual documents, as well as recording of intangible cultural heritage of national importance in the digital form. Besides the direct impact on culture sector, digitalized culture products and services provide better reuse of cultural content in other sectors, including the creative industries and education. There are four major sectorial benefit groups using culture and arts digital content:

- Culture: development of new services and products;
- Education: formal, non-formal and lifelong learning;
- Science: research base;
- Business: new services and products[2].

Availability of digital content in culture brings the social impact, by ensuring availability of culture content to the wider public, providing education and research opportunities, promoting of national identity and integration. It has also economical impact side-effects, as development of digital content uses innovation and ICT resources, produces content and data and has indirect impact through social benefits.

Current situation with availability of Latvian cultural content and services in the digital environment does not contribute to the appropriate cultural institutions' activities within information society conditions. In order to solve the situation, there are several initiatives, providing first serious attempts for digitalization of cultural institutions' stocks, summarization of cultural heritage in digital format and lock of current developments in the cultural sector digital form for future generations.

## **2 Historical hints in digitization of arts in Latvia**

The Latvian Academic Library (LAL) should be considered a pioneer in the field of digitization. The first attempt to digitize valuable cultural materials was in 1994, when the LAL projector 'Electronic Library of Latvian cultural, scientific and technical information' was launched.

- One of the most impressive and important digitizing project was realized in the Treasure House for folklore. Krišjanis Barons' collection of folksongs "Chest for Dainas" included into the UNESCO programme Memory of the World has been made available through digital "Cabinet of Folksongs", comprising 172779 folksong texts and manuscript images[3] (dainuskapis.lv).
- Wax cylinders, the digitization of which was carried out at Vienna phonogram archive. For its part, the Institute of Mathematics and Informatics of University of Latvia from the ancient prints stored at the National Library of Latvia (the Bible, dictionaries, grammar, sermon books) formed the storehouse of the Latvian language.
- Project 'Lost Latvia'. Within the framework of the project the important culture historical materials, related to various Latvian places and objects, which has once existed, but nowadays has totally disappeared or got lost, has been digitized. The project embraces a wide specter of objects: places (once existed rivers, castle

mounds, streets, etc.), buildings (castles, manor houses, ruined houses at world wars, churches, fishermen villages, etc.), monuments (monuments of artistic quality, monuments of historical persons, etc.), market places and harbours, bridges (wooden bridges, pontoon bridges, railway bridges, destroyed in World War II, rope bridges, etc.) and nature objects (secular trees, parks, alleys, etc.) (zudusilativa.lv)

First projects has faced some barriers, e.g. lack of appropriate digitalization tools and unified standards, co-operation barriers between memory institutions, copyright issues faced by stakeholders within process of digitisation and online accessibility of cultural materials as well as limited financing and not sufficient number of staff in the cultural institutions for digitalization work.

To foster the digital cooperation of archives, libraries and museums, the funding program at the Latvian State Culture Capital fund was formed, as well as a joint standing committee of museums, archives and libraries was established. In the mid 2007 the Competence centre for digitization presented the first part of “Manual for Digitization” which describes standards and quality criteria for scanning and files formats. The Manual introduced unified standards based on the best international practice, as well as official and de facto standards.

### **3 Recent projects**

Following nowadays tendencies, culture and arts institutions in Latvia implement their digital growth strategy through digitization projects enabling further development perspectives:

- Creme de la creme of Latvian arts history- Latvian National Museum of Art. The collection of the largest art museum in Latvia comprises more than 52 thousand works by Baltic and Russian painters and sculptors. Recently the museum has passed extensive renovation and one of the challenges was the right and appropriate interpretation of the museums exposition and presentation of the collection according to the needs of diverse visitor groups. Most important task was to add contemporary spirit and reveal information “behind the scenes” to the main museum product, so that both visitors equipped with touchscreen and those wishing to explore museum treasures in relaxed intimate atmosphere, are satisfied. Initial purpose of digitisation was to provide content for the digital tools, which accompany the exposition e.g. touch screens, digital guides etc. Each exhibit is provided with a bibliography in three languages and authors portrait. However the main digitisation outcome are mobile application for Apple and Android users, serving as an interactive guide for exploring the museum collection as well as unique architecture of the museum building. The application consists of four museum routes, accompanied with audio recordings and interactive game elements: Explore the museum building, Essence of the artworks; main exposition and personal exhibitions depending on the current offer. With a digitization and modern technologies now, visitors have a possibility for to discover compositions and elements of many artworks in

an interactive manner. Many of the application features are innovative, for instance, by rubbing the interactive museum wall on the screen, the user can observe the view, and how particular area looked before restoration.

- Little Paris - Riga Art Nouveau Centre. Riga is famous for its Art Nouveau area that experienced an economic boom in the 20<sup>th</sup> century. Currently, Riga is one of the few cities in Europe, where very rich Art Nouveau architecture, art and design objects are preserved. Due to this, the city is included in the UNESCO Heritage List as a world heritage site, and its main value is concentration of the most outstanding Art Nouveau buildings in Europe<sup>1</sup>. Supported by European Economic Area grant co-financing scheme, the Digitization of the Cultural heritage of the Riga Art Nouveau Centre and Development of virtual museum project recently has been implemented, where the photo fixation of 700 objects of the cultural heritage of the Riga Art Nouveau was created, digital copies of 300 objects of the cultural heritage of the Riga Art Nouveau were prepared and the museum artefact database was created. The project has achieved its aim -to enable different target audiences to acquaint themselves with the unique collection of Art Nouveau in modern digital exhibition with digital photographs and professional studies providing further education in Riga and popularisation of the national cultural heritage in Europe. 10 different thematic content programs are developed and arranged in three rooms with digital exhibition (10 touchscreen display, photo studio and two holograms, an interactive kiosk). Virtual museum with digital exhibition provides opportunities for comparing Art Nouveau heritage of Riga and other European cities and for future research, attracting audiences of different ages, especially young people.
- Open Ethno - Latvian Ethnographic Open Air Museum. One of the oldest and largest open-air museums in Europe where 118 historical buildings from all four of Latvia's provinces – Kurzeme, Vidzeme, Zemgale and Latgale, have been put on display<sup>2</sup>. The museum has developed the mobile application OpenEthnoLV, where the main aim was to attract diverse auditorium - especially school and university students, so that they can get all the history, events and news directly to their phones or other devices, which supports this app. The application provides following features: audio visual display of museum's objects; the museum plan and recommended routes, GPS location services; a list of items (along the route, or the rating of the alphabet), searching of information with key words; main information about history and Latvian Cultural Canons treasure which includes – Latvian message (viensēta) with all its elements and countryside; information block (Welcome, News, Events, Publications) – linked with museums webpage; possibility to buy tickets online and obtaining of information through QR codes.
- Regional pearl - Balvi County museum. Digital exposition of the North Latgale (Latvia) intangible cultural heritage was implemented within a project "Preserve not to lose!" and 3164 museum's objects are transferred to The Joint Catalogue of the National Holdings of Museums (JCNHM). Exposition is unique and modern, and newest technologies allow putting all, what has been collected and kept in

---

<sup>1</sup> UNESCO, 1997, REF. 852

<sup>2</sup> <http://www.latvia.travel/en/sight/latvian-ethnographic-open-air-museum>

storage rooms, in attractive and interactive context of today's needs. Traditional values of North Latgale, that include folklore, traditional singing and its collectors and performers, ethnography, crafts, craftsmanship and its carriers, private collections and materials about Balvi – it all has been digitalized and integrated in audio and visual materials. *The Northern Latgale Intangible Cultural Heritage Exhibition* takes up five halls that are located in the 19<sup>th</sup> Century Balvi manor complex, namely – in the former barn of the manor. It offers digital information formats for different groups of people, engaging researchers for more in-depth information, general tourists for precise and short information and children by games based on the knowledge of the heritage. The exhibition can be perceived almost – but not entirely – separately as a visual or audio experience. Most attractive is folklore room, where one can sit in comfy chair and listen to audio recorded traditional songs and psalms and at the same time view the singers on video screens that are attached to the ceiling. The design of media programmes and video parts is based on the aesthetics specific to the region, making it an integral part of the museum's work. The ancient interweaves with the new, revealing the essence of continuity. Efforts to preserve the knowledge and skills passed on from generation to generation have been materialised in valuable sound and video recordings, as well as photographs. The museum breaths alive, when the folk singers and masters of ancient crafts gush with joy, seeing what might well be the first touchscreen media in their lives and themselves in it. This promotes heritage-based creativity by setting example for young generation to include modern technologies while interviewing their grandparents and making school projects, as well as for artists, designers and craftsmen to use ancient symbols, materials and knowledge in creating something new.

The arts and culture digitization process and experience of most successful projects in Latvia has found following keystones of the effective digitization management:

- The initial planning and implementation phases of a digitisation project are crucial to its eventual success. A paramount concern here is that digitisation should be set in a wider policy framework and related to an organisation's core mission, as well as digitized materials should demonstrate clear connection with a user groups needs
- Along with digitizing the cultural content, it is important to integrate those digital capabilities across the entire organization e.g. providing technical tools, services etc., ensuring quality of use of digitized material.
- The co-operation between memory institutions, as well as clear distribution of their responsibilities are important
- Setting of digitizing standards for each materials and institutional needs
- Recognizing of copyright and external funding issues

The culture digitization in Latvia has been realized for 18 years and now the two main challenges are to arrange copyright framework so that every citizen can easy access the digitized cultural heritage in quick and convenient way and to establish the system

of implementation of the digitized heritage into the education system and school curricula.

### **References:**

1. Ministry for Culture of Latvia, [www.km.gov.lv](http://www.km.gov.lv)
2. Digital Culture Content in Global Network - Benefits for Society, Zarins U., LIKTA conference proceedings, December 2013
3. Latvia Folkore Repository, [www.lfk.lv](http://www.lfk.lv)