

Digital Innovation of Cultural Heritage

An overview



Digital Innovation of Cultural Heritage (2019-2022)*

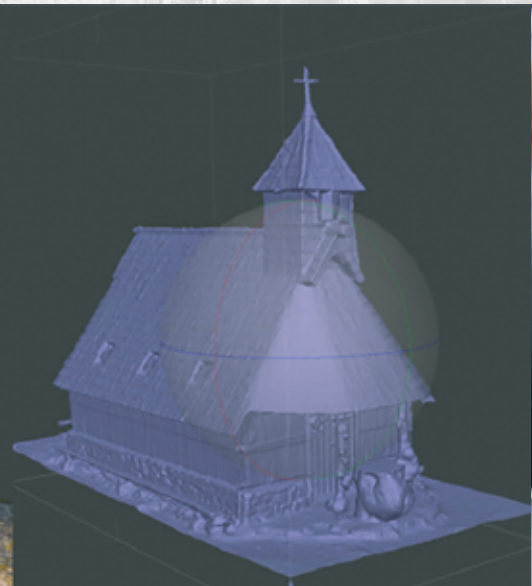
In 2019, a public call by the Ministry of Economic Development and Technology of the Republic of Slovenia has spurred a nation-wide initiative for digital innovation of cultural heritage, where leading tourist destinations have 3D digitally captured emblematic units of Slovenian immovable cultural heritage and **digitally interpreted them through new media and new tourist products.**

- **114+ 3D models** of Slovenian cultural heritage
- **31+ new** tourist products
- **200+ new** digital content about Slovenian cultural heritage
- **31+ re-discovered** stories and legends
- New **collaborations** and **new partnerships**
- Bridging **culture and tourism**
- Incorporating **cultural heritage into tourism**

* Arctur's Heritage+ team has worked on a selection of these projects, of which some are presented in the following pages and online materials.

Goals

- Develop **new tourist experiences** inspired by the rich local cultural heritage
- Promote and document protected immovable cultural heritage using advanced 3D technologies
- Follow the mission of **becoming one of the leading European countries** in digitally enriched tourist experiences of cultural heritage



Key steps

1. Trainings & Workshops

- Interdisciplinary workshops and trainings on idea development, storytelling, technologies and promotion
- **Toolkit** on Digital Innovation of Cultural Heritage
- **Technical guidelines** for 3D digital capture

Scan QR code for
Heritage+ Toolkit



2. 3D Digital capture using photogrammetry and laser scanning

- More than **40 monuments of immovable cultural heritage** have been 3D digitally captured (by the Arctur's Heritage+ team) into high quality and attractive 3D models
- All 3D models will be added to the documentation **by the Ministry of Culture** (permanent storage) and could be used for renovation
- 3D models could be **further used in gaming and film industry** as well as promotion



Scan QR code for
Heritage+ Showreel



3. Attempts of 3D reconstructions using 3D modelling

- Attempts at 3D reconstructions based on available archive resources
- Useful tool to **spark imagination and raise awareness** about the importance of protecting cultural heritage



4. Digital interpretation using new media

- VR experiences
- AR apps
- Holograms
- Interactive walls
- Interactive screens
- Object recognition tables
- Web apps
- Digital and interpretation rooms and spaces

Scan QR code
for Heritage +
DIKD after video



5. Digitally enriched tourist experiences

- Each product should **involve a digital tool/new media** interpreting 3D captured cultural heritage
- Products ought to be developed according to **Slovenia Unique Experiences standards** (local, authentic, unique, experiential, green, boutique, premium, added value, de-seasonalisation, five-star character)



NEW MEDIA
SOLUTIONS

The top image shows a hand holding a textured, cylindrical object with a camera icon on a circular base. The background is a dark surface with faint text, including the word "Capon" and a sentence: "A capon is a rooster...".



Digital room e-Castles of Posavje

Castles are one of the main tourist attractions of Posavje and due to its architecture a visible and remarkable element of cultural landscape. The main wish of the RRA Posavje as the regional development agency was to develop **digital content and experiences**, involving 7 locations in Posavje.

Inspired by the dark cellars of castles, interpreted in a modern way, we designed the dark room with **hand-drawn pictures of castles**, spot lightning and wooden stools. Special attention was given to background music, a modern interpretation of Medieval music. The intended emotion was surprise as one steps from the world of pools into a dark, medieval-ish world of castles.

Scan QR code and watch a trailer for the Digital room e-Castles of Posavje

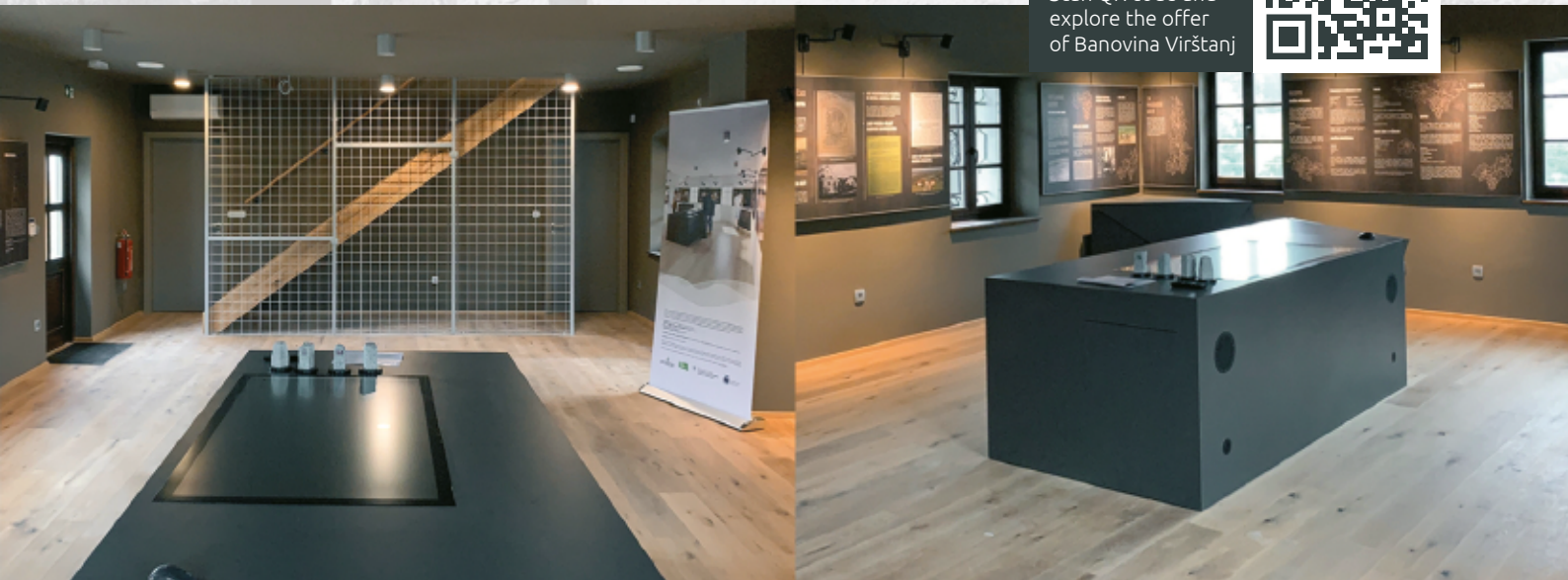


Winemaking and winegrowing of Banovina Virštanj

Newly renovated Banovina Virštanj near Podčetrtek presents and invites one to experience the rich winemaking and winegrowing traditions in Virštanj. The building comprises of a wine cellar with winetasting offerings, ground floor as a common space with **object recognition table and exhibition** that serves also as a venue for wine-related events, and a VR room in the attic with several VR glasses, offering an insight into the life of vine and vineyard.

The main idea behind the project is to position and present the Virštanj winegrowing region to the visitors – thus the **technology is incorporated into the wider experience** of winetasting and wine-tour.

Scan QR code and
explore the offer
of Banovina Virštanj



Submerged villages of Velenje lake

Deep in the lakes of Šaleška dolina are **hidden, almost forgotten villages.** Šaleška Dolina Tourism Board wished to create a new tourist product that involves all the main attractions, yet in a new and attractive way.

Within the experience, the visitors are taken to the mines to learn about the lakes and stories of people above-ground through an animated video.

Afterwards, they travel to the center of the lake with an electric boat, where they **virtually descent to the bottom of the lake** to explore hyper-realistic 3D digitally reconstructed village of Škale using VR glasses. The experience ends at the shores of a lake, on a viewing platform.

Scan QR code and learn more about the tourist product and its itinerary



Multiplicative effects

- Presentations at **international fairs and conferences** (EXPO 2020 Dubai, WTM London, Conventa, Alpe-Adria Fair)
 - **50+ SMEs** involved in implementation of the projects
 - **7 regional offices** of Institute for the Protection of Cultural Heritage of Slovenia have cooperated
 - **150+ tourism and heritage experts** for the first time involved in development of new media experiences
- Bringing local cultural heritage **to the forefront** of tourism development
- **30+ creative and cultural industries** engaged in projects as collaborators, producers or consultants

Awards and presentations

- The initiative of Ministry of Economic Development and Technology was awarded the **ECTN Destination of Sustainable Cultural Tourism Award 2021**



Learnings

- **Initial doubts and skepticism among tourist destination operators vanished** through hands-on experience and creative process.
- **Trainings and workshops are crucial for fruitful collaboration** between sectors and professions (common knowledge base, common vocabulary, common standards, exchange of ideas, peer-learning ...).
- Ideas should **bridge storytelling, different digital and analogue media,** incorporate space and architecture.

Digital Innovation of Cultural Heritage Portal

Scan QR code
explore the
DIKD portal



A common portal presenting the results of 3-year processes of digital innovation across Slovenia, enabling exploration of Slovenian cultural heritage in 3D, 360° and video.



CULTURAL HERITAGE
FOR FUTURE GENERATIONS

The public call for tourist destinations has been launched by the Ministry of Economic Development and Technology in 2019. Projects have been co-funded by the involved tourist destinations, the Republic of Slovenia and European Union through the European Regional Development Fund (ERDF)



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