



MONTENEGRO

DRIVING THE TRANSITION
TO TOURISM INDUSTRY 4.0
POWERED BY DIGITAL
TECHNOLOGIES

TAKING YOU AND YOUR
INDUSTRY TO THE
NEXT LEVEL



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION



PROJECT AT A GLANCE

Supporting the transition to Tourism Industry 4.0. in Montenegro driven by digital technologies

Donor: Slovenia
Coordinating Agency: Ministry of Economic Development and Tourism of Montenegro





UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION



PROJECT OBJECTIVE



Strengthen digital skills in Montenegro, through pilot application in tourism, cultural and related economy sectors by introducing technologies and innovation processes to boost competitiveness, production of higher added value products, employment and sustainable economic growth.



Join the Training Programme

on Digital Innovation of Cultural Heritage!

As part of the project “Provision of Digital Technologies Fostering Tourism 4.0 and Technological Learning in Montenegro”, we are pleased to invite you to participate in a **Training Programme** focused on digital storytelling and 3D technologies for cultural heritage and tourism. The programme consists of **five interactive workshops**, combining theory and practice:

- **Introduction to 3D and Digital Storytelling (online)**
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- **Hands-on Workshop (on-site)**
Planned for June 2026

Register HERE

or scan the QR code



Participants will gain both **conceptual understanding and practical experience** with digital tools and workflows that enable innovative storytelling and digital preservation of cultural heritage. We warmly invite **professionals, students, researchers, and cultural heritage practitioners** to join us and enhance their skills in digital innovation for Tourism 4.0.

The project is coordinated by Arctur, a Slovenian high-tech company known for its award-winning initiatives in the field of digital cultural tourism, and is implemented under the mandate of the United Nations Industrial Development Organization (UNIDO) (UNIDO Project SAP ID 230074).

ARCTUR



Digital storytelling – digital interpretation of cultural heritage

Matevž Straus



Digital technologies can be of help

Digital layer of audio-visual content can contribute to a more engaging, immersive and interactive narration.



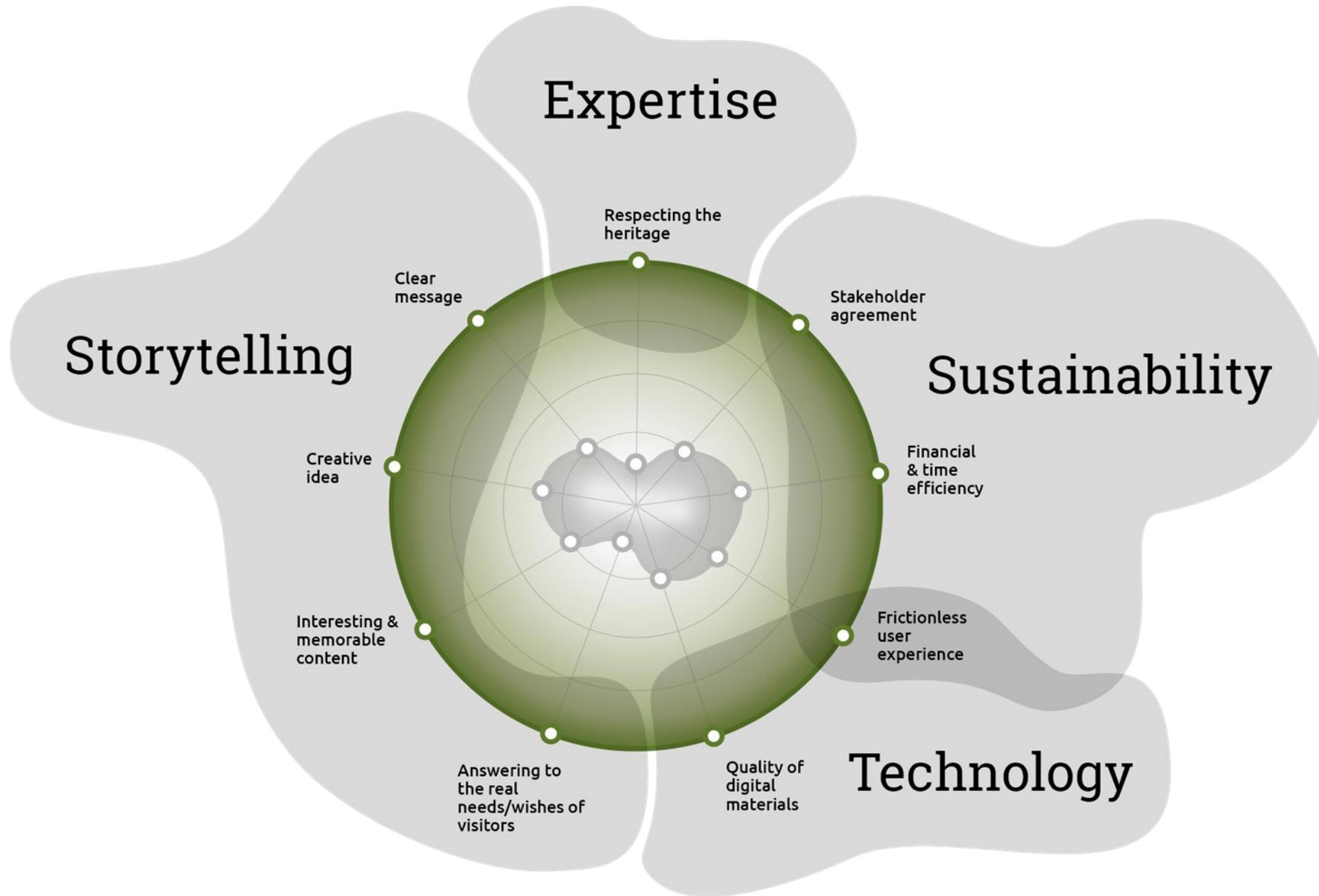
Digital storytelling uses technology and all of its advantages to share your story with a wide audience.

Instead of traditional methods like books or oral tales, digital storytelling **combines words, images, sounds, and videos to create a more engaging and interactive digital story.**

Why digital storytelling?

1. Emotional connection
2. Personalisation
3. Interactivity
4. Data-driven







Augmented reality applications



Virtual tours with 3D objects



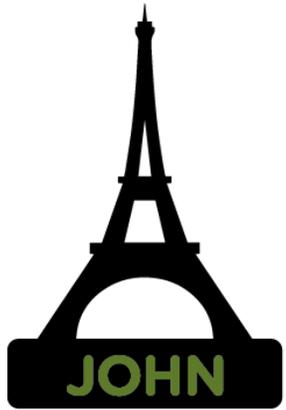
VR games



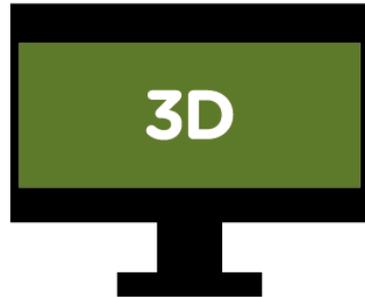
Holograms



Interactive table with 3D objects



3D print of souvenirs



Film with 3D objects



VR-360° film with 3D objects



3D film



Virtual souvenirs

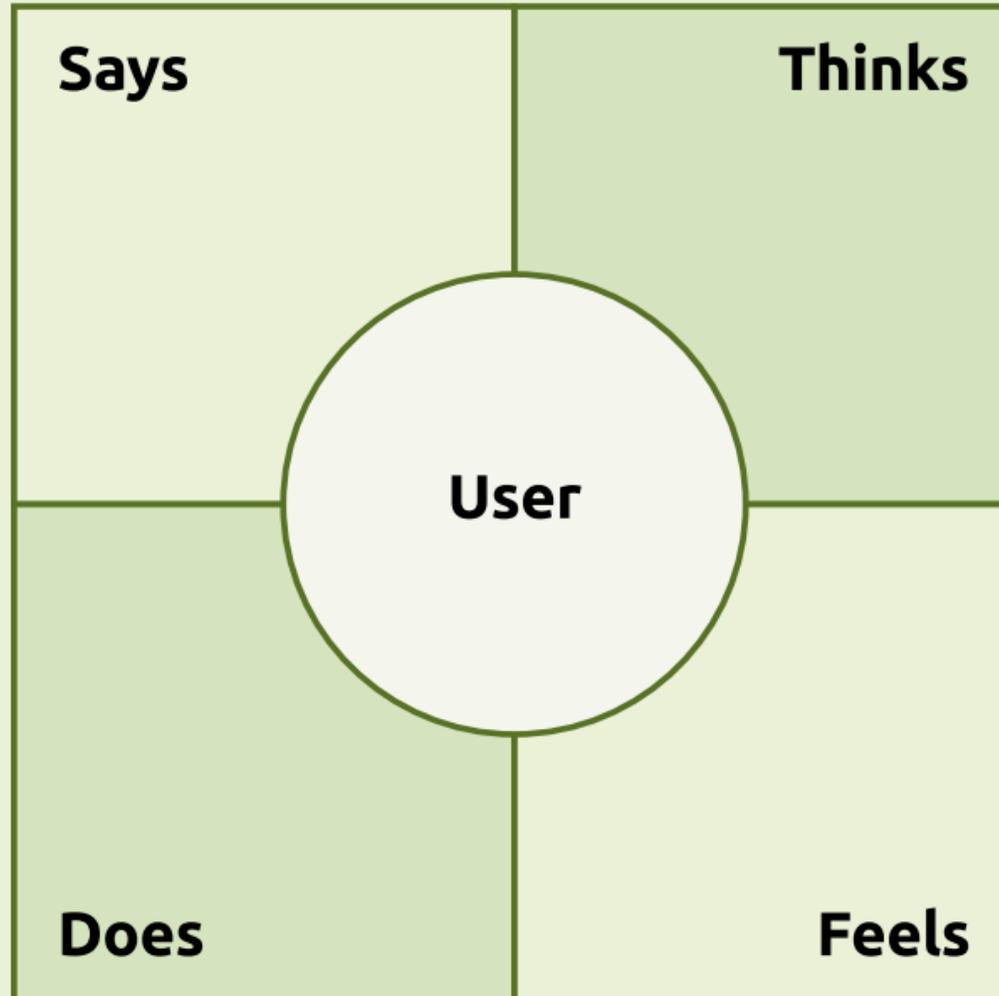
new media matrix for museums New Media Tools in Comparison	on-site								off-site				combined				
	portable audio guides	mobile applications	visual information displays (e.g. touchscreens)	smart objects	audio and video	augmented reality	holographic imagery	3d elements (e.g. printing, movies, interactive)	4d elements (e.g. sensoramas)	robots	online reviews	blogs	podcasts	museum websites	social media & social media platforms	SMS/MMS, Whatsapp, Viber & other messaging services	virtual reality
suitability by type of visitor																	
children (0-12 years)																	
teenagers (12-18 years)																	
young adults (19-30 years)																	
adults (31-60 years)																	
senior citizens (61+)																	
school classes																	
handicapped (mobility-impaired)																	
handicapped (blind or sight-impaired)																	
suitability by type of visitor (Falk & Dierking)																	
explorers																	
facilitators																	
professionals/hobbyists																	
experience seekers																	
rechargers																	
suitability by type of exhibition																	
permanent exhibition																	
special exhibition																	
travelling (multi-stop) exhibition																	
suitability by objective(s)																	
creating a "wow" effect																	
educational purposes																	
attracting (additional) visitors																	
enhancing the experience																	
overall conclusion (suitability by period)																	
now																	
in five years																	



Empathy Map

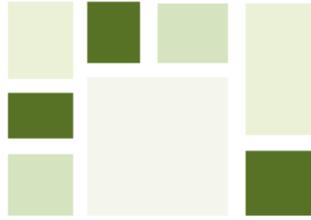
The Empathy Map is a popular method for deepening our understanding of a target user and basing our activities on the insights it provides.

You can read more about the empathy map method on:
www.nngroup.com/articles/empathy-mapping/



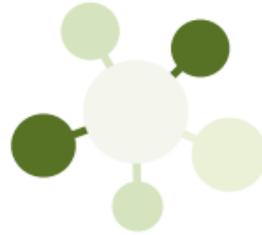
Author: David Gray

Looking for an appropriate method? Search for the following terms online:



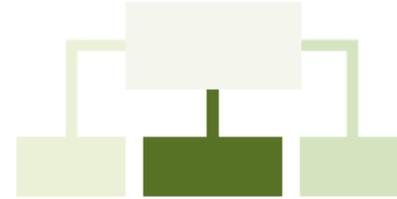
Moodboard

A collage of photos, words and examples of materials that helps us to formulate the general "mood" of our solution.



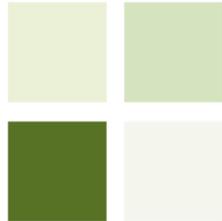
Mind Map

A diagram that represents multiple ideas and is useful for understanding the connections between different information.



Problem Tree

A tool for better understanding the hierarchy of the problems that we wish to solve. Appropriate for more complex challenges.



SWOT Analysis

A commonly used method for developing strategies. It comes in the form of two tables - one with the advantages, disadvantages, opportunities and dangers and the other with strategies that are formed at the intersections of the four elements.



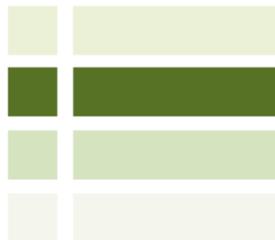
Lotus Blossom

An exercise in creativity that helps us to form new ideas. The main theme is divided into eight core themes, each of which has four sub-themes.



Harris Profile

A way of visualising the pros and cons of different design concepts.



MoSCoW

A method for defining the importance of individual traits of the solution: "Must-have", "Should-have", "Could-have", "Will-not-have".



Future Workshop

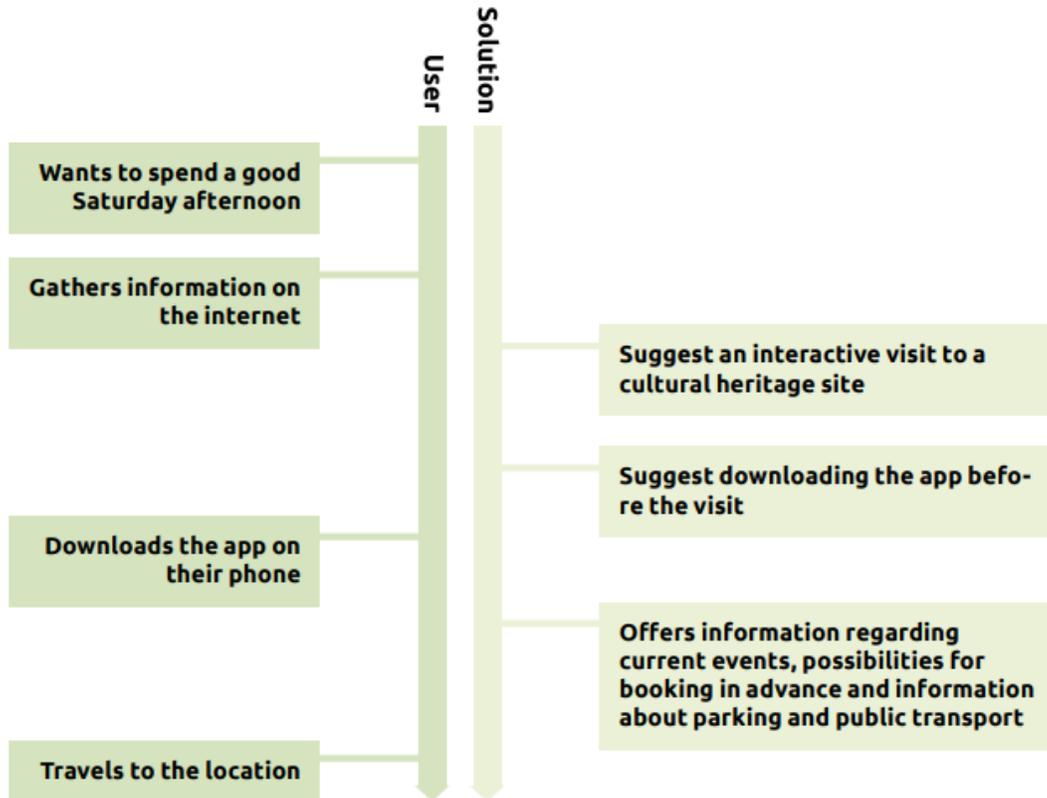
A method in which all stakeholders sketch out their desired future, without limitations.



Storyboard

A tool originating in film production. It helps with better visualisation of activities, experiences and interactions.

Designing customer journey



- Never promise something you can't deliver.
- Clearly communicate to the user what the service is currently doing (for example “Loading”, “Processing data”, ...)
- If the service is ‘smart’, consider that users will expect it to have social skills. A ‘smart’ service should adhere to the rules of courtesy and etiquette.

»Principle of least astonishment (POLA)

The Design of Everyday Things, Donald A. Norman

- Simplify the structure of tasks until the available actions become intuitive.
- Visualise your structures, activities, results and feedback.
- Clearly indicate the connection between the expected results and the actions required.
- Accept the limitations of the system and build upon them.

1. 5-star hybrid experience: Mysteries of submerged villages

Mysterious of submerged villages

Zavod za turizem Šaleške doline

Tourist experience above and below ground

Mysteries of submerged villages

Sail on precious pieces of the past!





Velenjska plaža

VE-001





ENERGY 10
VE-001

Velenjska  plaža



2. Project Mapping: (Saint) George

















2. Project Mapping: Isola - Izola





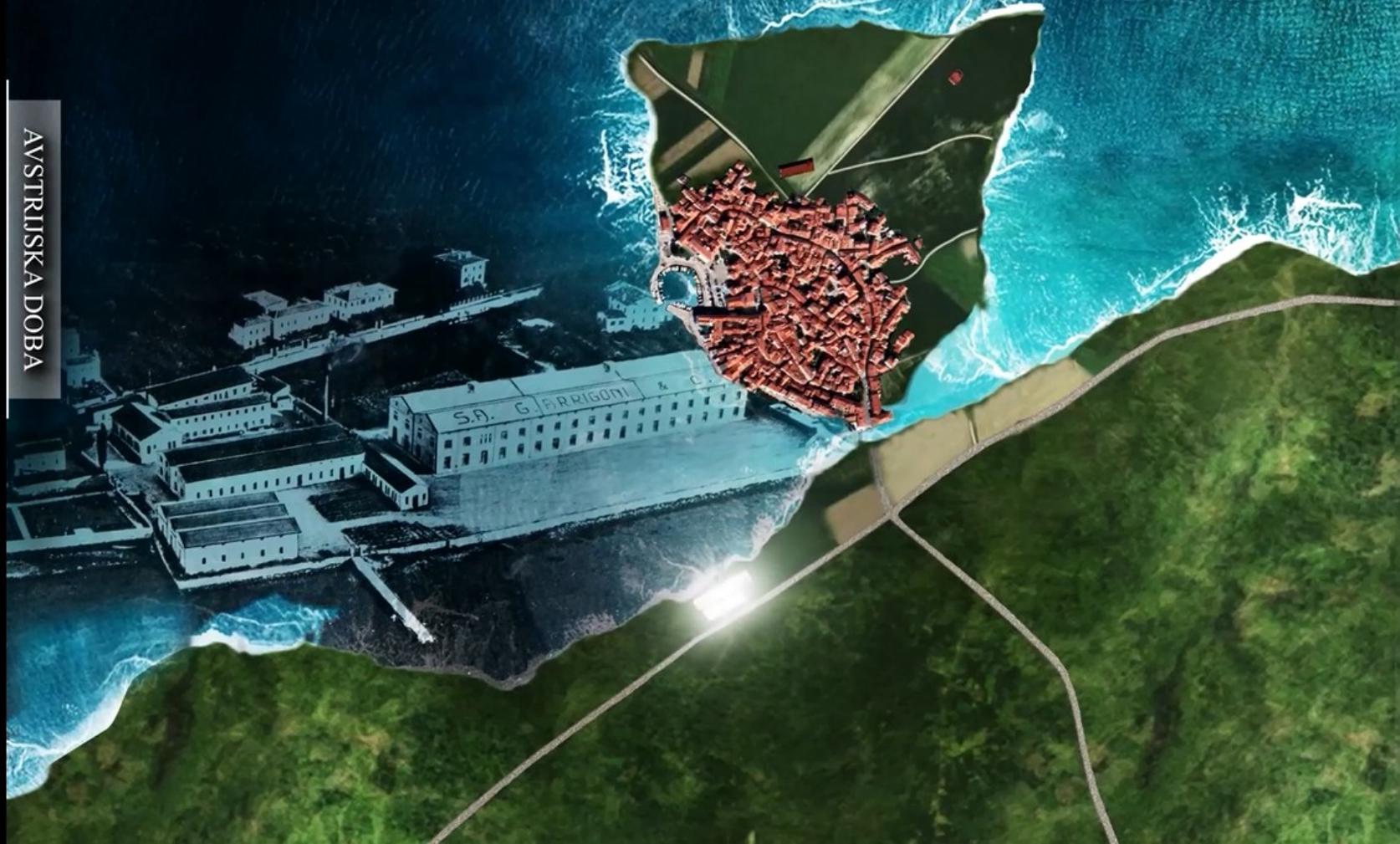
ALLIED LINES ATTACK THE OCEAN LINER
AND CRUISE TO PORTULATO INK

Izola

Videomapping of town's history

PRVI TOVRSTNI TOVARNI STA
AMPELEA IN ARRIGONI.

AVSTRILJSKA DOBA



AVSTRILJSKA DOBA

ITALIJANSKA DOBA

ZAVEZNIŠKA LETALA LADJO NAPADEJO

ITALIJANSKA DOBA

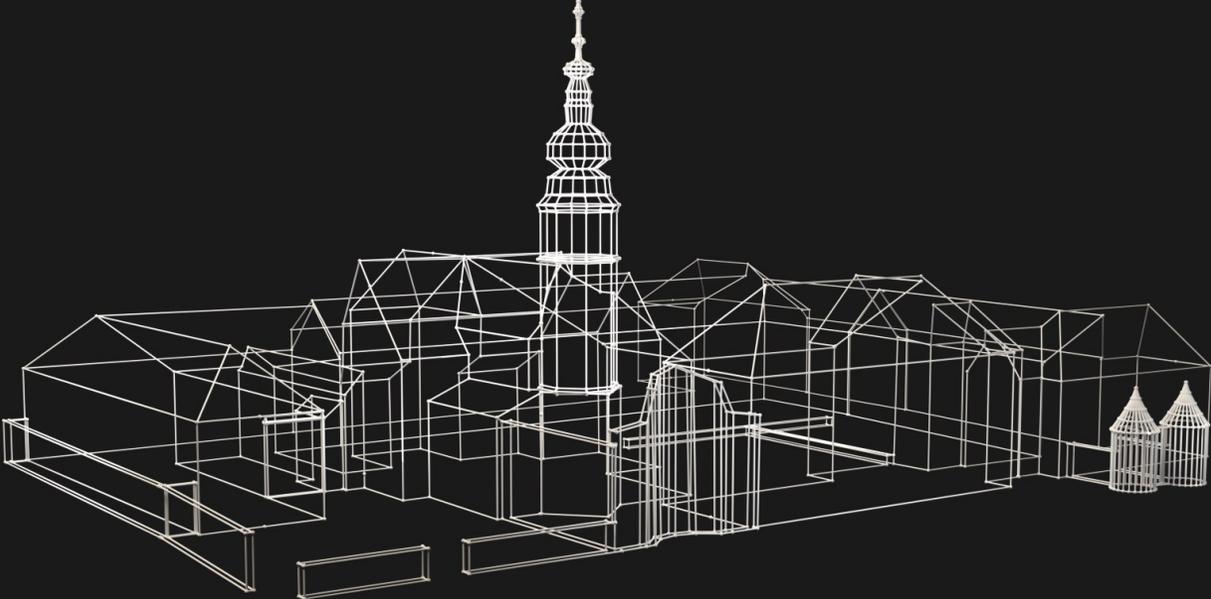


IZOLA SLOVI PO VELIKI RIBIŠKI FLOTI.

JUGOSLAVIJA



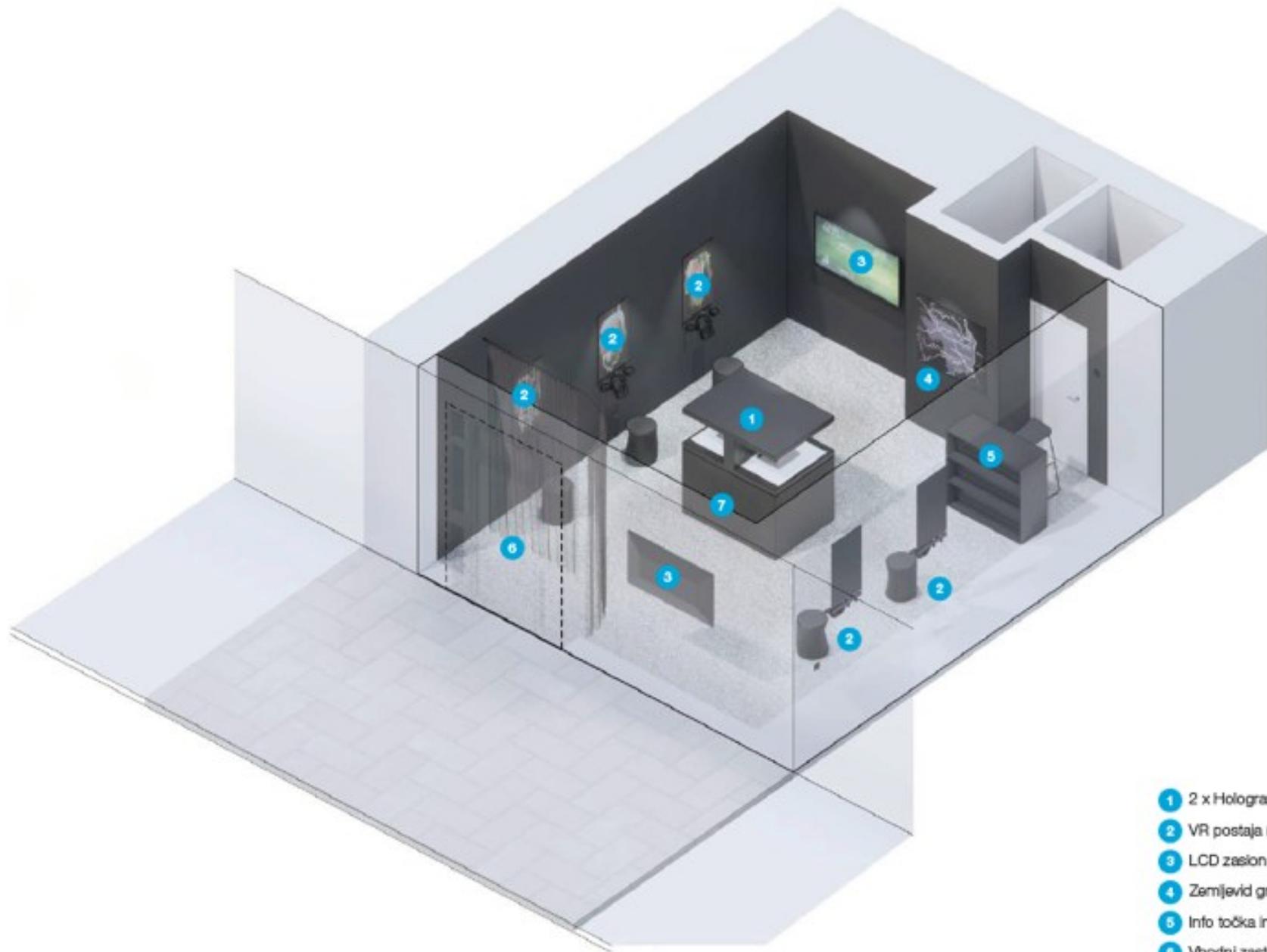
6. Interpretacijska soba in Hologramske razglednice



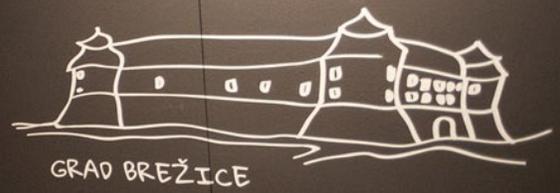
e-Castles of Posavje

RRA Posavje

Digital Room in Čatež Spa Resort



- 1 2 x Hologramski predvajnik
- 2 VR postaja (VR očala in premiknen stol)
- 3 LCD zaslon
- 4 Zemljevid gradov
- 5 Info točka in prostor za zaposlenega + računalnik
- 6 Vhodni zastor (pomične zavesa)
- 7 Prostor za shranjevanje tablic





Digital Innovation of Cultural Heritage

Guidelines

In Slovenian and English



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ARCTUR

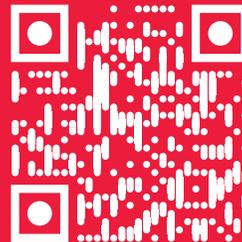


Join us!

Become a member of **Tourism 4.0 Partnership**

Join:

joinus.tourism4-0.org



200+ members

