

Innovative digital tools arising during COVID-19 period for sustainable cultural heritage and touristic development

GOOD PRACTICES OF DIGITIZATION OF NATURAL AND CULTURAL HERITAGE AS ANTI PANDEMIC MEASURES

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ICT in Tourism

Today's progress of Information Communications Technologies (ICT) has great potential to be utilized in increasing the effectiveness, efficiency, and productivity gradually or radically through automated concepts. Web technology as part of web ICT can be utilized to help the effectiveness and efficiency of daily business activities, including business people in tourism.



ICT in Tourism

Sustainable development is largely acknowledged as the most effective strategy for attaining environmental, social, and economic advantages from all forms of tourism. Sustainable tourism management supports both the long-term quality of life for local communities and a high-quality visitor experience.



ICT in Tourism

Using ICT in tourism:

- users now have unparalleled access to digital cultural content.
- stakeholders can reach and attract a wider audience
- the opportunity to develop original content for recreation and education purposes.



Innovative Digital Tools

The Laboratory of Knowledge & Intelligent Computing has developed **innovative digital applications** aimed at:

- the **tourist promotion** and **valorisation** of monuments, archaeological sites, and events of cultural interest.
- Increase the visibility and promote the stakeholders



Innovative Digital Tools





HERMES

The project aims to:

- through the use of innovative digital tools to achieve the promotion of the common cultural heritage and the most important cultural monuments and places of interest as well as educate in common musical and theatrical traditions
- design and creation of a virtual environment with the main historical monuments of the city of Arta where the modern technologies of virtual reality will be fully exploited
- augmented reality application for the tour of the Castle of Arta





HERMES

The cutting-edge technologies used provide access to digital content in two alternative ways:

- on-site, during the tour, through the AR application
- via the web, mobile devices and VR headset, to visualize the 3D models





HERMES-Mobile Application

The mobile application is working with two modes, AR mode and digital information mode. The term "AR " describes applications that integrate information and material, mainly images and sound, into the real world as perceived by the user.

Benefits:

- enhance the understanding of the content
- motivation to explore the material from different perspectives
- interaction in real time
- a combination of the real and the virtual world, offering the user the possibility to enjoy unique experiences
- viewing 3D models via mobile in case the places are closed





HERMES- Mobile Application

- very user-friendly interface
- features:



HermesAR Google Play

- History of Arta Castle (texts and photo collection)
- AR mode: 3D models and voice narration for parts of the Castle
- Point of Interest: 3D model of castle photos of POIs

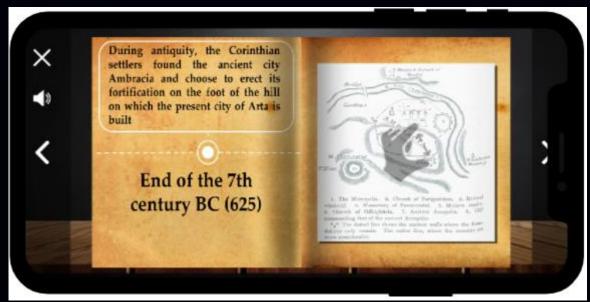






HERMES- History of Arta's Castle





Orsini Family

History of castle during 7th century BC





HERMES-AR Application



Gate of Castle



The Coat of Arms

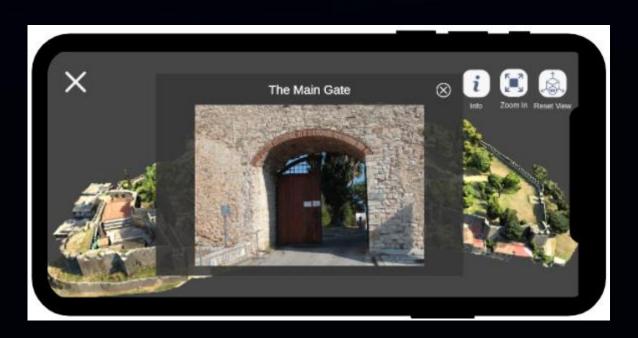




HERMES- Place of interest







Picture of Main Gate

3D model of Castle





HERMES-VR Application

Using the Virtual Reality Application users can participate in a 360 virtual tour or learn the history of the castle by playing an interactive VR game in a realistic environment.

Benefits:

- the virtual tour is available 24/7 even when during covid19
- realistic representation of the castle
- education via gamification
- provide abundance of visual information





HERMES-VR Education



Xenia Hotel



The palace of Despots







HERMES- 360VR tour







Inside the Castle





QNeST PLUS -Quality Network on Sustainable

Tourism

The QNeST PLUS "Quality Network for Sustainable Tourism" project involves partners specialising in tourism, cultural heritage, Mediterranean food and the use of digital technologies.

Businesses can participate in a transnational network of partners, where they are certified with the "Quality Label" in terms of sustainable development and promotion of sustainable tourism at local and transnational level. The Quality Label concerns traditional tangible and intangible cultural heritage combined with Mediterranean diet, as well as sustainable environment and social well-being.



QNeST PLUS -Quality Network on Sustainable

Tourism

Within the next several years, the tourist and travel industries may be affected, with short, medium, and long-term economic consequences, as a result of travel restrictions and social isolation caused by the covid19 pandemic.

To this end in the QNeST PLUS, we are utilizing thematic routes to promote new routes across the rich cultural history of periphery and landscape areas.

The thematic routes can be described as paths linked by segments in waypoints (including places of interest and business) characterized by a unifying theme that gives the entire route a meaning.





QNeST PLUS - Digital Tools

Specific digital tools have been designed and developed to facilitate accessibility and increase the visibility of the tangible and intangible cultural heritage of the Adriatic-Ionian region.

- Web Application
- Mobile Application





QNeST PLUS: Web Applicaiton

The promotion of businesses participating in QNeST PLUS is mainly done through the web application.

Features:

- An easy-to-use environment for the promotion of local bodies and businesses
- Show suggested thematic routes and points of interest
- Interaction with maps in modern application standards
- Easy navigation capability

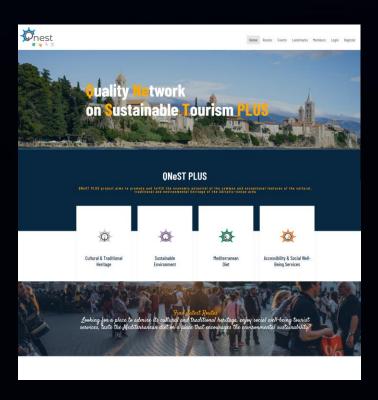
plus.qnpktseqnest.eu





ONeST PLUS

QNeST PLUS: Web Application



Users can:

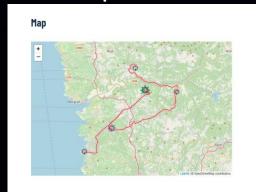
- Create accounts in the platform
- manage their profile
- add a review
- use search filters to find events, landmarks and QNeST members
- use keyword search to find thematic routes
- see pictures, videos, description, and waypoints on a map



QNeST PLUS: Web Application- Thematic Routes

Description of waypoints in the route

Waypoints on Map

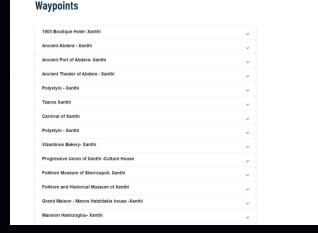


Gallery



Description of route





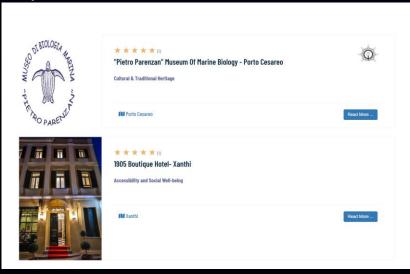




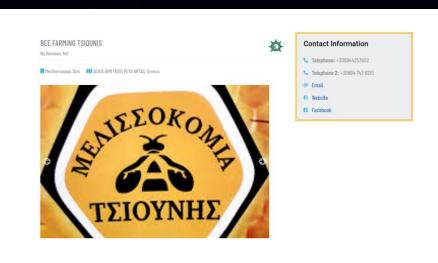
QNeST PLUS: Web application - Members

Details of QNeST Member

QNeST members







Location on Map

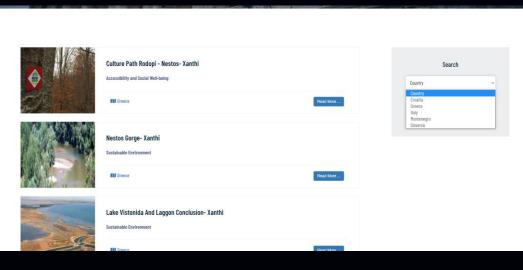


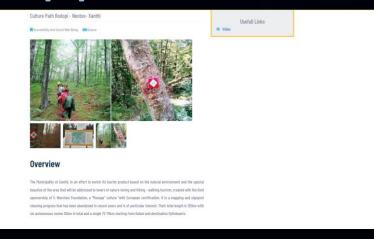




QNeST PLUS: Web application Landmarks

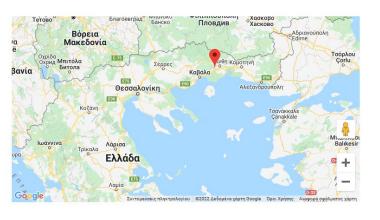
Filters





Description/ Gallery

Landmark Location



Map location





QNeST PLUS: Mobile application

