Locations virtualized by partners

Final Version of 30/06/2023

Deliverable Number D.3.3.5.

Project Acronym	**AdriPromTour**
Project ID Number	10419486
Project Full Title	Valorisation of Adriatic cultural and natural heritage through strengthening of visibility and tourist promotion
Priority Axis	3 - Environment and cultural heritage
Specific objective	3.1 - Make natural and cultural heritage a leverage for sustainable and more balanced territorial development
Work Package Number	WP3
Work Package Title	Clustering thematic activities
Activity Number	3.3
Activity Title	Awareness raising and engagement
Partner in Charge	European Point Consortium
Partner(s) Involved	All
Author	Emiliano Galluccio
Status	Draft / Final
Version	1.0
Preparation Date	30 / 06 / 2023
Distribution Level	Public

European Regional Development Fund

Summary

List of abbreviations and terms

Location: Each territory which is going to be virtualised, can have one or more locations. In this document, for example it's shown how, within the Province of Teramo, there have been virtualised two locations: the cities of Teramo and Atri.

POI: A point of interest (abbreviated POI) is a specific place or location point on a map that someone might find interesting or useful to visit. Each location can have one or several POIs which can range from famous landmarks (e.g. museums, churches, towers, squares), natural attractions (e.g. bays, coasts, waterfalls) to commonplace relevant spots (viewpoints, attractions).

Virtual Environment: an artificial environment that replaces users' real-world surroundings convincingly enough that they are able to suspend disbelief and fully engage with the created environment. Immersiveness is an important element of virtual reality applications, which can be obtained reproducing, at least:

Continuity of surroundings: The possibility give to user to look around in all directions and have continuity of the environment.

Conformance to human vision: the quality of elements that allow user to understand their environments (objects in the distance are sized appropriately to user's understanding of their size and distance, motion parallax ensuring that user's view of objects changes appropriately as perspective changes).

3D audio: To grant the maximum immersiveness, VR environments should be able to replicate natural positioning of sounds relative to objects included in the environment and the position of the user's head.

VR: Virtual Reality. The technology that is capable of reproducing an artificial environment. It could consist in software (browsers adapted for the VR environment navigation) or hardware (devices which can recreate the environment in a way that human senses are engaged as a normal reality).

Equirectangular format: one single stitched image of 360° horizontally and 180° vertically which is used to recreate Immersive VR environment with VR software/image viewers devices.

Introduction

Information and communication technology (ICT) is expecting that one of the most significant developments which will critically impact the tourism industry, in the shorter future, is Virtual Reality (VR), which is in constant evolution due to many of the recent innovations (platforms, devices and content production tools).

VR technologies offer unlimited aptitudes for mass virtual visitations to tourism destinations, showing their intricate abilities to simulate real-life contexts and making it a very powerful tool for meeting the needs of tourists.

Having Google, Facebook, Samsung, and other companies pushed this technology, VR products are developing into a mainstream consumer product with sales expected to hit half a billion units by 2025, becoming a channel with incredibly potentialities for destinations and tour operators.

VR is often defined as the technology using the computer-generated 3D environment, often referred to as "virtual environment", providing physical immersion and psychological presence in VR experience in the real-time simulation of one or more of the five senses of the users as a result of navigation.

The marketing and promotion segments of the tourism sector and the tourism branding have always been assisted mostly via visual imagery and they're in the need to continuously innovate the forms of visual imagery with the objective to promote a positive destination image and to establish the communication of emotions and experiences influencing the consumers and tourists.

VR Technology-based marketing of tourism destinations, thus, is often used because of its ability to induce the emphasized sensory and emotional experience and it could give the opportunity to target marketing messages to specific markets, capture the attention of potential visitors and give assistance in relevant factors identification that essentially create motivations in reference to future travel decision-making processes (attachment, stimulation, evaluation and experience).

The VR technologies are already used in provision of tourists with experience previews of sites, cultural tours, destinations and attractions, as a part of the marketing, and the related applications could be largely found in the initial phases of customer buying cycle in the area of tourism, because it enables the extensive information about important factors and services that play a significant part in the search stage of the process of decision-making.

Implemented VR platform

During the implementation of Hercultour project, financed in the framework of Interreg Italy-Croatia Programme, and capitalized through Adripromtour Cluster Project, Europe Point Consortium developed a VR platform which encapsulates the most relevant points of interest (POIs) of Teramo Municipality.

Objectives

Starting from the developed VR platform, Adripromtour aimed at integrating the content from all partners in order to offer to visitors an interactive, realistic, easy and detailed VR navigations with the objective of:

- valorise the cultural and natural heritage of the territories in order to boost the tourism marketing and promote all partners' locations with a cross fertilization of combined information which are exploitable worldwide and from every kind of device
- Create an immersive tourism experience which will help tourists in the trip-planning processes and activity planning.
- Promote the Adripromtour project and Programme brand, also participating to Fairs and cultural events.

Adripromtour Partners' contribution

All participating partners have been requested to provide their contribution, in order to proceed to the content integration, as follows:

ITEM	FORMAT
Locations Aerial views (see Pic. 2)	1 aerial image (drone view) for each location landpage: - Equirectangular format, Minimum 15.000px x 7.500px, .JPG extension
POIs Virtualisation (see Pic. 3)	a) A List (excel template will be provided to the PPs external experts) of each POI for each location a) Images for each virtualized POI - Equirectangular format, Minimum 12.000px x 6.000px, .JPG extension
Videos (if any)	Equirectangular format, Minimum 5,7K/30fps, .MP4 format
Text info-guides	Text description for each POI - Max 1500 characters, in local and English language
Audio-guides	Audio information for each POI - Max 2 Minutes of audio describing the POI, in Local and English language, .Wav o .Mp3 extension

Partners provided their contents (equirectangular images, texts and audioguides) in order to integrate the platform and to provide the assistance to the PP6 external expert, which managed the platform integration, during the phase of contents insertion, in some practical operations, such as: correct calibration of all information related to the contents, positioning of POIs in the aerial view map, positioning of navigation buttons, sequencing the pictures in the same POIs, etc..

All contents once integrated in the platform formed the 360° virtual tour which can be visited by pc/laptop/mobile and VR headsets at the link as follows:

https://www.consorziopuntoeuropa.it/adripromtourvr/index.htm

LP - Primorje-Gorski kotar county

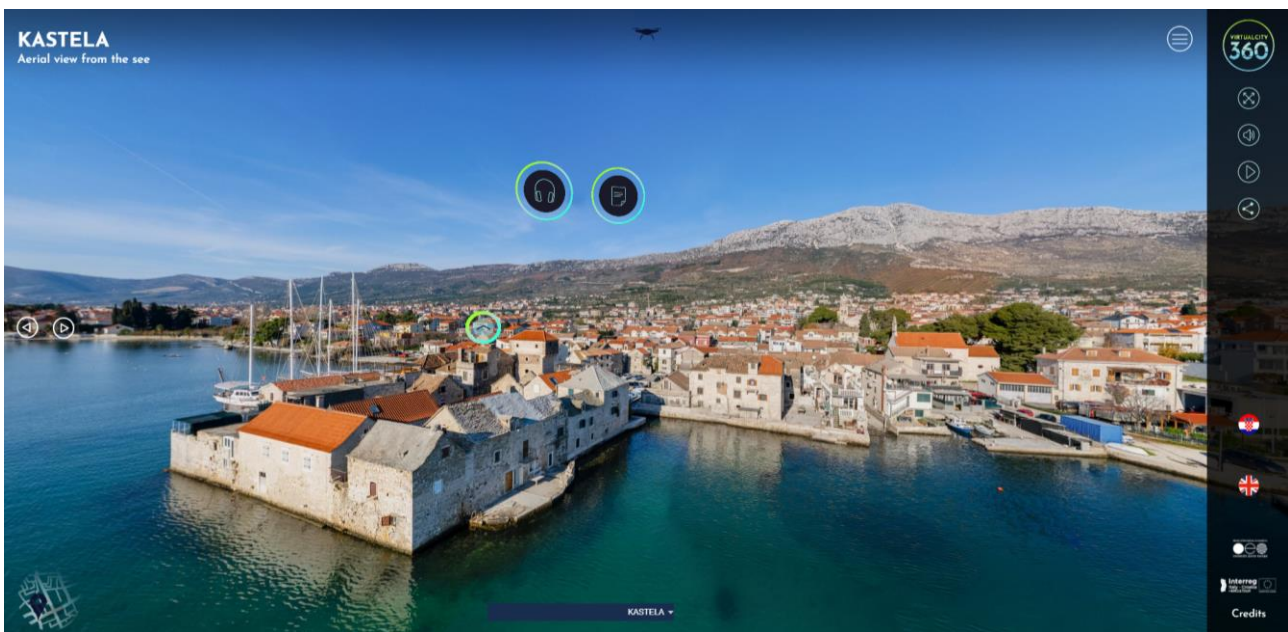# PP1 - Polytechnic University of Marche
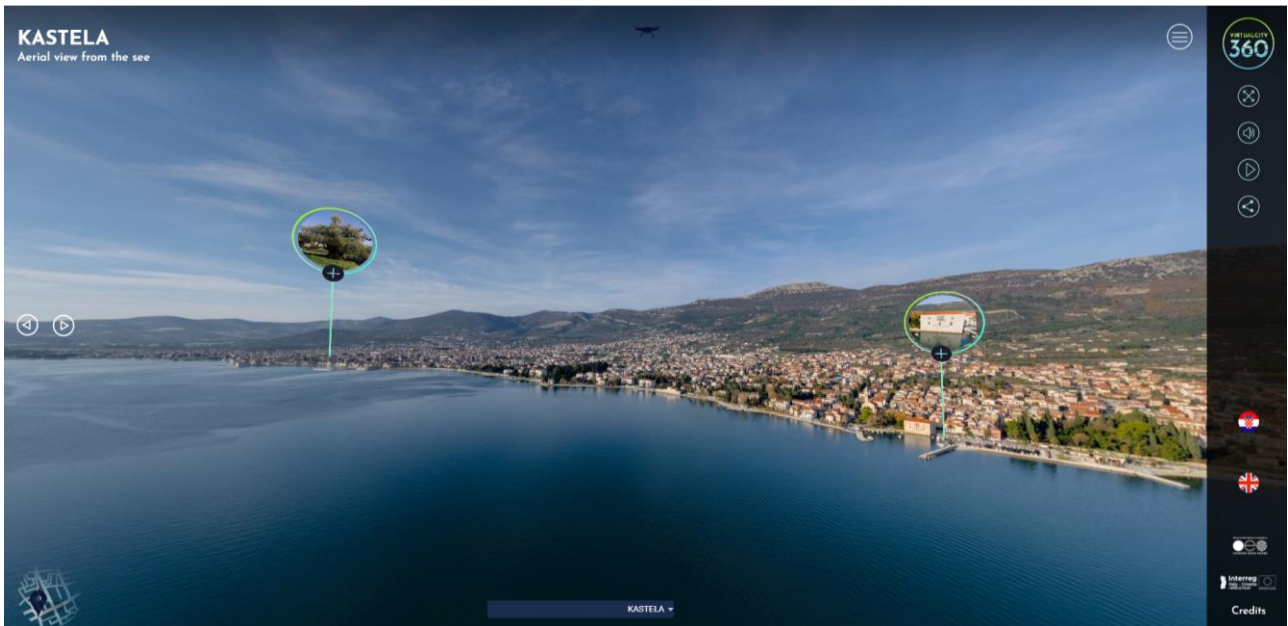
PP3 - Municipality of Cesenatico
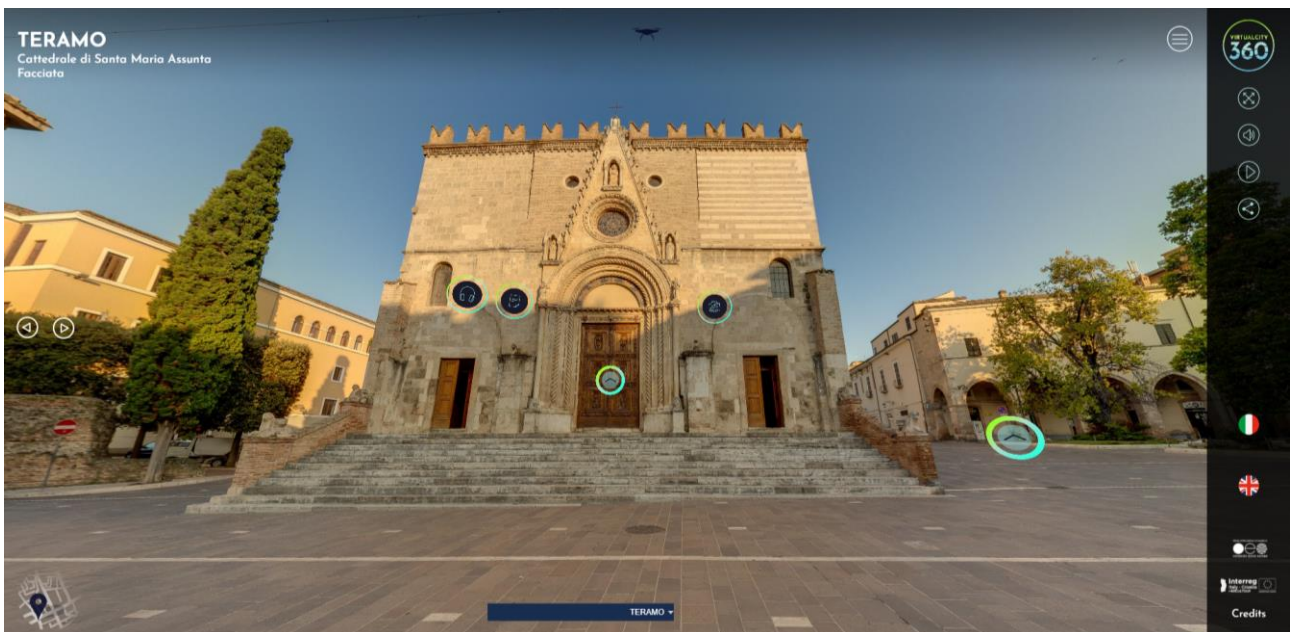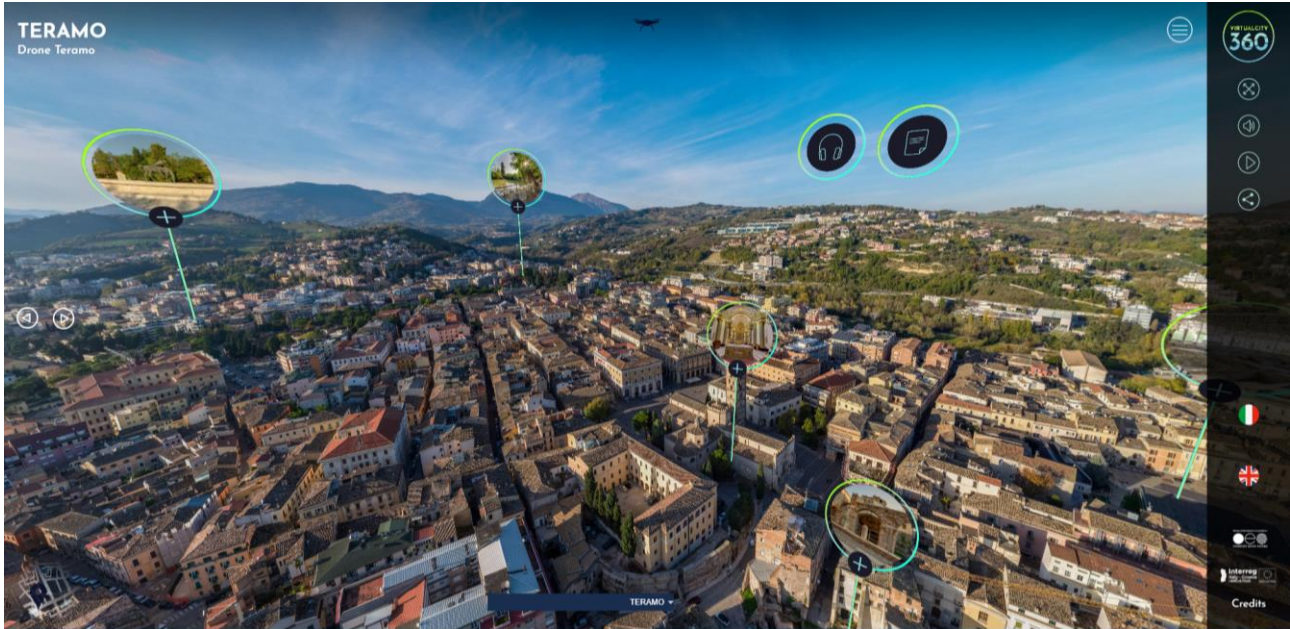
PP4 - Juraj Dobrila University of Pula

PP5 - City of Kaštela

PP6 - Europe Point of Teramo Consortium

PP7 - Šibenik-Knin County