

THE PROJECT

INNOVATION

The project aims to foster the development of innovative solutions for tourism and cultural heritage enhancement by providing an open data infrastructure that supports new opportunities and solutions

THE PLATFORM

Implementation of an infrastructure for the creation, access, sharing and reuse of Open Data, with digital archives in a secure cloud environment, promoting Open Innovation, Digital Economy and Knowledge Society

GOALS

Increasing the competitiveness of Tourism and Cultural Heritage businesses in Sicily through the use of Open Data for the development of innovative services and creation of new business models



HOW DOES IT WORK?

DATA ACQUISITION

Using a combination of web scraping and URL analysis, supported by machine learning, AI, and LLM, linked data related to Sicily are extracted from supplier sites

DATA PROCESSING

Extracted data are transformed and cleaned using ETL (Extract, Transform, Load) processes.

ARCHIVING

The transformed and cleaned data is stored in the Data-Highway infrastructure in the cloud

ELABORATION

Archived data are ready for processing and analysis, meeting the needs of current and future applications

EXPOSURE

Processed data are exposed through APIs or user interfaces, allowing intuitive and efficient access, leveraging Artificial Intelligence when needed

MONITORING

A continuous monitoring system ensures data availability and integrity



Creation of a Linked Open Data platform for the realization of innovative applications for tourism and cultural promotion



www.datahighway.it

PARTNERS



DOT – Data On Travel: Vertical Social Network for Territorial Tourism

Develops an innovative application for territorial tourism by leveraging Linked Open Data. DOT creates a vertical social network dedicated to the tourism sector, combining Big Data and user-generated data to offer personalized tourism experiences and predictive and proactive services

SMARTOURISM – Clever tourism

Enhance mountain hiking as a tourism resource through innovative technologies, with the creation of an interactive Web portal and linked App to plan and track hikes, share experiences, and provide useful data. Make trail data available through Open Linked Data, improving the attractiveness of natural resources in parks and reserves



USE CASES

The activity involves the development of demonstrators and the adoption of next-generation technologies, such as the NGS-LD standard for the integration of heterogeneous Linked Data and the use of AI and LLM (Large Language Models), which will be tested on identified use cases and to be selected

PROMO – Monitoring and control proactive monitoring and control of natural and cultural heritage

Aims to create a prototype transportable neutron tomograph to study stone samples from the historic architecture of eastern Sicily. Fast neutron tomography, which is sensitive to water seepage, makes it possible to analyze the Baroque rocks of the Noto Valley, a UNESCO heritage site



TravelOD – Web platform for the dissemination and use of regional data in tourism in Linked Open Data format

Creation of a web platform for the dissemination and use of regional tourism data in Linked Open Data format. Users can browse data, create guided and customized queries via dedicated endpoints

BLOCKCHAINIT – Trinacria Tokens: Blockchain and AI for tourism

Trinacria Tokens aims to revolutionize the tourism experience in Sicily through the use of blockchain, augmented reality, Artificial Intelligence and gamification. The platform will be accessible through a mobile application that will offer a wide range of integrated services for tourists, local businesses, and local and regional authorities.

