

THE PROJECT, IN BRIEF

The purpose of the DIGITPORTS project is to boost the competitiveness of maritime transport through the use of digitalisation tools (Digital Twins - DT) to enhance planning capabilities, operational sustainability and performance of Italian and Croatian ports, creating a scalable DT logistic network in the Adriatic basin

You can follow **DIGITPORTS Project** on:



www.italy-croatia.eu/web/digitports

Interreg  Co-funded by
the European Union

Italy – Croatia

 **DIGITPORTS**

THE PROJECT'S NUMBER



**7 PARTNERS
PORT AUTHORITIES**



**PROJECT DURATION
04/2024 - 09/2026**



**ERDF
1,907,380.80**



**TOTAL BUDGET
2,384,226.00**

DIGITAl Twins applications for safer and greener Adriatic PORTS operations



WHY DIGITPORTS?

The operational planning of a port terminal (container, passengers or multipurpose) is a highly complex operation. To address competitive pressures, shipping and logistics expansion, stricter environmental accountability, a greater demands for transparency, particularly related to pollution and EU procurement changes, **Adriatic Ports are significantly increasing digitalization** and automation.

These are crucial challenges **that must be addressed in a scalable and sustainable way, capable of producing a cultural change toward a “data-driven” port management.**

Although Adriatic Port Authorities don't directly manage terminals, they must ensure efficient operations due to their role in public asset allocation and their key impact on local economic growth, which includes also strategic planning beyond port boundaries. So, that's the reason for this project.

DIGITPORTS will for the first time focus on the application of Digital Twins (DT) to port ecosystems. DT tools, sensors and Artificial Intelligence (AI) will help in switching to **data-led decision making process:**

1 to plan and develop **sustainable business strategies** for land and sea port operations and **real estate valorization**;

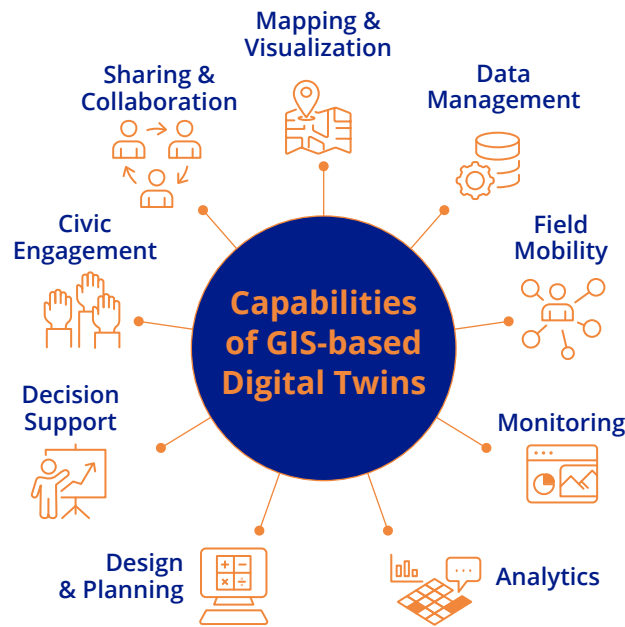
2 to **reduce costs for maintenance of real estate port buildings and quays**, based of predictive maintenance schemes;

3 to use DT tools to **support the territorial management**, in particular about: managing concessions fees, bathymetries and dredging, Automatic Port Reservation System for efficient and safe berthing allocation, better gates management, just to name a few. These **pilot DT tools must be capable to integrate big amounts of data within complex contexts and the evolution of a web based GIS** (Geographical Information System) that encompasses both administrative, economical, environmental, structural and operational model replica of the real port.

What is a Digital Twin?

A Digital Twin (DT) is a **virtual representation of an object, place, process or service**, which is created from historical and real-time data. Since it is a constantly updated and true-to-life digital replica, **the use of DTs enables simulations and predictive analysis** (by testing, for example, different scenarios without real risks), **to optimize processes and identify potential problems.**

In managing complex infrastructures, such as the port ecosystem, DTs are a powerful tool to adopt a “smart logistic” approach: understanding, monitoring, making more efficient planning and decision-making processes with immediate impact and positive operational spillovers in terms of organization, performance and sustainability.



LEAD PARTNER



PROJECT PARTNERS

