Step Into The Future Of Mobility

Embrace a Smart, Sustainable, Seamless and Secure Revolution

Digital innovation is transforming the **mobility** and **transportation** sector with the aim of ensuring and promoting more **efficient**, **integrated**, **and sustainable travel** options for everyone through an ecosystem approach that involves all stakeholders end to end.

The role of infrastructure is crucial in developing a cutting-edge and **responsive connectivity system** that addresses expectations and reduces geographical disparities and environmental impact.

MOBILITY AS A SERVICE
SMART ROADS • CROWD MANAGEMENT
ENVIRONMENTAL TRAFFIC AND TRANSPORT MANAGEMENT
AI & ADVANCED ANALYTICS • IOT • DIGITAL TWIN • CYBERSECURITY

Vehicles, Infrastructures and People: the Smart Mobility ecosystem goes live!

Infrastructure, Solutions, and Digital Services for a Country Moving at the Same Speed.

01
How to monitor tunnels and underground metro structures?

Tunnels and galleries are assets that need constant monitoring to ensure efficiency and safety. Tunnel Monitoring systems, through the management of alerts received from automatic and intelligent systems (such as sensors for smoke/fire/open flame detection) or video processing for accident recognition, guarantee the activation of immediate countermeasures in case of an incident or malfunction.

02
How to ensure security in airports and stations?

Crowd Management solutions ensure the physical safety of travelers through video analysis and digital models for simulating different scenarios: analysis of the percentage of occupied space over time, alerts for congestion, evacuation time etc. Real-time data acquired from heterogeneous sources send alerts to identify and manage critical situations.

03
How to check the health status of bridges?

Through the use of sensors, solutions for near-real-time infrastructure monitoring, evaluation algorithms for the condition of the structure, and the development of advanced models for inspection and maintenance planning, it is possible to create an advanced System of Structural Health Monitoring.

04
How to simplify port operations?

Innovative physical security systems for handling baggage and goods, infrastructure monitoring, and maintenance. Simplification and digitalization of import-export processes with automatic recognition of license plates and container identifiers on authorized vehicles within the port area, as well as off-route management. 3D reconstructions of the port area with simulations of environmental impact.

05
How to reduce urban traffic and pollution?

Reduce urban traffic and limit the number of vehicles circulating in search of free parking spots thanks to the use of sensors. Drivers can be directed straight to available spaces, with benefits in terms of environmental sustainability and optimization of urban space usage.

06
How to improve the travel experience with MaaS?

A digital platform of intermediation provides personalized information to city users on traffic conditions, accessibility, and availability of public and private mobility services. It enables the search for travel solutions through a multimodal journey planner, evaluating them based on cost, travel time, and sustainability. It facilitates booking and payment of services, including pay-per-use options, and allows users to provide feedback and report issues. A Cloud platform available to policymakers and operators, with monitoring dashboards, enables the control and analysis of urban mobility to define intervention plans.

07
How to improve logistics in cities?

Through Mobility Gate RFID and Mobility Pass RFID, cities can effectively regulate and monitor the entry, duration of stay, and routes taken by commercial vehicles, while complying with regulations and permitted paths.

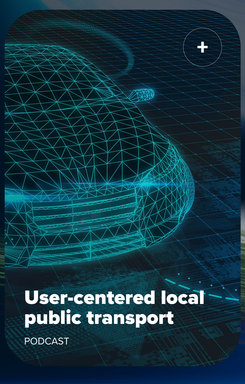
08
How to facilitate digital access and payments with a unified platform?

Through a Cloud-based platform, it is possible to manage various aspects of mobility, including congestion charge fees, parking, or city logistics, and integrate existing infrastructure such as parking meters with wireless technology. Thanks to APIs, mobile devices for road control are also automated, streamlining workflows and reducing repetitive and time-consuming tasks.

09
How to enable electric mobility?

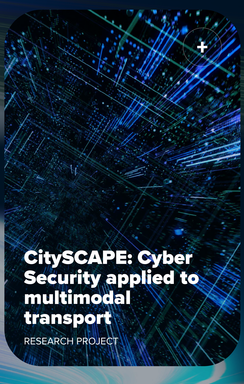
Energy and Asset Management solutions for improving network efficiency and charging infrastructure, reducing energy consumption, facilitating effective interaction among energy stakeholders, optimizing electric fleet productivity, and supporting Local Public Transport in the green transition journey.

Discover More



User-centered local public transport
PODCAST

A BMS for Bridges, Viaducts and Overpasses Health Monitoring
CASE STUDY



CitySCAPE: Cyber Security applied to multimodal transport
RESEARCH PROJECT

OUR Ecosystems

- Wellbeing
- Wealth & Commerce
- Digital Citizenship
- Energy Resources & Sustainability
- **Mobility**

OUR ToolBox

- PODCAST
- PAPER
- CASE STUDIES
- RESEARCH PROJECTS
- USE CASES
- PLATFORMS & SOLUTIONS

DISCOVER MORE visit **eng.it**

SUSTAINABLE DEVELOPMENT GOALS