



# MOST@EXPO Osaka: From Research to Business

Auditorium Padiglione Italia April 20, 2025

OPTIFaaS
AI-Powered Digital Twin Platform
for Mobility & Transport Operation and Plan









**Urban Challenges & OPTIFaaS Objectives** 

From data to action: Tailored Mobility Services

## The Core

Snap4City / OPTIFaaS delivers mobility solutions for operational management and strategic-tactical planning through an integrated Digital Twin and various AI models, enabling what-if analysis, simulation, and optimization



**Decongestion** 



Safety



**Accessibility** 



**Cost Reduction** 

# **Objectives**



**Decarbonization** 

**OPTIFaaS** 

Scalable, flexible, customized mobility solutions
Supports various urban contexts from small communities to large metropolises









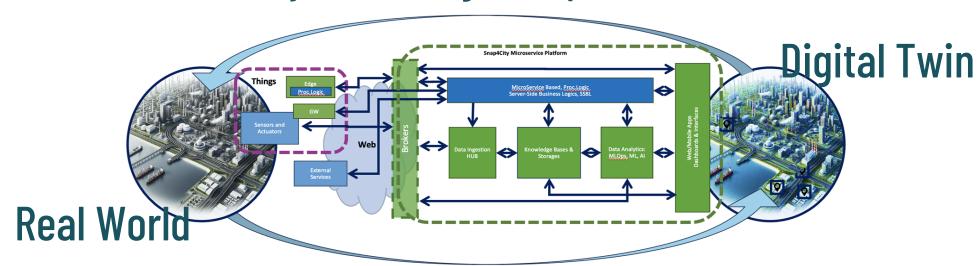




#### AI-POWERED DIGITAL TWIN PLATFORM FOR MOBILITY & TRANSPORT OPERATION AND PLAN

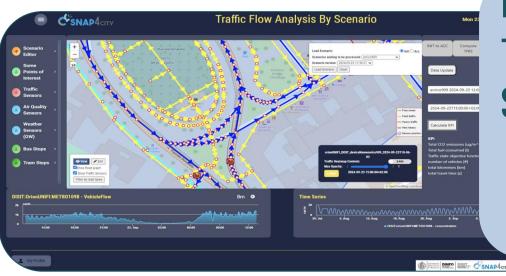
Smart & Sustainable Mobility with Snap4City / OPTIFaaS Empowering Cities with AI based Digital Twin

# Integrated Digital Twin + Artificial Intelligence platform for real-time urban mobility monitoring and optimization



# Al Technologies

- Deep Learning
- Reinforcement Learning
- Generative Al
- GNN-DRL and similar



# Designed for Tactic and Strategic Planning

- What-if scenarios
- Simulations
- Optimizations

### Supports Operational Management

- · Traffic monitoring, forecasting, and reconstruction
- Infrastructure evaluation
- · Traffic light plan generation
- Early warning systems
- Dynamic/multimodal routing
- Analysis of city users' behavior













Platform Value & Business Model

**OPTIFaaS** 

Scalable Solutions for Smart City Growth

# **Snap4City**

Is an open platform designed to support cities and organizations in enhancing urban mobility through the integration of heterogeneous data sources and Al



### Open

open source, interoperable, modular, microservices



#### Scalable

with city size and complexity



Al-powered platform data-driven platform for mobility innovation



sustainability

## **Optimizing Transportation Systems**

Adopts a service-based business model tailored to the

needs of small and medium-sized cities and mobility

operators. It emphasizes cost-effectiveness, offering

flexible and scalable solutions for urban mobility and

improving efficiency, sustainability, quality of life



### **Business Intelligence Tools**

available for decision makers, operators, control rooms



### Minimal Set up Costs

maximum flexibility, visual programming, no-code platform













Sustainability & Social Benefits

Driving the Future: Smarter. Greener. Together.

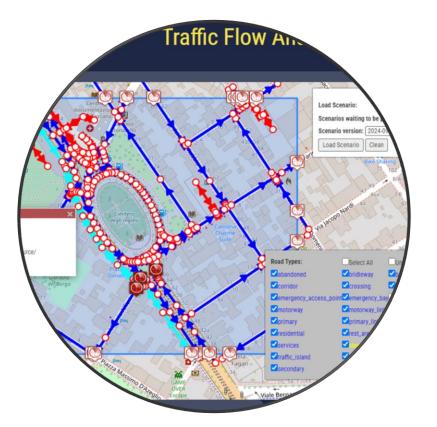
Snap4City / OPTIFaaS promotes efficient and safe urban mobility, contributing to an improved quality of life and the sustainable growth of the community

**Social Impact** 

Reduced travel times and emissions

Accessibility and inclusivity

Road safety



# Sustainability Features

Traffic optimization

Multimodal transport integration

Data-driven simulation and what-if analysis

Fuel consumption reduction



















