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Paris 2024 Olympics Games Smart Athlete Transportation System

3DEXPERIENCE®

About the presenter

Rafale

DASSAULT AVIATION

Systems Engineer / Project Manager

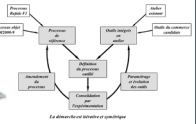
OSF

SITAC

Mirage F1CR

FLIR

Mirage 2000-9


Method

PSA GROUPE

Systems Engineering Deployment

Picasso

Partner

Method

C5

407

Compliance

adn

System Engineering Business Unit Development & Consulting

Energy

Pharmaceutical

Medical Devices

Aerospace

Automotive

Train / Signaling

INCOSE AFIS

ISO Systems Engineering for VSEs

ARTS ET MÉTIERS ENSTA ParisTech université PARIS-SACLAY

UNIVERSITÉ PARIS 1 PANTHÉON SORBONNE

Gauthier Fanmuy

Systems Engineering Portfolio Director

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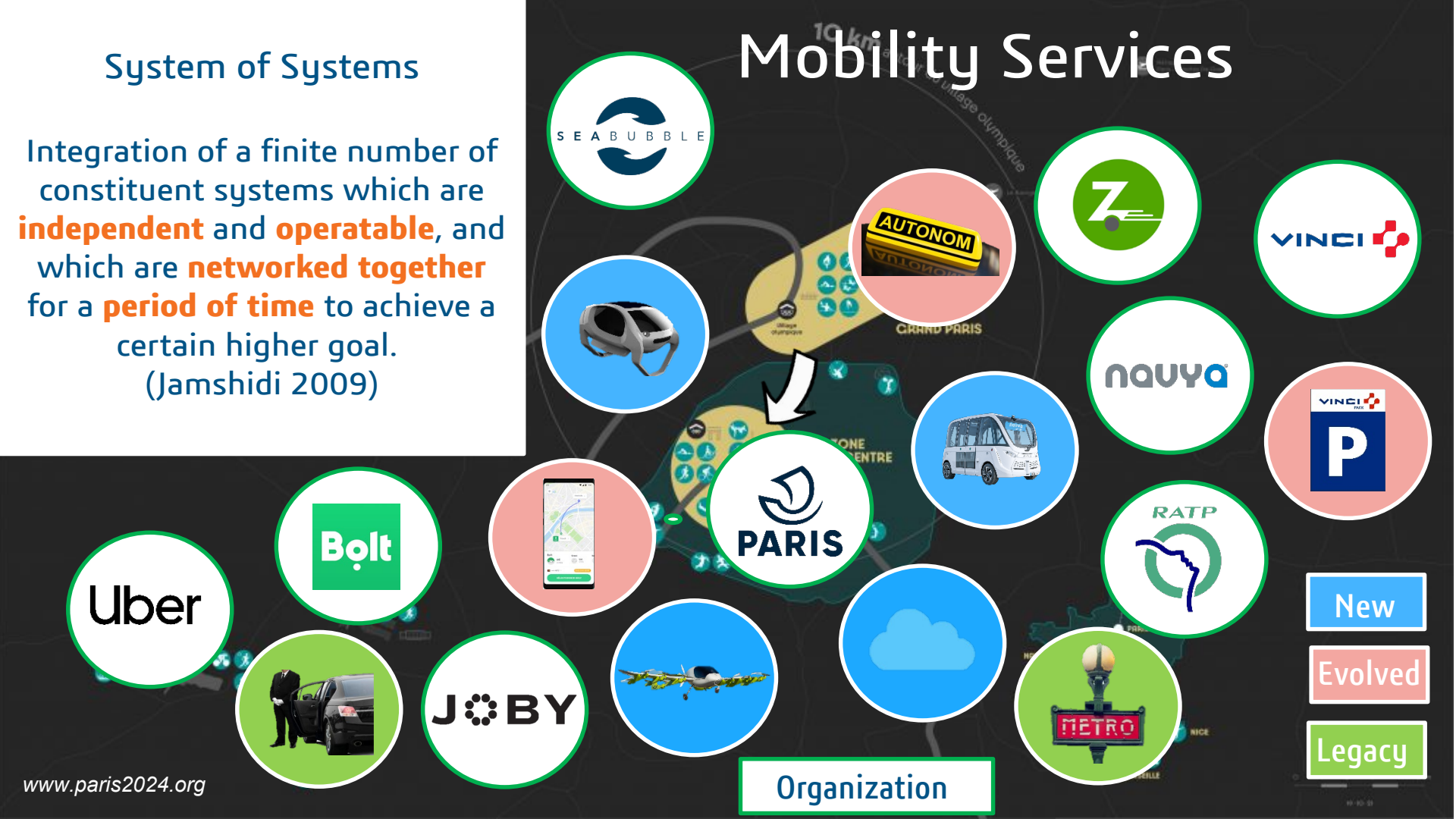
Welcome to Paris Olympic Games 2024

Credit : AP/SIPA

Mobility Services

System of Systems

Integration of a finite number of constituent systems which are **independent** and **operatable**, and which are **networked together** for a **period of time** to achieve a certain higher goal.
(Jamshidi 2009)

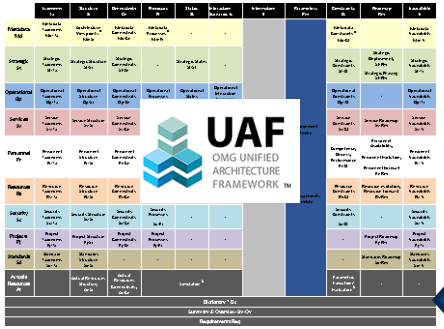


Unified Architecture Framework

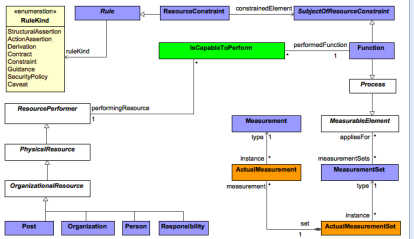
Unified Architecture Framework

Normative Components

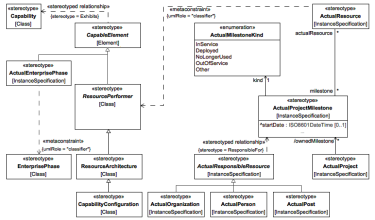
Framework



Metamodel

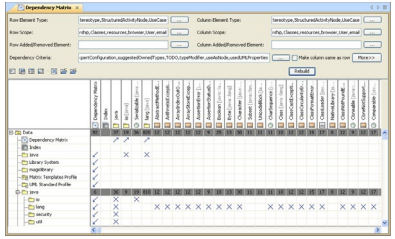


Modeling Language



Non-Normative Components

Traceability



Example

Dassault Systèmes Leadership

UAF Co-chairman

Member of NATO ACaT

NAF v.4

modaf

DoDAF V2.0

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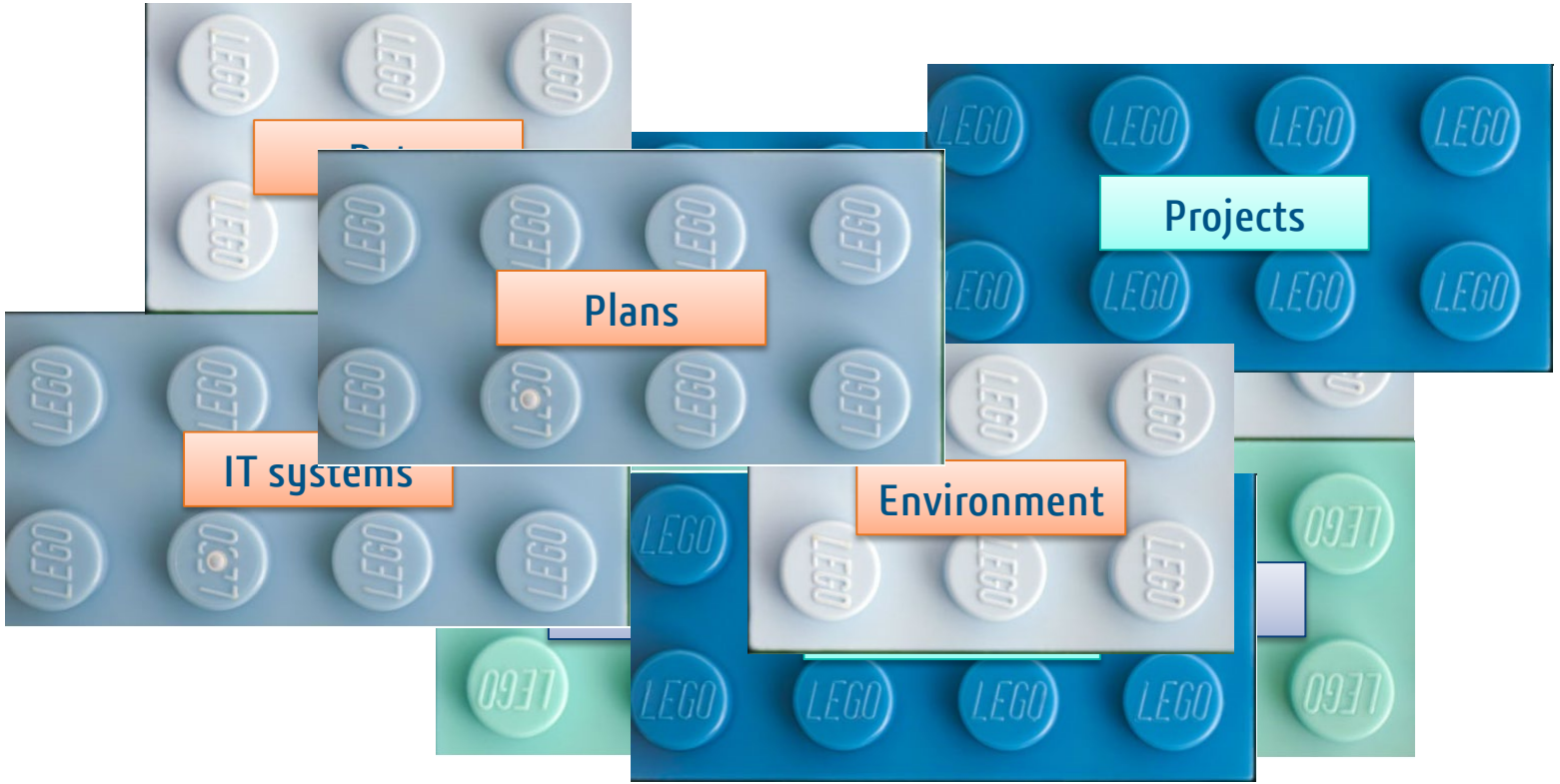
So we need to capture…



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What we need?

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What we get?

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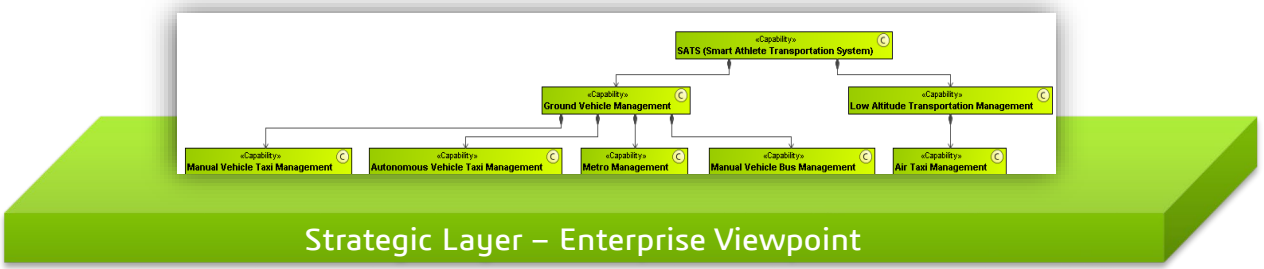
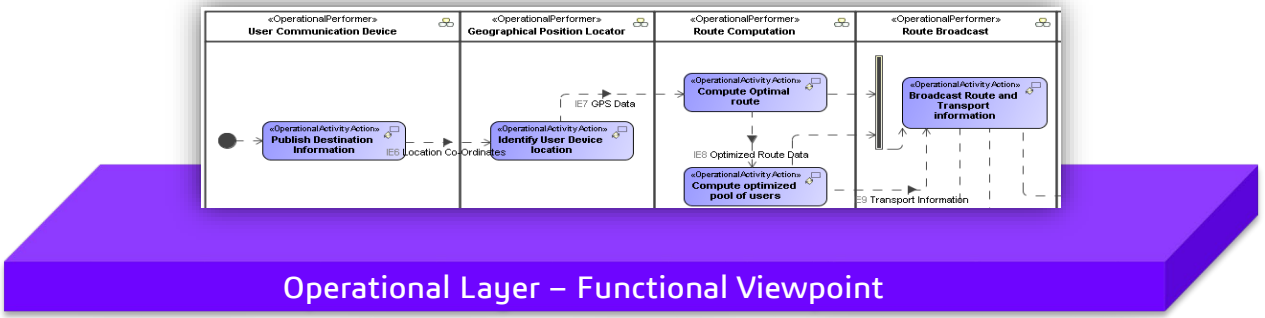
System of Systems Approach

Problem domain

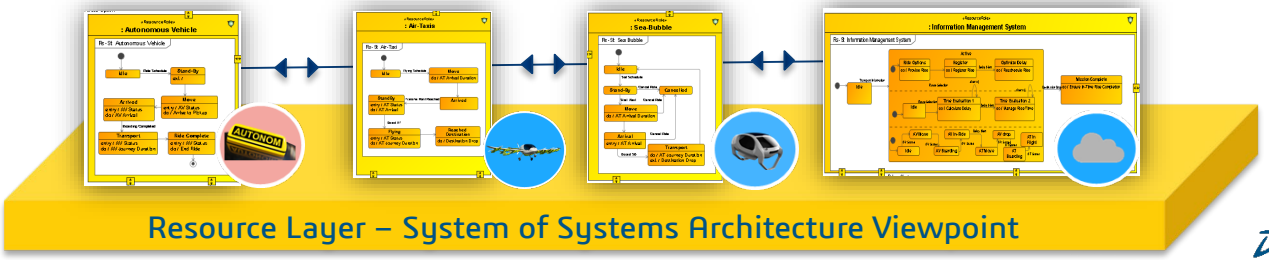


Why



What

Solution domain



How

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Value network collaboration

Industry Solution Experiences

Industry Process Experiences

Roles & Apps

Smart, Safe & Connected

Mobility Systems Architecture

Modeling & Simulation

Systems of Systems Architect

Navigation & Execution

Mobility services stakeholders

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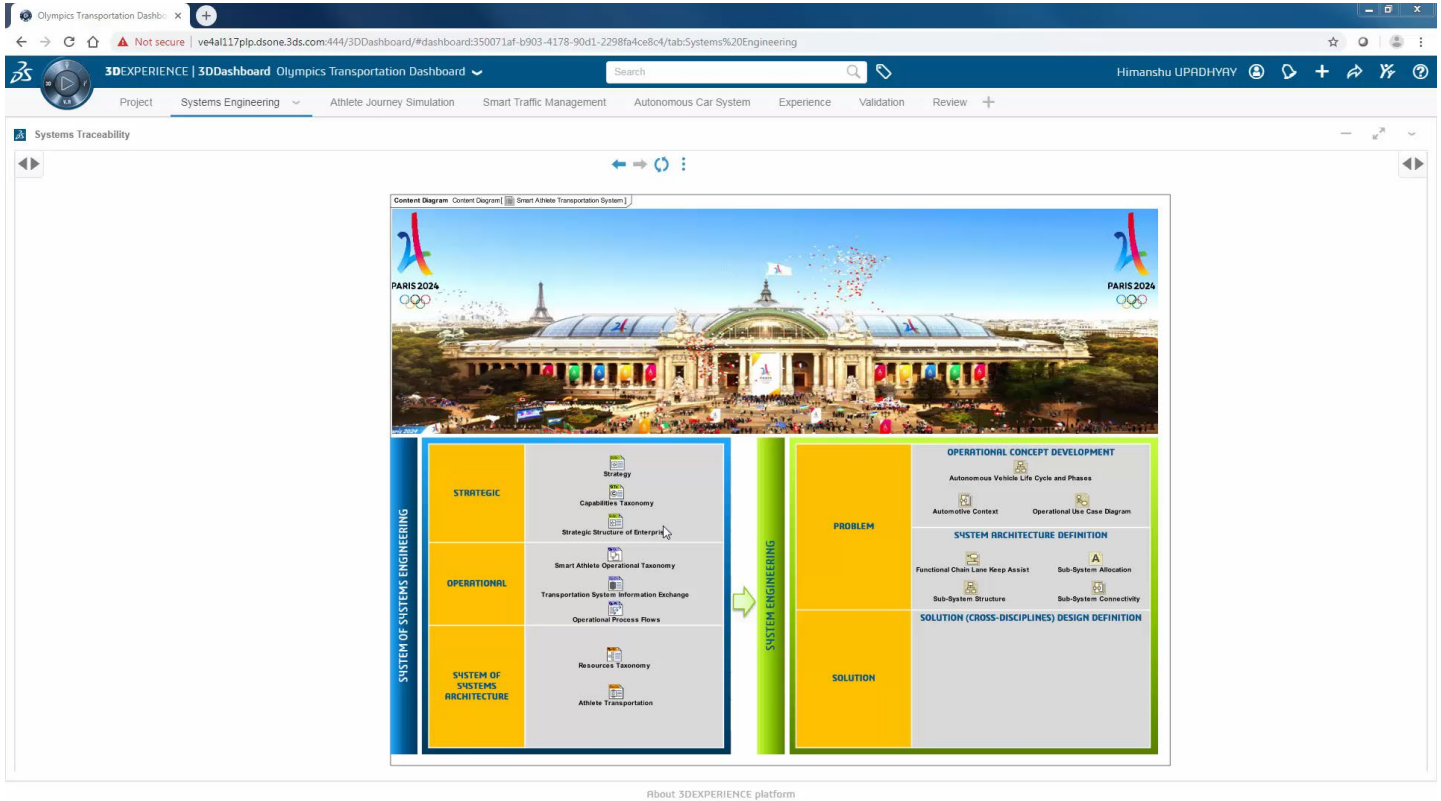
Demonstration



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Conclusion: benefits

- Understand the **operational** landscape
- **Make decisions on candidate SoS configurations** compliant with the capability requirements
  - **Automatically** verify capability requirements based on emergent SoS behavior
- Develop **standard-based** system of systems architecture to simplify source selection all along the **supply chain**
- Deliver **consistent and complete** architectural specification for Systems acquisition

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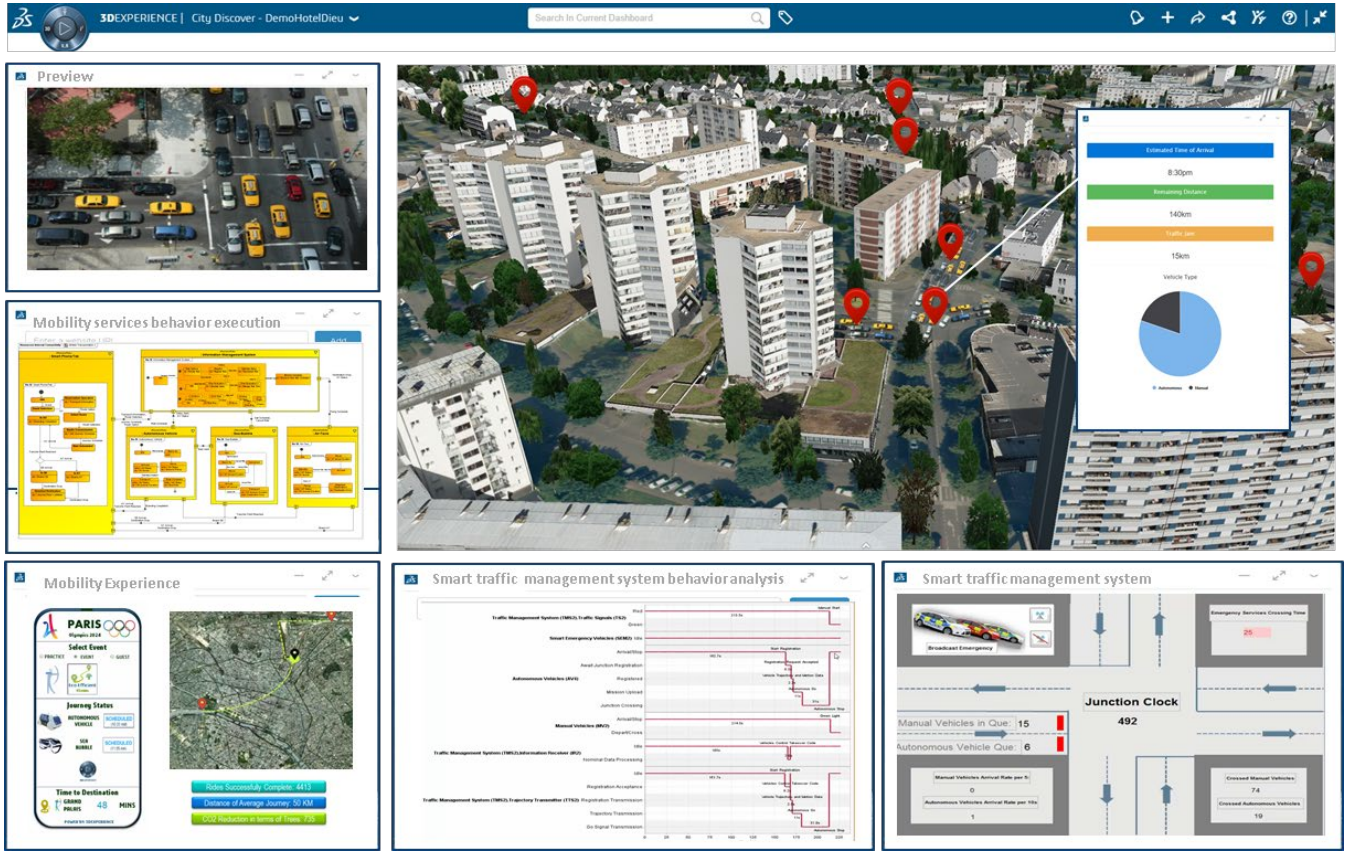
The future of SoS is immersive mission analysis



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