

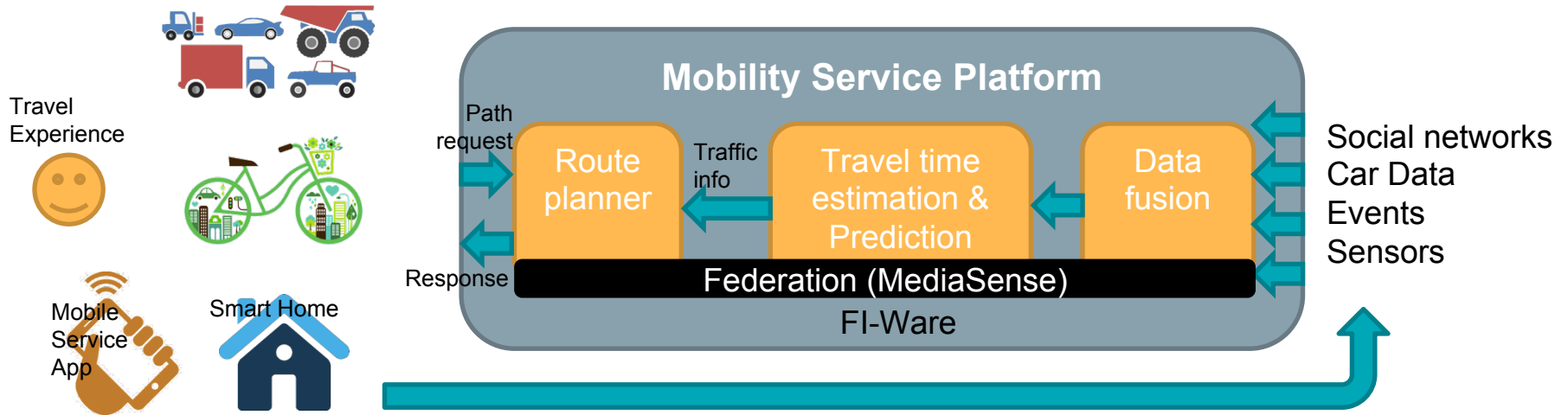
# Smart Mobility Services

How User Data and IoT enable Context-aware  
Mobility Platforms for Sustainability

Prof. Theo Kanter, Stockholm University, September 16, 2016

# FP7 MOBIS 2012-2015

Personalized Mobility Services for Energy Efficiency and security through advanced Artificial Intelligence techniques



# Challenges Energy Efficiency & Sustainable Mobility

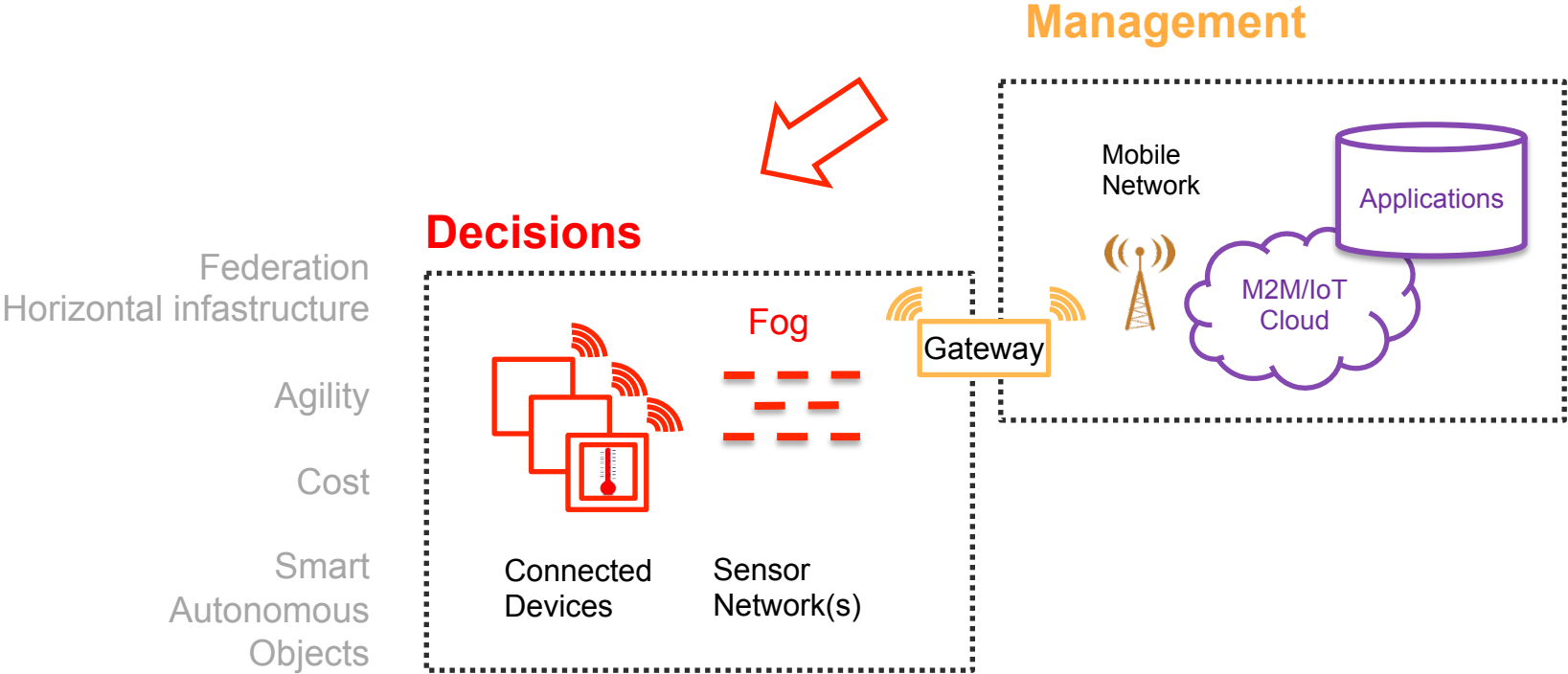
## → Horizontal Open Data

- Federation      FP7 MOBIS, Stockholm Royal Seaport → Horizontal Data sharing.

## → Decision-making from Cloud closer to Things

- Agility      Increase number of objects → Complexity  
Response times, lead times
- Cost      OPEX      Cost of Coordination via the Cloud (e.g., mobile access)  
CAPEX      Change once, use everywhere
- Smart      Smart Autonomous Objects in a Horizontal Infrastructure

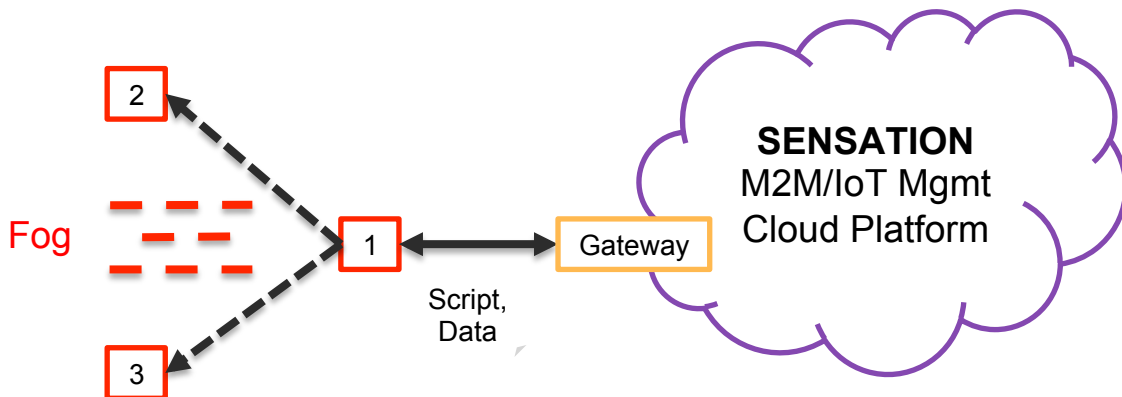
# MediaSense (From Cloud to Fog)



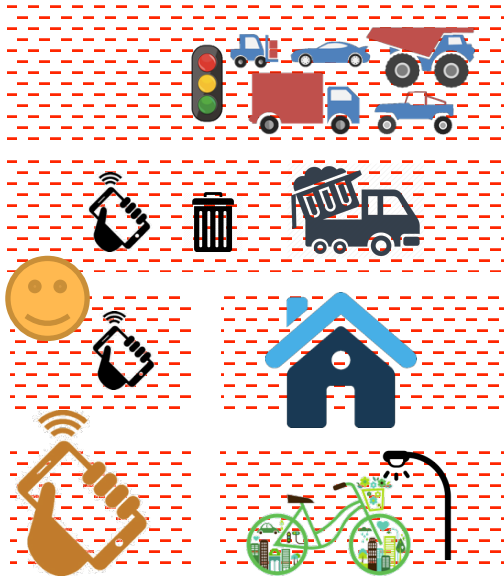
# MediaSense (From Cloud to Fog Proof-of-Concept)

- Relations between Smart Objects
- Map-Reduce
- Open Source
- FP7 MOBIS, AAL SALIG, Stockholm Royal Seaport, Urban ICT Arena, ...

Light,  
Temperature,  
Humidity,  
3D Motion  
Doors  
Localization,  
Etc.

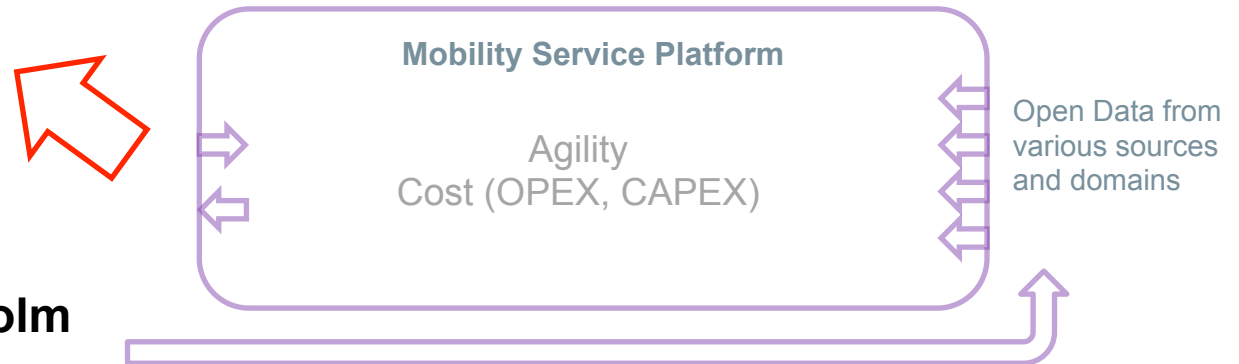


# Smart Mobility Services based on MediaSense



- Smarter Street Lights (personal energy, security)
- Smarter Air (personal health)
- Smarter Bikes (personal security)
- Smarter Garbage (smart bins & collection)
- Smarter Traffic, Parking (predictive availability)
- AR/VR City (rapid personalized experience)

Digitalization of Stockholm



# Contact

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