Smart Mobility Innovations
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SMART TRAFFIC / CITY ECOSYSTEM

Industrial disruption with digitalization

Car and traffic (r)evolutions

1st revolution – new mass vehicle for transportation
1900 – 1960	Mechanical car generation
1960 – 1990	Electronic car generation
1990 – 2010	Software car generation

2nd revolution – services for connected smart citizens
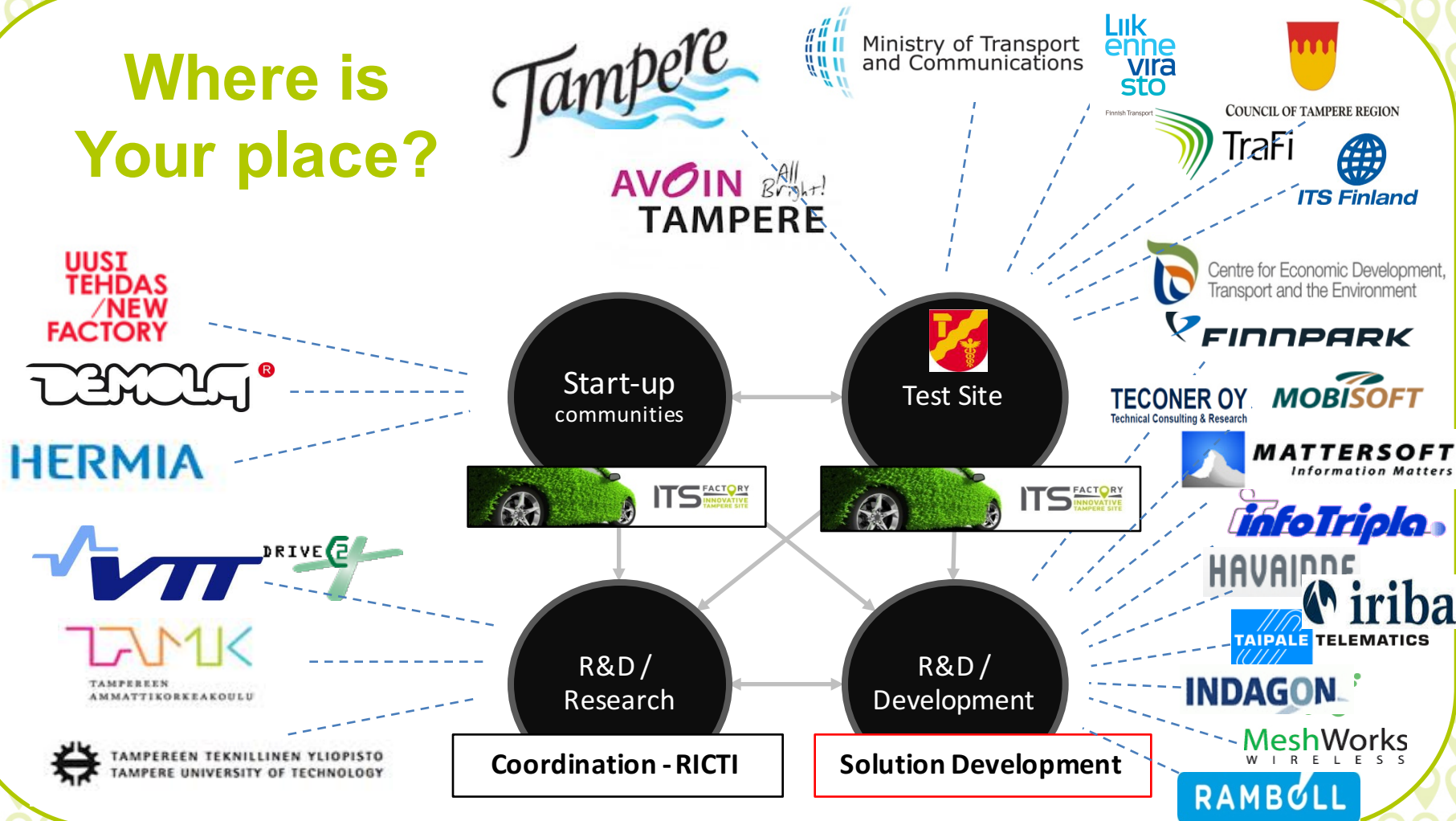|	
A) 2010 - …	Services for connected cars
B) 2012 - …	Services for smart traffic
C) 2015 - …	Services for hybrid / electric cars

A. We are rapidly moving into a world where vehicle, phone and home/office will be interconnected and allow a seamless experience to the driver

B. Vehicle and driver will also be connected to the road infrastructure and they will get real-time data for traffic and service information (traffic alerts, expected rush times, weather, free parking lots, real time public transportation information, local services etc)

C. European directive (24.01.2013) will require 8 000 000 electric car charging stations in Europe before 2020. Finland has to invest 71 000 stations (7 000 public stations)
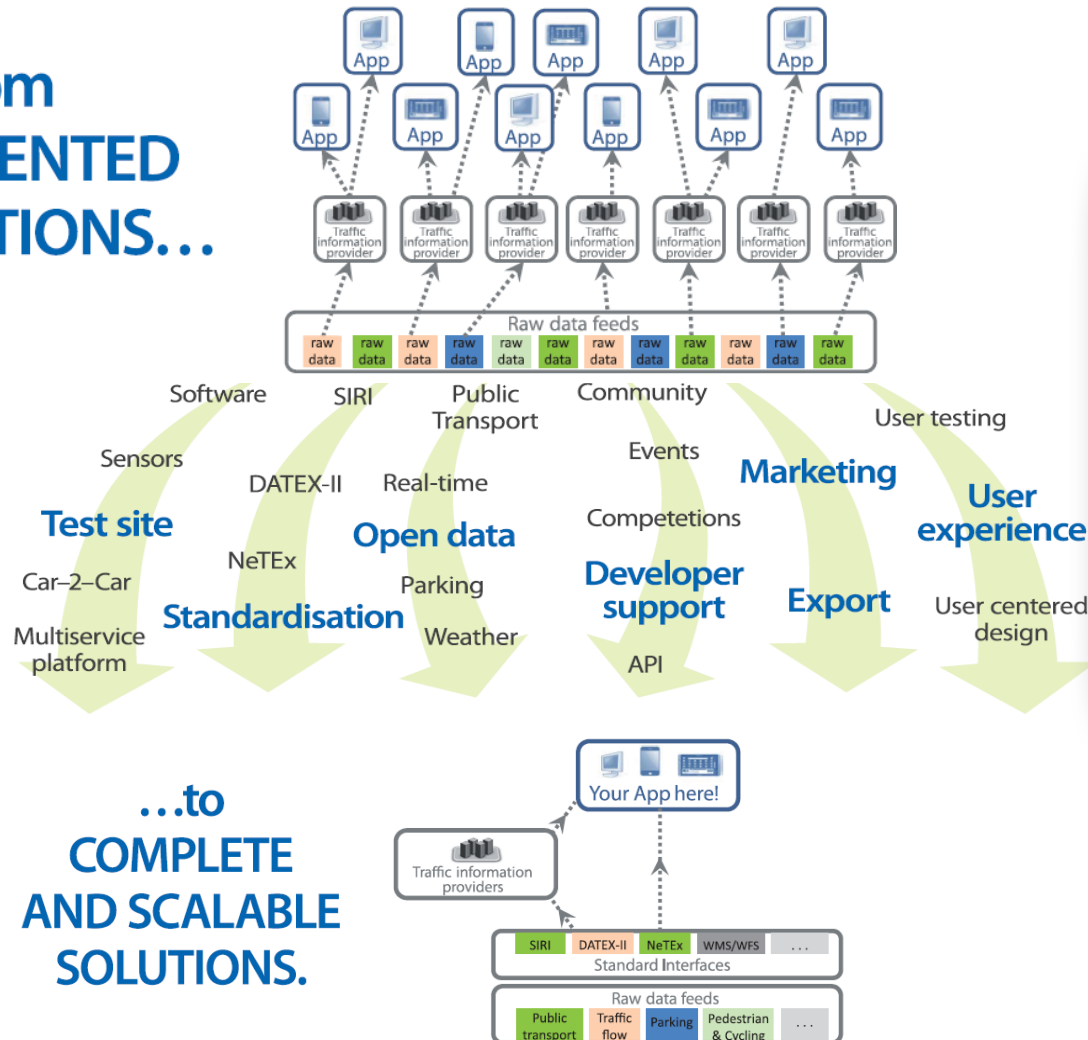
- ITS Factory -

Welcomes all intelligent transport parties to co-operate in building a future of ITS !

Where is Your place?

Tampere

Ministry of Transport and Communications

Liikennevirasto
Finnish Transport

COUNCIL OF TAMPERE REGION
TraFi

ITS Finland

AVOIN TAMPERE *All Bright!*

UUSI TEHDAS /NEW FACTORY

DEMOLA ®

HERMIA

VTT DRIVE 2 +

TAMK
TAMPEREEN AMMATTIKORKEAKOULU

TAMPEREEN TEKNILLINEN YLIOPISTO
TAMPERE UNIVERSITY OF TECHNOLOGY

Centre for Economic Development, Transport and the Environment

FINNPARK

TECONER OY
Technical Consulting & Research

MOBISOFT

MATTERSOFT
Information Matters

infoTripla

HAVAINNE

iriba

TAIPALE TELEMATICS

INDAGON

MeshWorks
WIRELESS

RAMBØLL

Start-up communities

Test Site

ITS FACTORY INNOVATIVE TAMPERE SITE

ITS FACTORY INNOVATIVE TAMPERE SITE

R&D / Research

R&D / Development

Coordination - RICTI

Solution Development

SMART OPEN DATA

From **FRAGMENTED APPLICATIONS…**

…to **COMPLETE AND SCALABLE SOLUTIONS.**

Smart Traffic Business Development Team is actively contributing to Tampere ITS Factory and develops working practices & tools for smart traffic industry to grow and get into international markets.

Developer Wiki http://wiki.itsfactory.fi/

MaaS Core Use Cases

1. Car sharing
2. Ride hailing
3. Travel chains
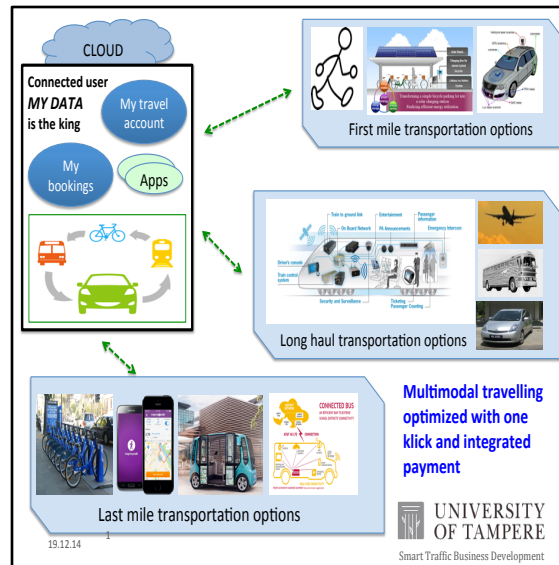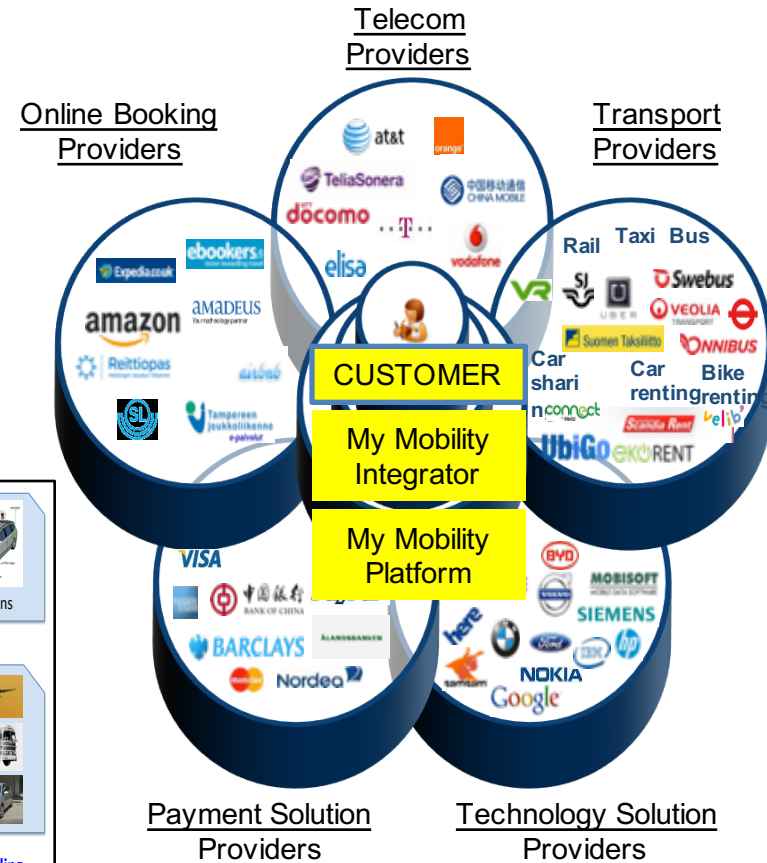
Telecom Providers

Online Booking Providers

Transport Providers

CUSTOMER

My Mobility Integrator

My Mobility Platform

Payment Solution Providers

Technology Solution Providers

The company logos mentioned are only for descriptive purpose.
Based on Frost & Sullivan & Tekes & University of Tampere material

ITS Data Sources

Road Traffic

Traffic Flow
Roadworks and Streetworks
Incidents and Accidents
Road Weather

Parking

Occupancy
Facility
Information

Geodata

Road network
Other traffic infrastructure
Street addresses
Map data
POIs

Public Transport

Timetables
Stop Timetables
Bus Location
Route Planning

Pedestrians and Cyclists

Cyclist & Pedestrian Traffic Flow
Route Planning

INNOVATIVE TAMPERE SITE
www.itsfactory.fi

Agreement by Leading Ecosystem Providers
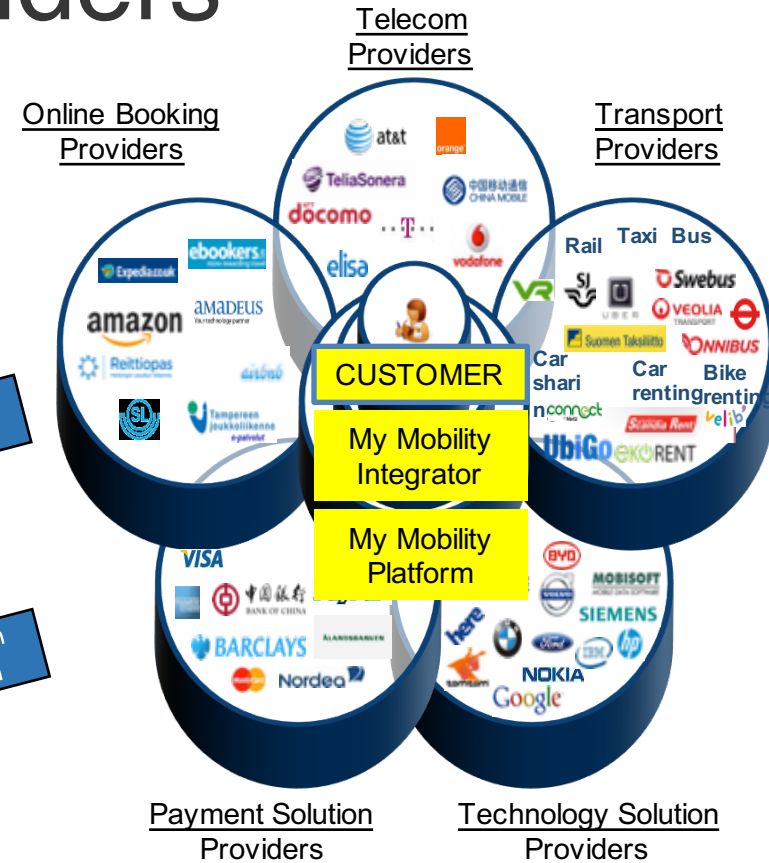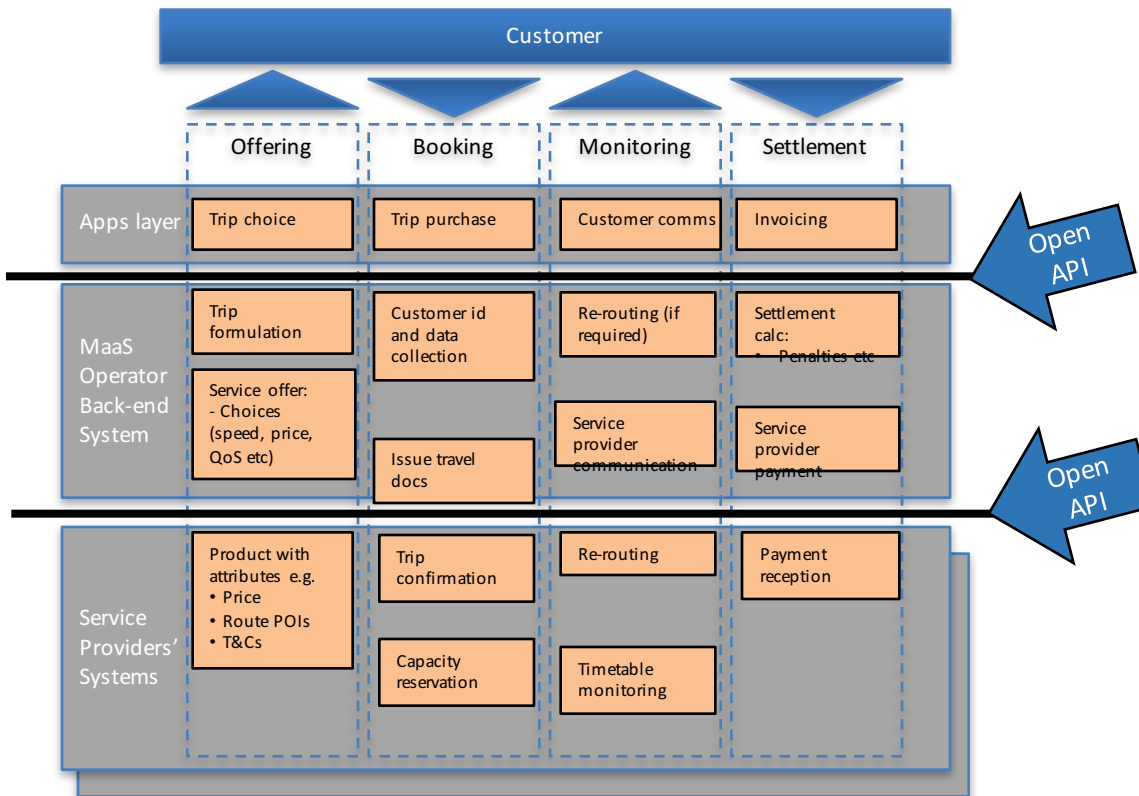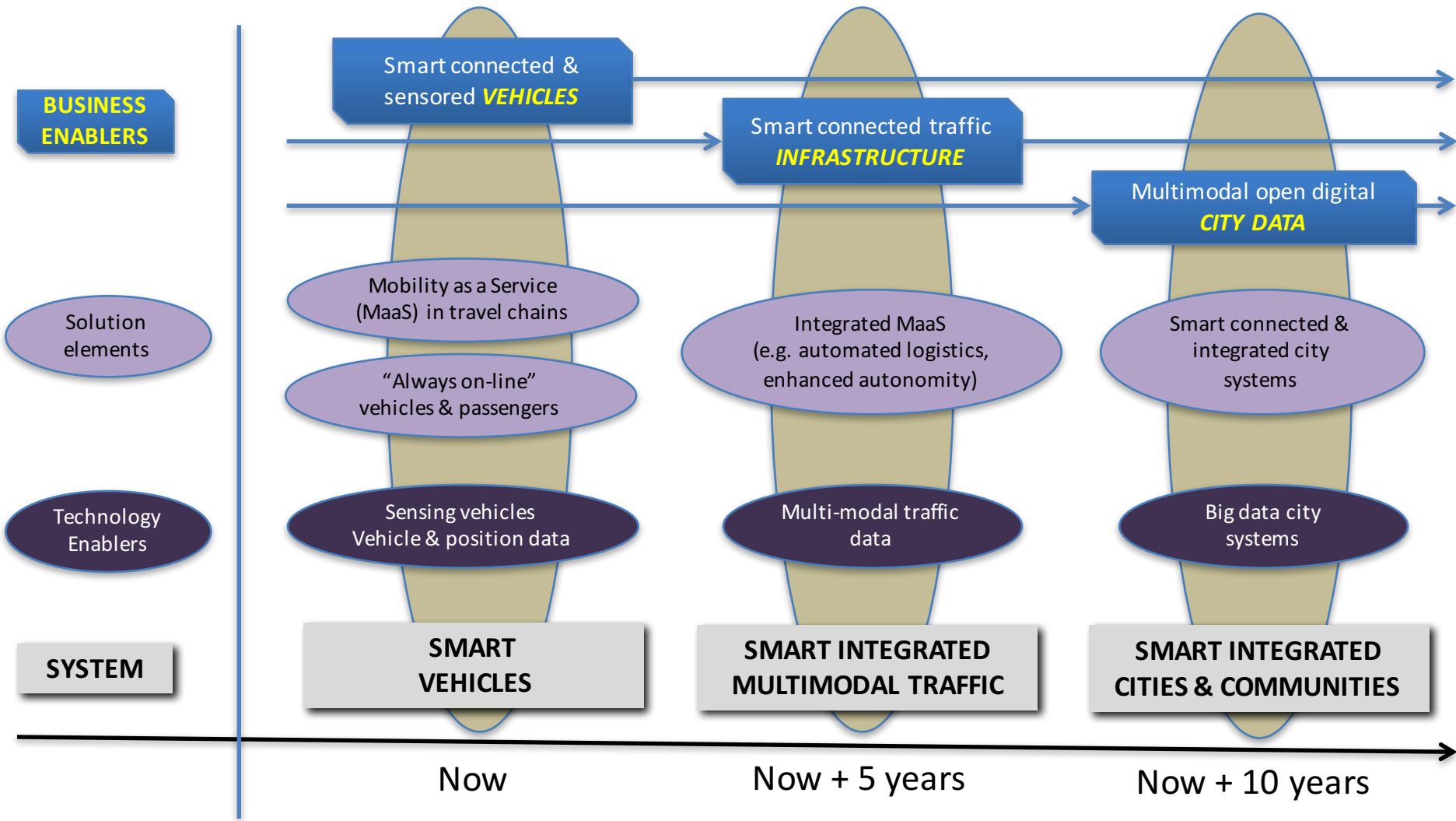

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Digital Smart City Solution Roadmap

BUSINESS ENABLERS
- Smart connected & sensored *VEHICLES*
- Smart connected traffic *INFRASTRUCTURE*
- Multimodal open digital *CITY DATA*

Solution elements
- Mobility as a Service (MaaS) in travel chains
- "Always on-line" vehicles & passengers
- Integrated MaaS (e.g. automated logistics, enhanced autonomy)
- Smart connected & integrated city systems

Technology Enablers
- Sensing vehicles Vehicle & position data
- Multi-modal traffic data
- Big data city systems

SYSTEM
- SMART VEHICLES
- SMART INTEGRATED MULTIMODAL TRAFFIC
- SMART INTEGRATED CITIES & COMMUNITIES

Now | Now + 5 years | Now + 10 years

12.01.17

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Smart Traffic Business Development

Smart *traffic*
driven solutions

Smart *city*
driven solutions

Smart City Ecosystem

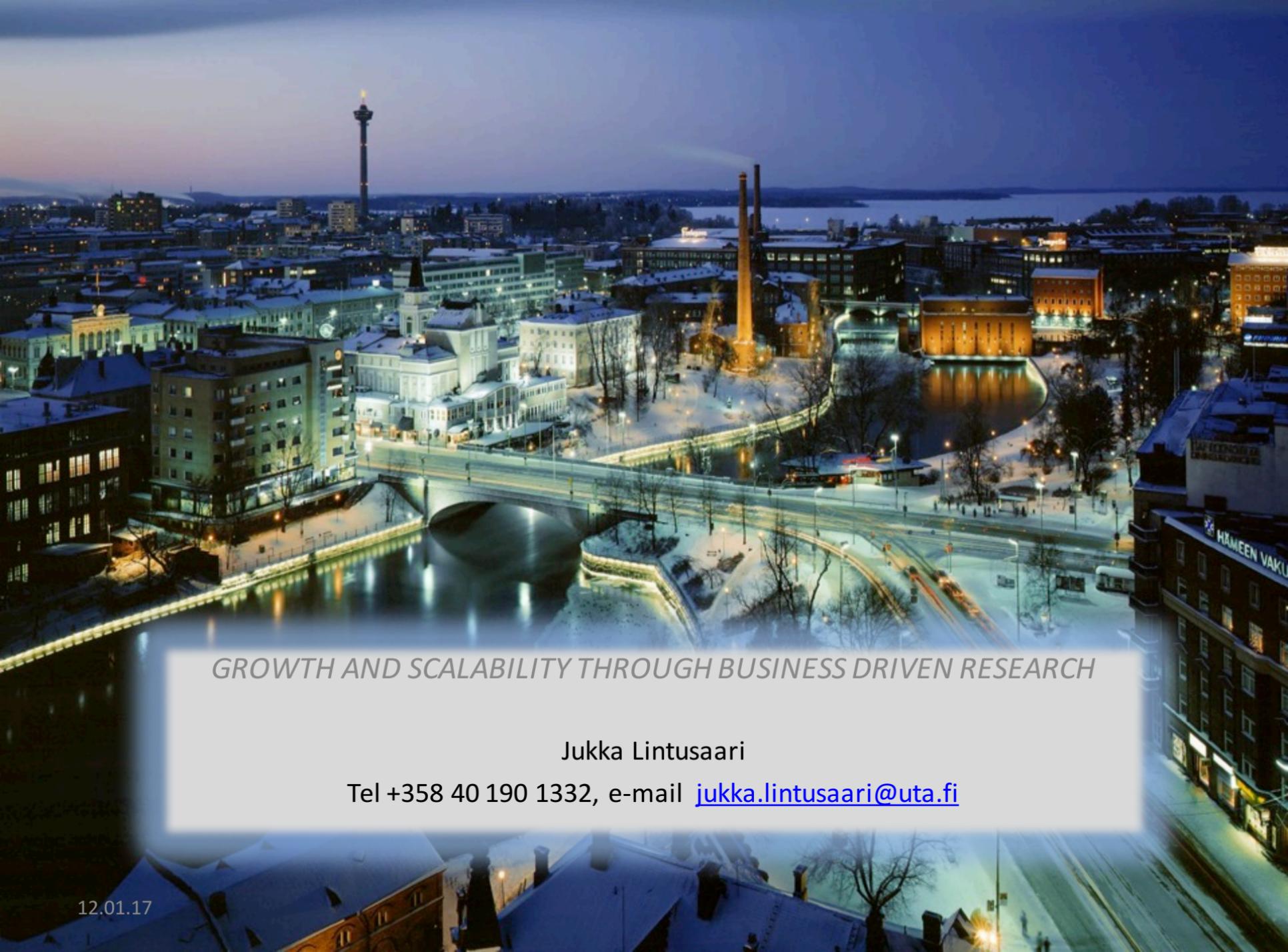Joint Architecture
(Open system: std i/f, modularity)

System Interoperability
(Single market: roaming & clearing)

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Smart Traffic Business Development

GROWTH AND SCALABILITY THROUGH BUSINESS DRIVEN RESEARCH

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