

Enabling Mobility as a Service

Karri Salminen, Chairman of the Board
Laura Eiro, Program Director
ITS Finland

The world changes rapidly

– How does the transport system respond?



Climate change

Technological
progress

Digitalisation

Smart cities
and smart
countryside



**Today there are more than one billion cars on the road.
That number will double by 2030. And quadruple by 2050.
We are heading to The Global Traffic Jam.**



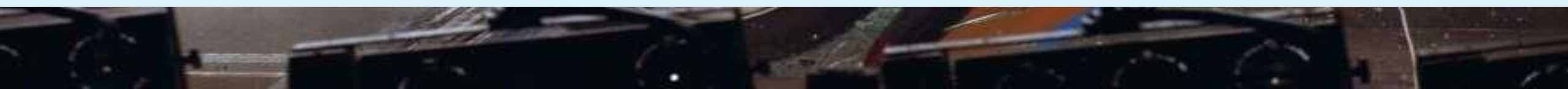


**Year 2014 was the warmest year since recordkeeping began in 1880.
So has been every year after that.**



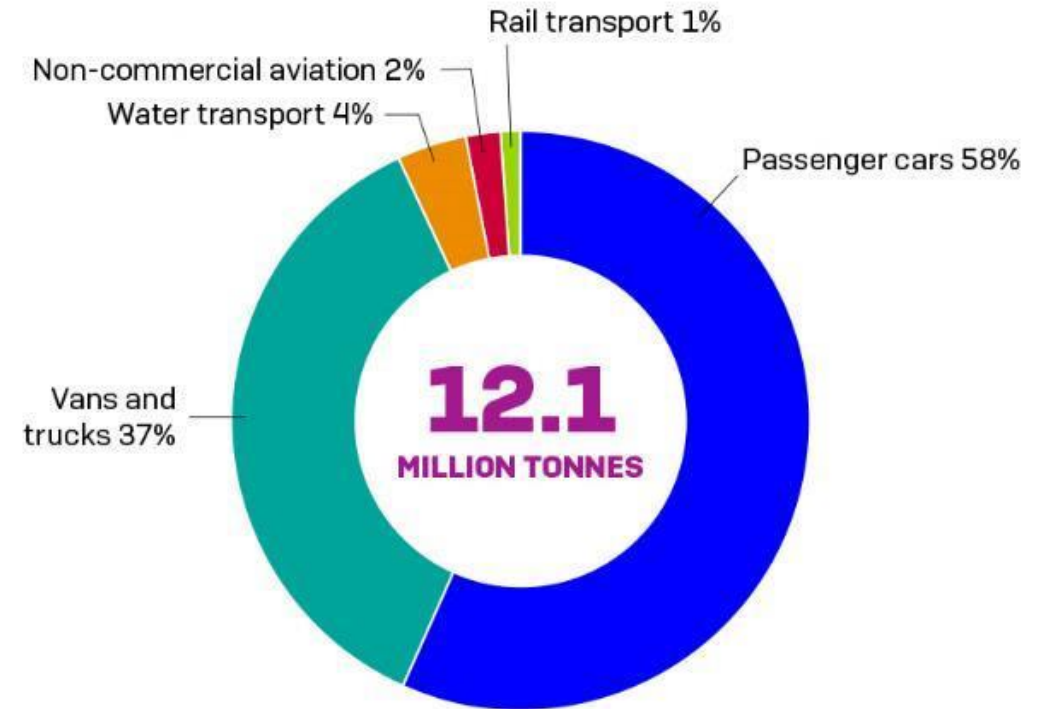


**Annually there are about 1 300 000 road traffic deaths globally.
That equals with 6 Jumbojet crashes, daily.**



Traffic-related emissions to be halved by 2030

Greenhouse gas emissions from domestic transport in 2016



■ + ■ 95% attributable to motor traffic

Global Mobility Market is Huge

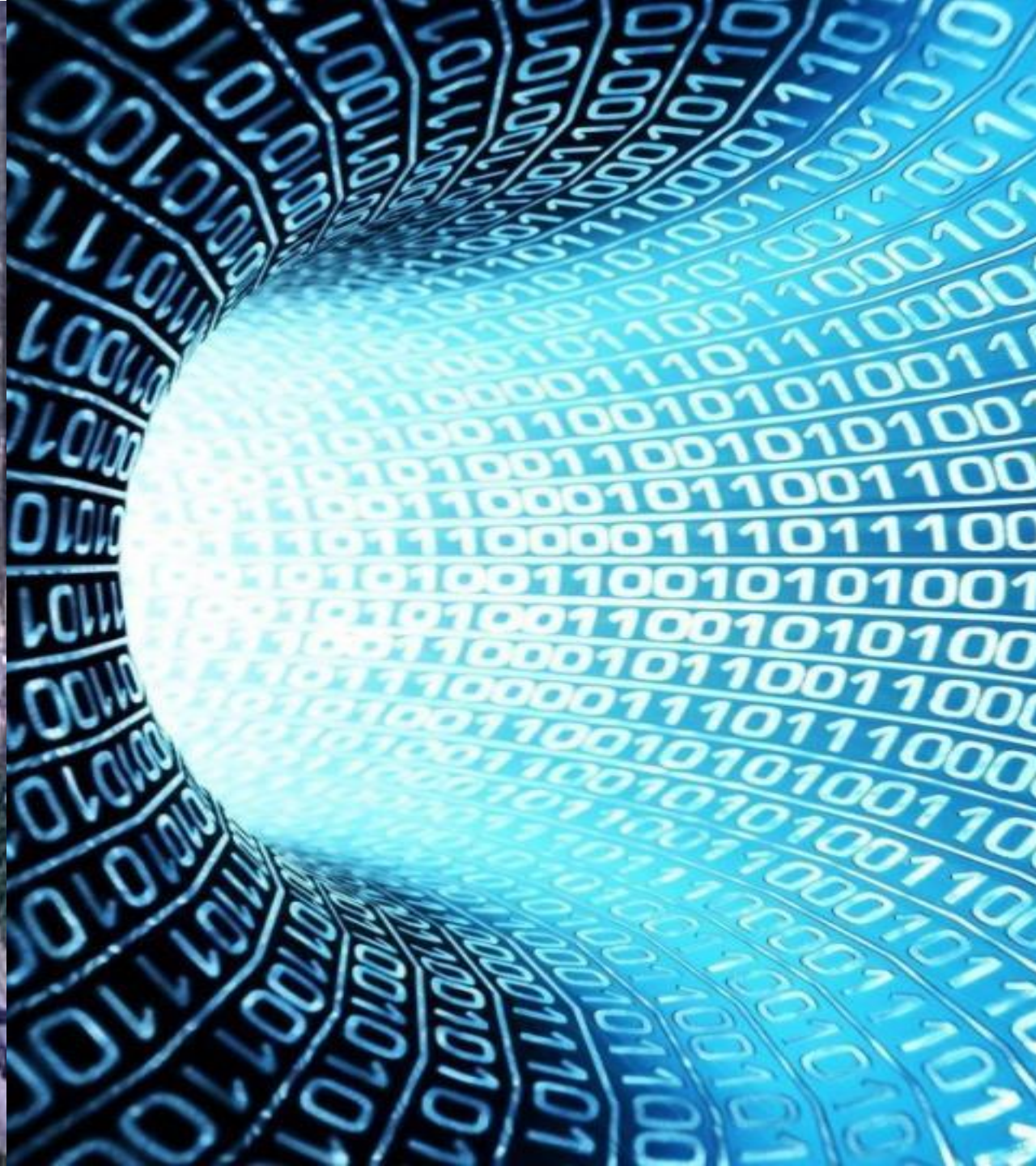
**Global
MaaS Market
1.000 Bn€ by 2030
(ABI Research 2016)**

**Global
Mobility
Market
≈ 6.500 Bn€
(McKinsey 2013)**

**Global
Transport Infra
1.000 Bn€
(McKinsey 2013)**



Transportation is being hit by a
DIGITAL Revolution



NUMBER OF YEARS IT TOOK FOR EACH PRODUCT TO GAIN 50 MILLION USERS:

Airlines



68yrs

Automobiles



62yrs

Telephone



50yrs

Electricity



46yrs

Credit Card



28yrs

Television



22yrs

ATM



18yrs

Computer



14yrs

Cell Phone



12yrs

Internet



7yrs

iPods



4yrs

Youtube



4yrs

Facebook



3yrs

Twitter



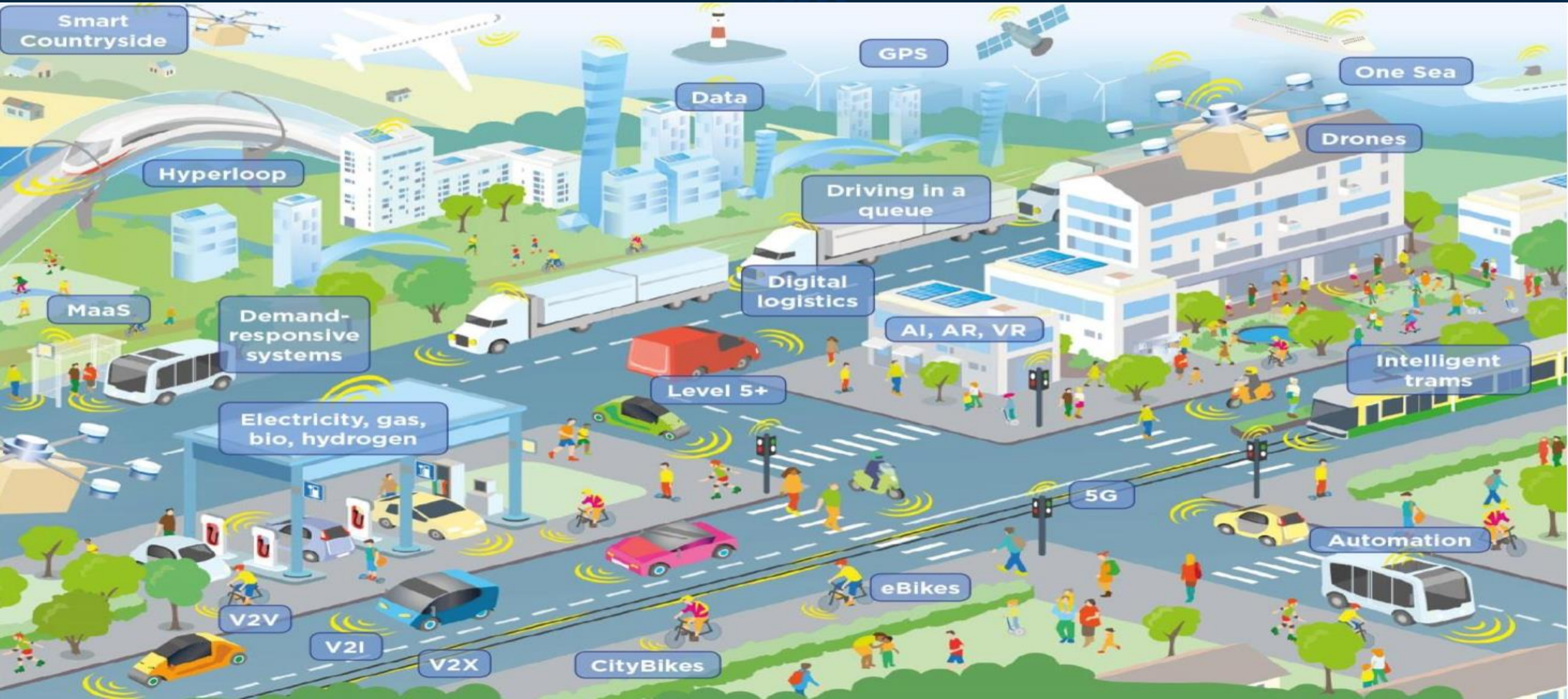
2yrs

Pokémon Go



19 days

Mobility system 2.0



SERVICES

INFRASTRUCTURE

ENABLING GOVERNANCE AND REGULATION



Mobility as a service

Mobility-as-a-service operators (big & small),
Multiple customized services
All Transport modes with single User Interface,
Internet of traffic.

Integrated online services and interfaces

Online services platform: Open Data, Interfaces
and APIs, Cloud Services, Internet of Things

Intelligent traffic infrastructure

Traffic management systems
Digital ticketing, routing services
Seamless connectivity

Telecommunications and information infrastructure

Mobile data networks 4G/5G
Static networks enabling international
interoperability, broadband for all

Core infrastructure

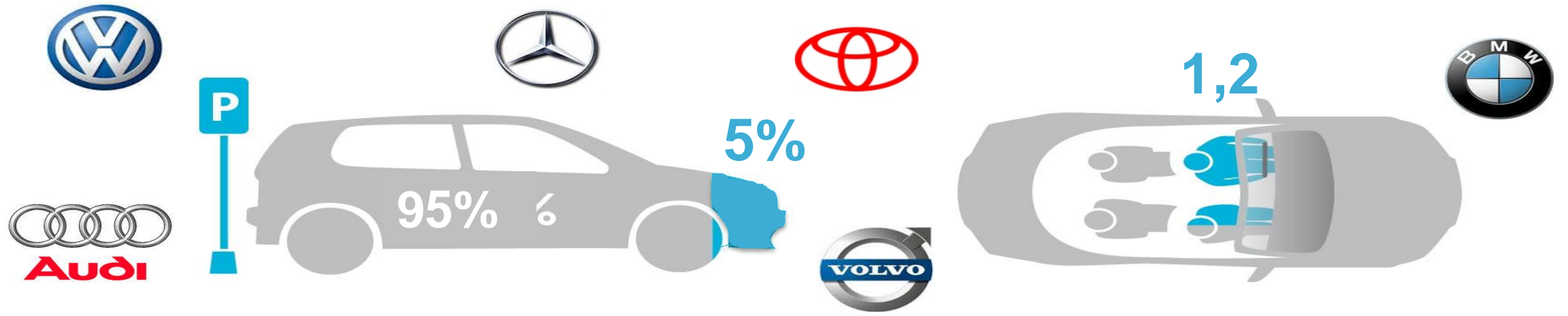
Roads, rails, airports and ports.
Growth Corridors



Mobility as a Service

- The End of Car Ownership?

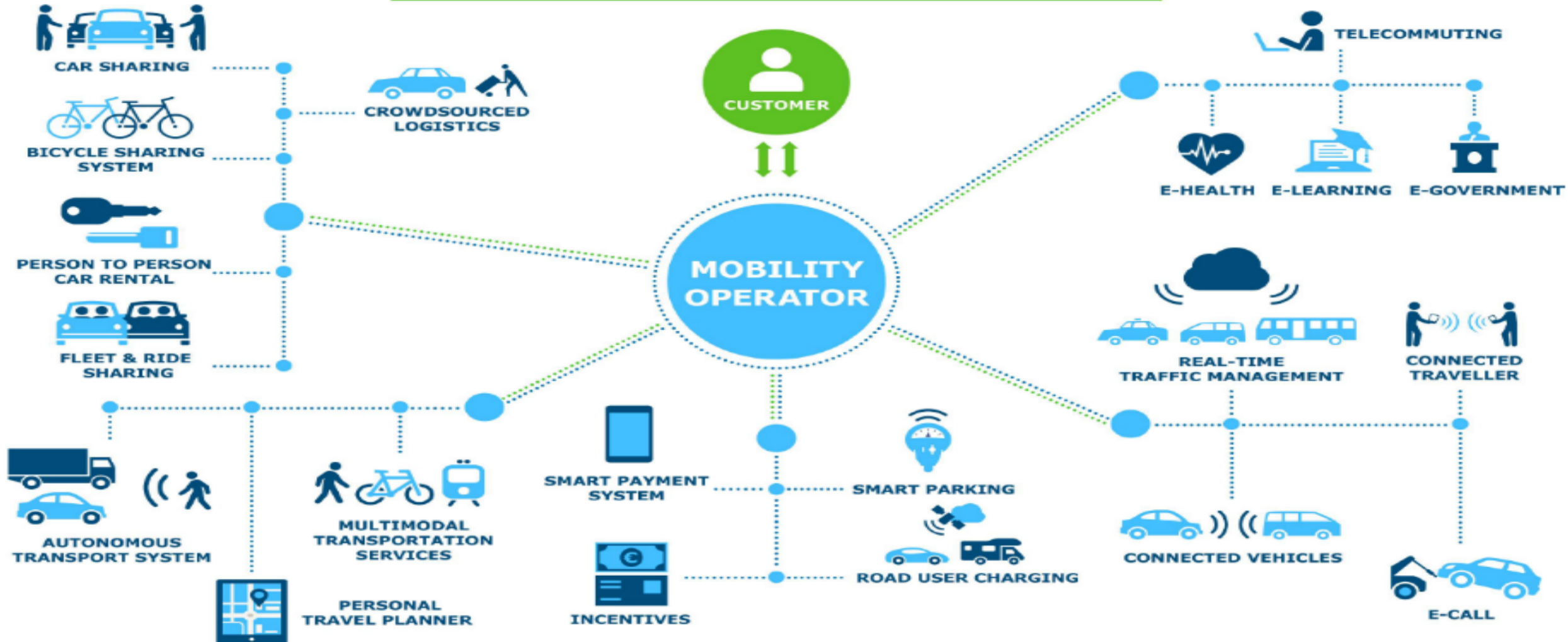
A shift from ownership...



...to usership (access)



MOBILITY AS A SERVICE FRAMEWORK



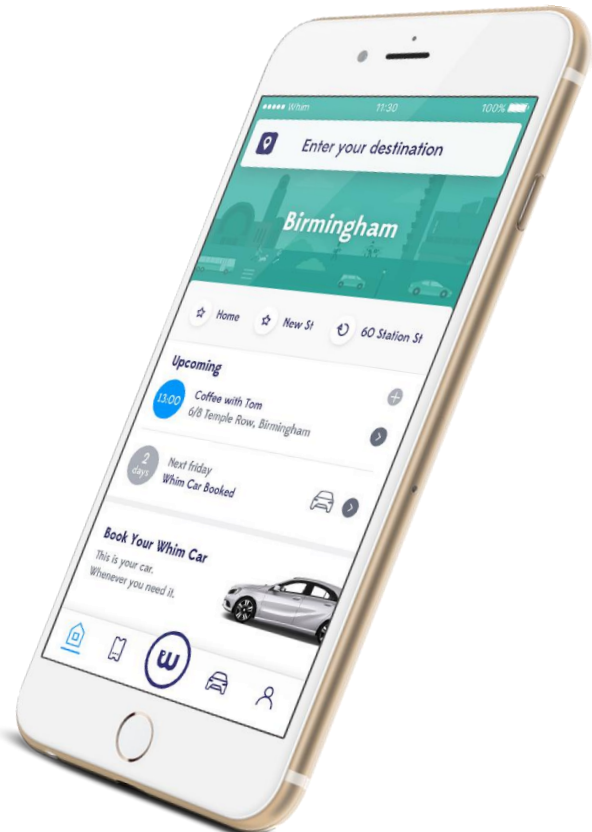
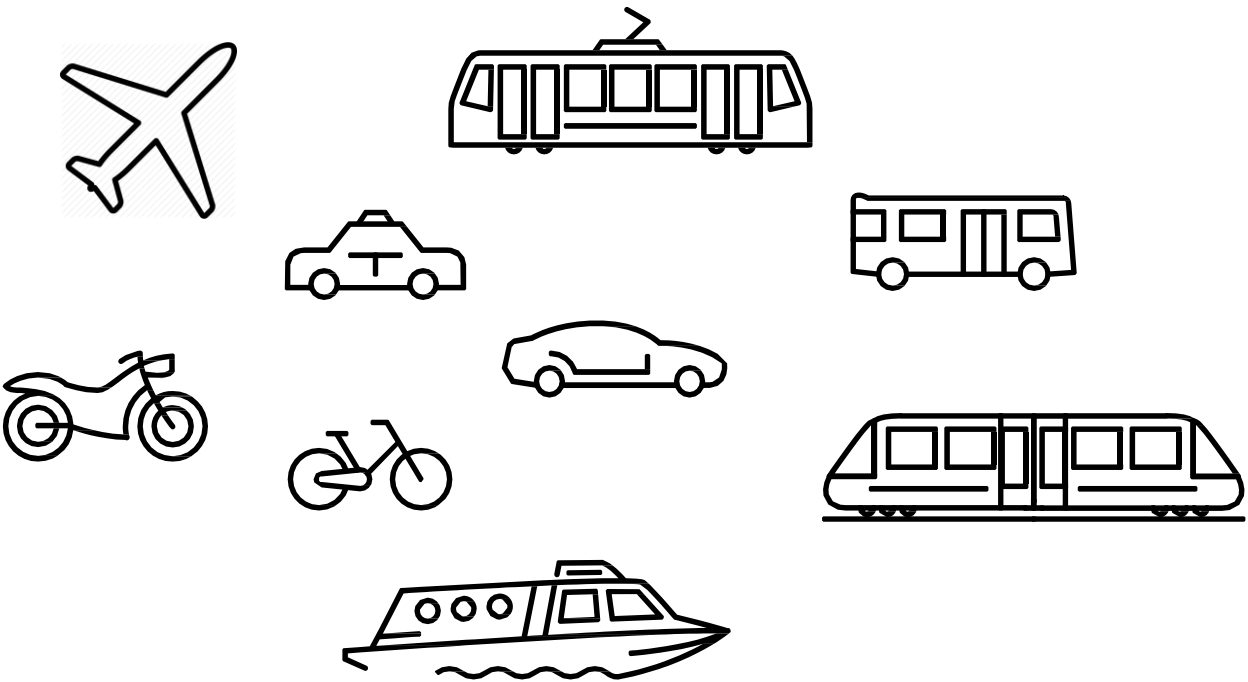
MY MOBILITY SERVICES



Mobility as a Service – The Netflix of Transportation

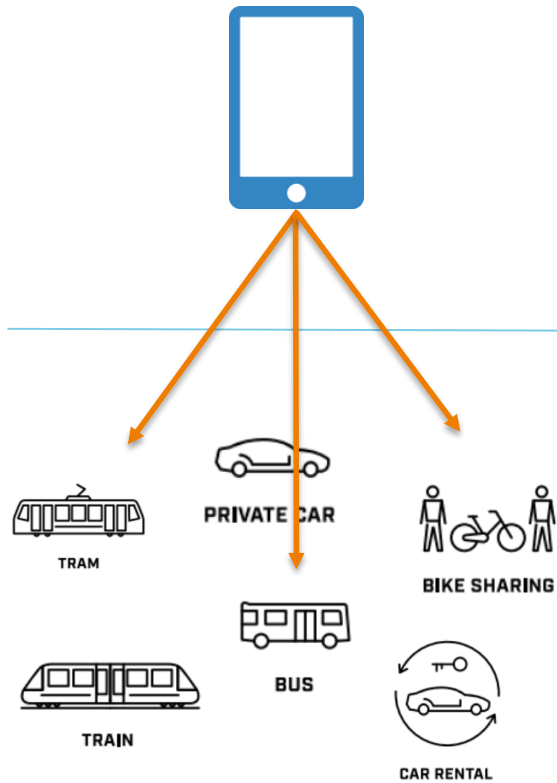
WHAT IF ALL TRANSPORTATION WAS
CONVERGED...

... AND TAILORED TO YOUR NEED AS
MONTHLY PACKAGES?

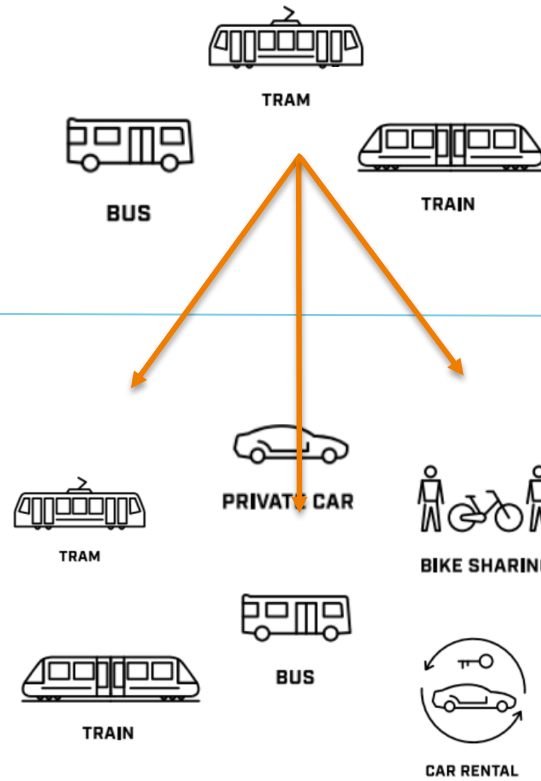


Three ways for markets to evolve

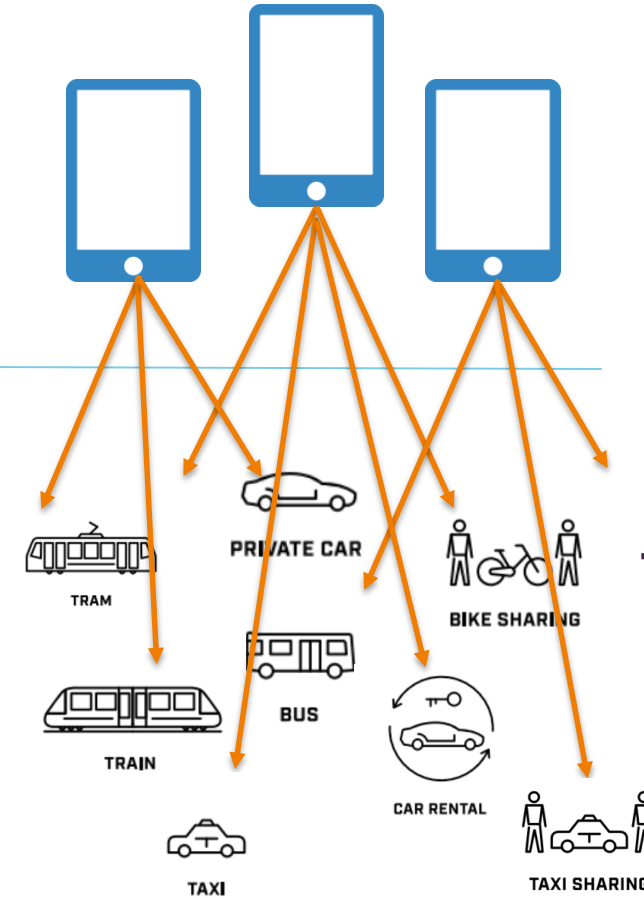
Winner takes it all



Public transportation takes it all



Roaming ecosystem



Mobility as a Service (aggregators)

Transportation providers

The background is a dark space filled with vibrant blue light trails and a grid of glowing squares. The light trails are blurred, suggesting motion and speed, and they radiate from a central point. The grid pattern is composed of small, bright blue squares that form a larger, curved structure, possibly representing a digital landscape or a data network. The overall effect is one of high-tech, digital connectivity and forward momentum.

Enabling governance

Basic principles on enabling MaaS

Decarbonisation



Customer

Easier market access & more room for innovation

Holistic approach:
No more silos

Technology neutral rules

Enabling digitalisation

Linking MaaS to a wider context

Leaving room for competition

Act on Transport Services

Better and more agile services

SERVICES

MaaS operators, apps, platforms, etc.

Data utilisation and regulation

DATA

Enabling digital services: APIs, open data, MyData

Deregulation, market access,
competition



Transport and communications networks

Easy Travel Chains

Essential data on mobility services (APIs)

- All transport modes and services

Anonymous single tickets (interoperability of ticket and payment systems)

- Road and rail transport services

Phase I

Data concerning the use of transport services

- Open interface of the Finnish Transport agency (anonymous and non-anonymous)
- Open data

Personal tickets (if there is an account in a digital service)

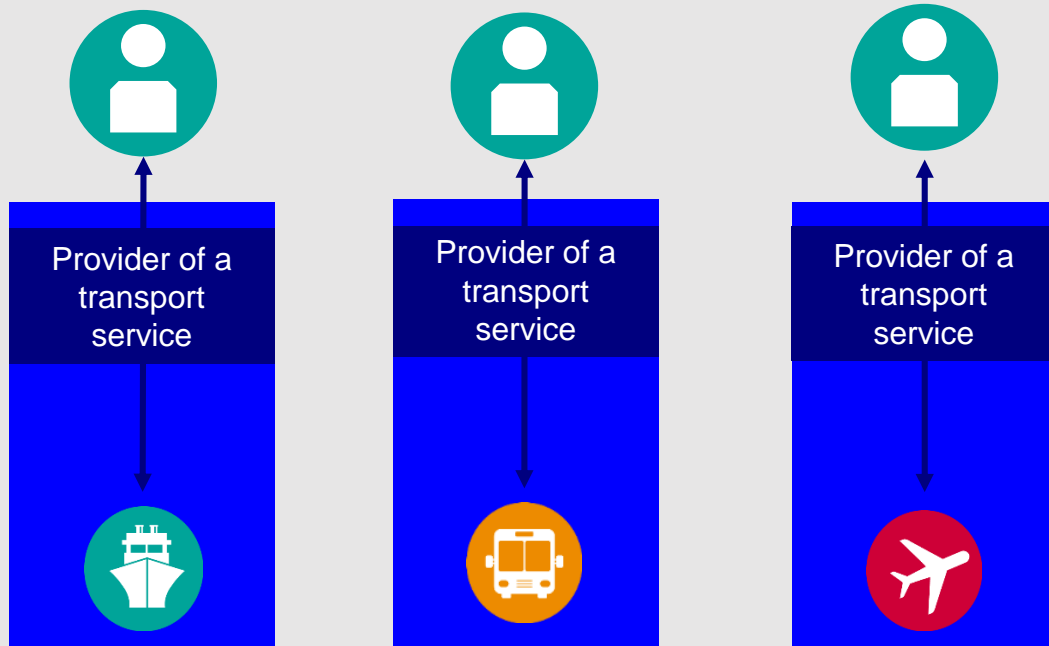
- Seasonal tickets
- Student and senior discounts etc.
- All transport modes
- All transport services

Phase II

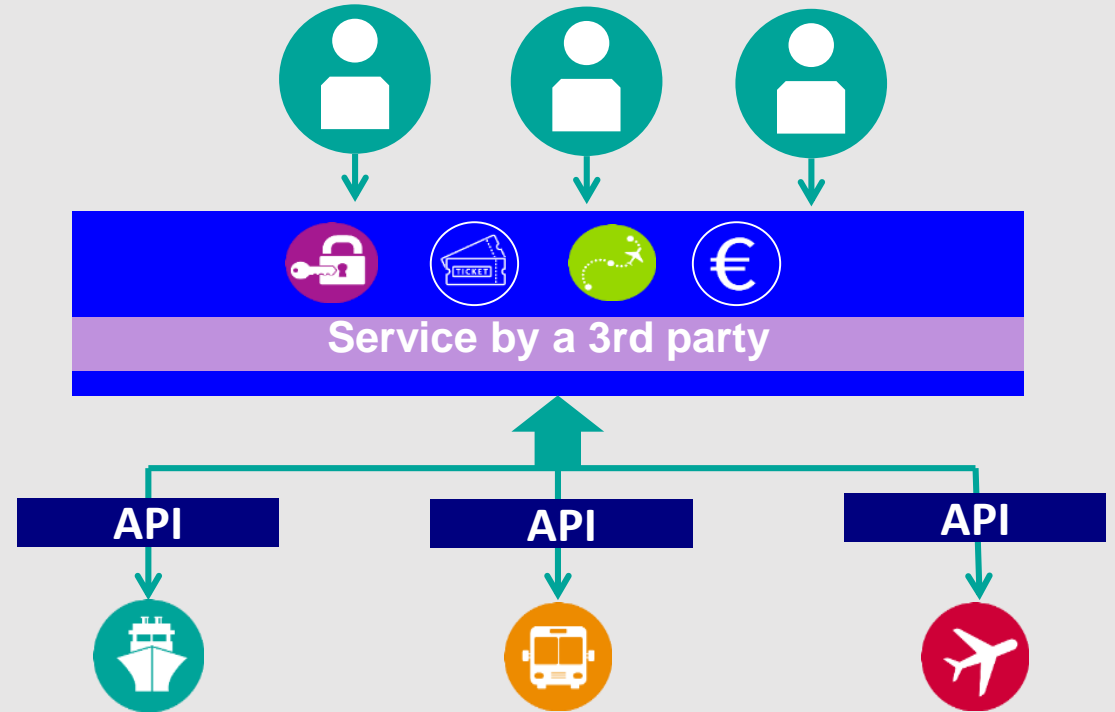


Buying transport services

TRADITIONAL SYSTEM



AFTER THE TRANSPORT CODE



What has changed?

- New market entrants – domestic and international
- Ongoing trials and pilots: automation trials, open testing ecosystems, pilots for new services etc.
- New services being developed – both in cities and in the countryside
- Investments in the Finnish startups
- People using services tend to use more public transit

#Trafficlab

KYTYT:

whim.



What next?

- Integrating public transit and MaaS
- Development of value chains and business models
- Ecosystem vs. egosystem
- EU and international regulation
- APIs, data, automation, liability
- Cybersecurity
- User behaviour

FINLAND, ready for a Moonshot

- # 1 Innovative Country in the World
- # 1 Good country index
- # 1 Educated Nation in the World
- # 1 Digital Country in Europe
- # 1 Trust Society in the World
- # 2 Start-up ecosystem in the World
- # 1 Best Governed Country in the World
- # 1 Sustainable Country in the World
- # 1 Stable Country in the World
- # 1 Happiest country in the world
- # 1 Best digital public services in the EU
- # 1 Digital knowledge capital in Europe
- # 1 Usage of mobile data per subscription



Thank you!

www.its-finland.fi

Twitter:

https://twitter.com/ITS_Finland

Facebook:

<https://www.facebook.com/ITSFinland/>