

# Helsinki♥MaaS



## Putting the concept back on track

POLIS Congress, 1.12.2016  
Sami Sahala

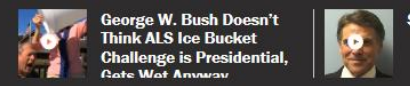
**FORUM  
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# What it would take for cities to eliminate the need to own a car

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Finland's Capital Plans on Making Private-Car Ownership Obsolete in 10 Years



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## Helsinki's ambitious plan to make car ownership pointless in 10 years

Finland's capital hopes a 'mobility on demand' system that integrates all forms of shared and public transport in a single payment network could essentially render private cars obsolete

• Should we ban cars in city centres?

Adam Greenfield  
theguardian.com, Thursday 10 July 2014 15.20 BST  
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APP FOR THAT. PHOTOGRAPHER: OLIVIER MORIN/AFP/GETTY IMAGES

## Millennials Want Apps, Not Cars

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TECH

More: Transportation Finland

## A 24-Year-Old Transport Engineer Is About To Free Her City From Car Ownership

ROB WILE AUG. 4, 2014, 7:32 AM 96,810 65

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By now it's become clear that Scandinavians and Nordic nations do a lot of things better than other countries. They have the smallest gender gaps, among the highest test scores, and the lowest levels of inequality.

Now, they're set to rub their transportation superiority in our faces.

Finland's capital, Helsinki, is about to launch a program that could virtually eliminate car ownership and give its residents the ability to plot an on-demand commute from their phones.



Sonja Heikkilä.

It's mostly the vision of Sonja Heikkilä, a 24-year-old Helsinki transportation engineer.

SCIENCE ENVIRONMENT

## Finland's Capital Private-Car Ownership in 10 Years

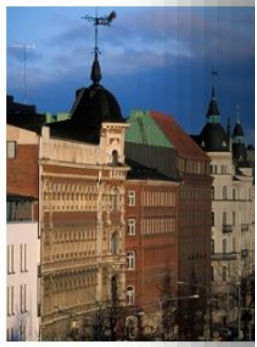
Melissa Hellmann July 11, 2014

Are you paying attention, rest of world?

Finland's capital, Helsinki,

...amping its entire on system by her several red on to potentially e cars obsolete

...d like a far- ect, but Sonja ansportation ose master thesis new model, says ults nowadays etermined about



Urban mobility, rethought ... Helsinki, F  
The Finnish capital has announce transport network into a compreh demand" system by 2025 – one t would have any reason to own a

Helsinki aims to transcend conve people to purchase mobility in rea The hope is to furnish riders with well-coordinated that it becomes

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US & WORLD

## Finland's largest city wants to replace cars with apps

New system would integrate all the city's public transit and private rideshares into one app

By Carl Franzen on July 14, 2014 09:17 pm Email @carlfranz

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# ABI Research Forecasts Global Mobility as a Service Revenues to Exceed \$1 Trillion by 2030

London, United Kingdom - 12 Sep 2016



Mobility as a Service (MaaS), which provides aggregated, single account, on-demand multimodal transportation services in a seamless and convenient way, is quickly gaining momentum. ABI Research forecasts global MaaS revenues will exceed \$1 trillion by 2030. Its anticipated disruptive impact on traditional transportation modes like car ownership, buses, trains, aviation, taxis, and rental cars is stirring up not just the automotive but also the entire transportation industry.

“Driverless technology, through the Car as a Service, or CaaS, paradigm, will be the defining factor for the success of on-demand mobility, offering consumers the possibility to summon transportation on the fly,” says Dominique Bonte, Managing Director and Vice President at ABI Research. “MaaS will result in more environmentally friendly transportation through the deployment of fleet-based, alternative powertrain vehicles and reduced congestion through improved utilization rates of available resources.”

Autonomous operation will eliminate the need for paid drivers, cut insurance costs, increase utilization rates to more than 70%, and enable Over the Air-based self-servicing and preventive maintenance. This will drive down the total variable cost per mile to a level that significantly undercuts the cost of car ownership and enable MaaS ecosystem development. Vehicle-to-Grid, demand-response charging of electric powertrains and the economies of scale of fleet-based deployments will further enhance this.

The MaaS ecosystem will breed a competitive environment full of dynamic transportation marketplaces, public private partnerships, and aggregators moderating and managing supply and demand according to government policies and frameworks. While the multimodal character and complex interdependence of different transportation models is at the heart of MaaS, CaaS models will remain the dominant contributor to on-demand mobility though 2030.

Bicycle rental revenues will remain small. And Transit as a Service—on-demand buses and driverless shuttles—and Aviation as a Service—autonomous passenger drones and flying cars—models will only start to become significant by 2025 and 2030, respectively. But rail-based and other fixed route and fixed schedule transit will become part of the MaaS paradigm, as well, with digital technology and open platforms allowing seamless and automated multimodal routing and single account billing.

“MaaS will fuel economic growth through lower transportation pricing,” concludes Bonte. “But it will have to overcome resistance from both private and public entrenched players before it begins to progress. Pioneers like MaaS Global and the public-private MaaS Alliance, with smart mobility leaders Xerox and Siemens among its members, are paving the way for this new uber paradigm to gain a foothold.”

These findings are from ABI Research’s [Mobility as a Service](#). This report is part of the company’s [Enterprise IT & OT Convergence](#) sector, which includes research, data, and analyst insights.

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**25 Oct 2016**

# From this week:

Our MaaS product ... is now available in Helsinki

*“We’ve been doing MaaS for 30 years, we had joint ticket for busses and tram already 1986”*

MaaS platform provider [X]...  
Our award winning vehicle rental management technology

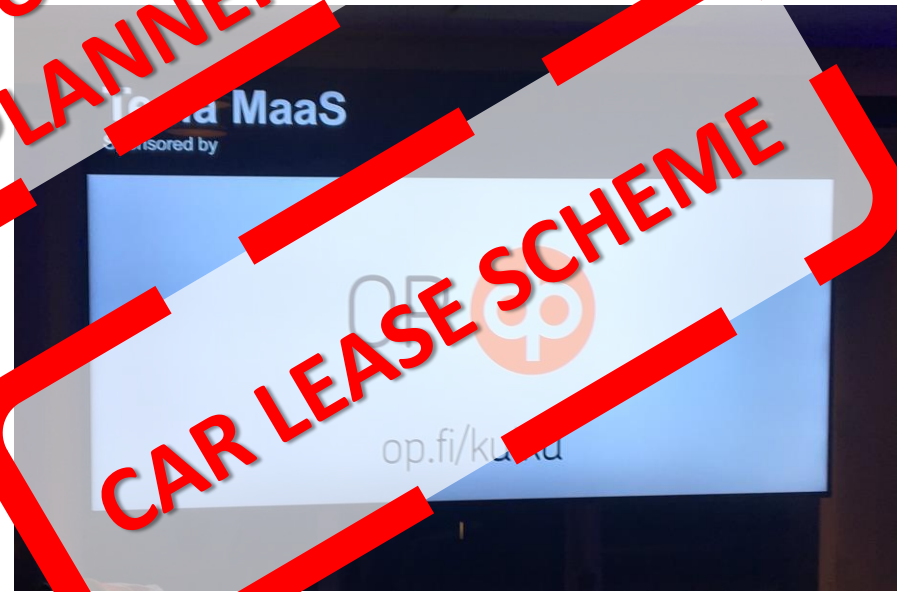


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**INTEGRATED  
PT TICKET**

**BACK OFFICE FOR  
CAR RENTAL**

**(YET ANOTHER)  
JOURNEY  
PLANNER**

**CAR LEASE SCHEME**



# Mobility as a Service seems to be...

## On-demand transport services

- such as Bridj, Split, Kutsuplus, also Uberpool, Lyftline

## Car-as-a-Service

- Uber/Lyft/etc, car sharing, ride sharing, car pooling, bike sharing, ...

## Integrated information about transport options

- With or without booking / payment

## Pay-per-use / Pay-as-you-go pricing

## All-inclusive packages



*As a customer you make a contract with one commercial operator, who provides you all the services chosen by you. Terms of contract may vary, and are up to you and your operator to negotiate*

Hiihtijalanjälki  
Carbon footprint

18:34

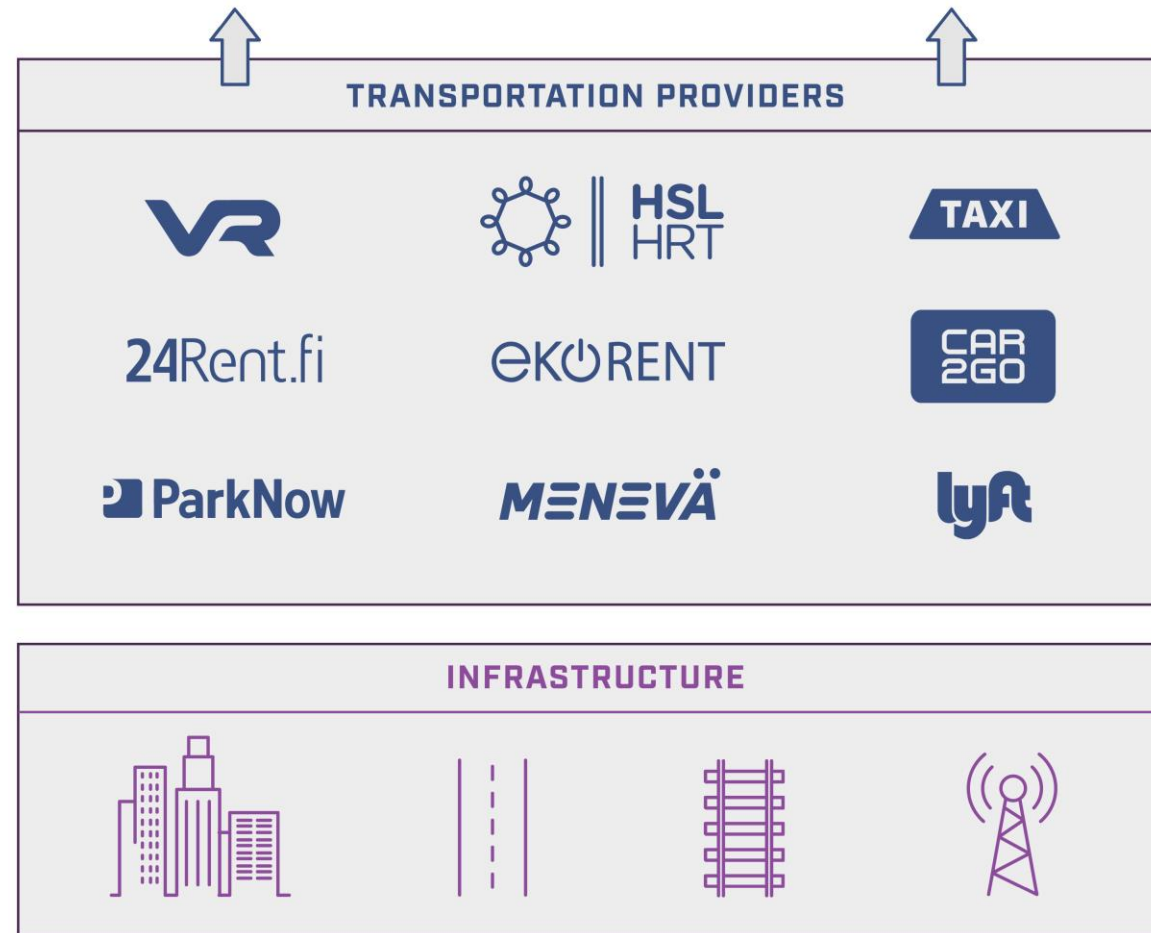
# Mobility as a Service

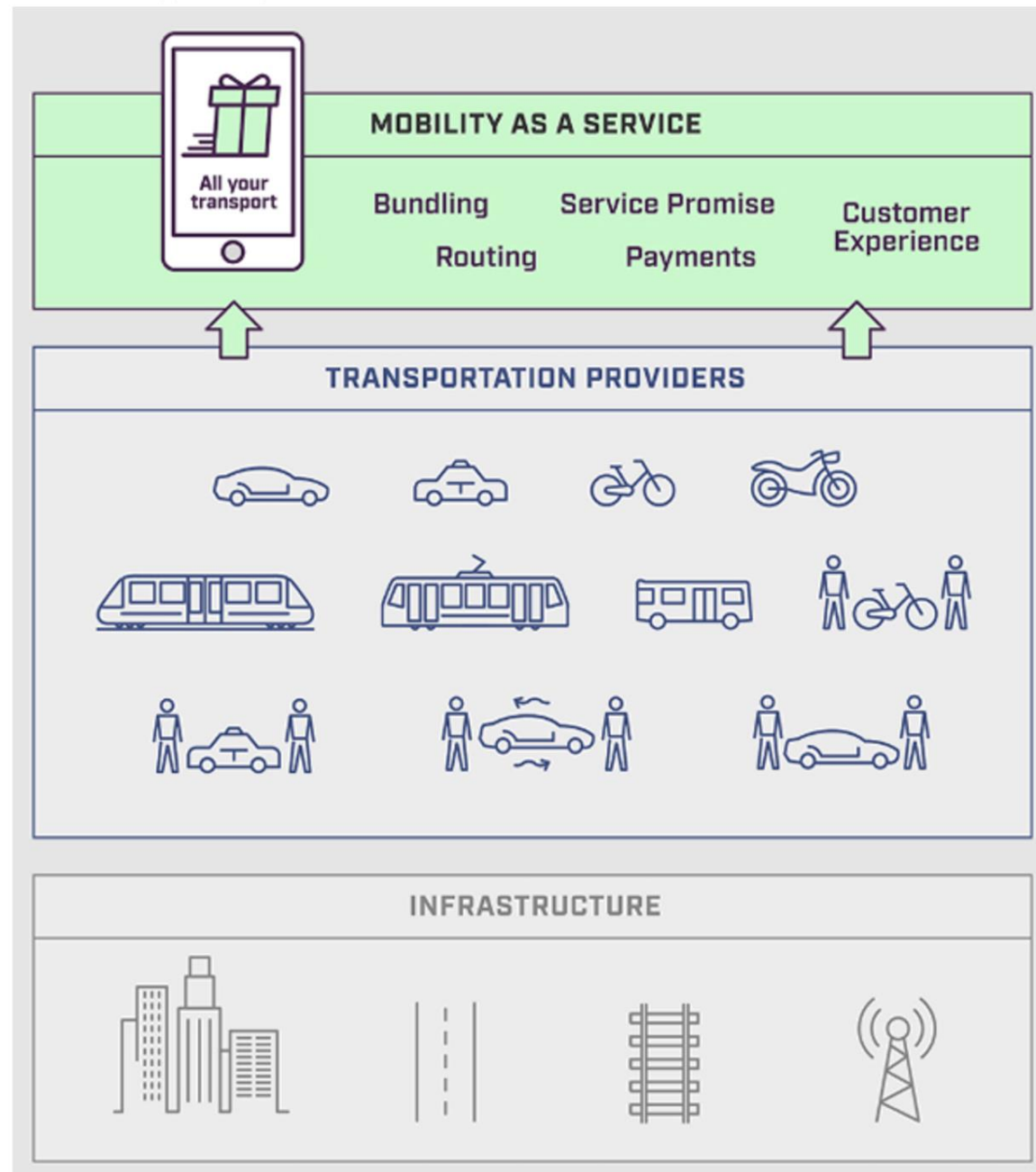
*Introducing a new player: "Mobility operator"*

# Mobility as a Service

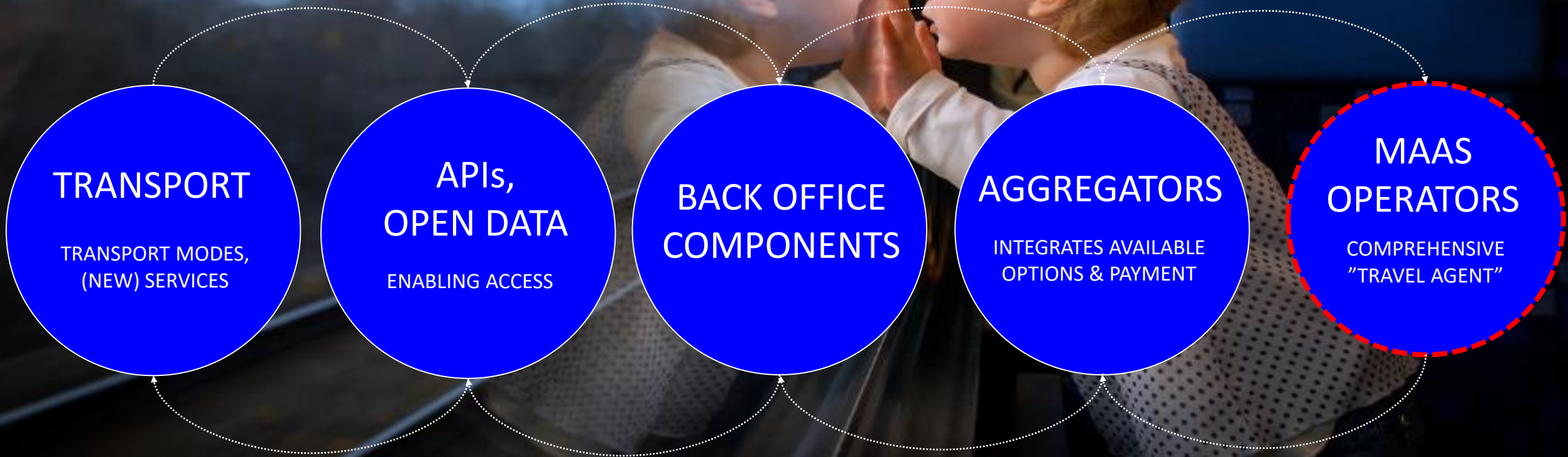


# We need a new layer of Mobility Operators





# Building blocks



# What we want to see

New modes & services,  
higher efficiency,  
automation

Big & small players,  
Full stack &  
components

Full service+beyond,  
many payment  
models, guarantee

**TRANSPORT**  
TRANSPORT MODES,  
(NEW) SERVICES

**APIs,  
INTERFACES**  
ENABLING ACCESS

**BACK OFFICE  
COMPONENTS**  
INTEROPERABILITY  
PORTABILITY

**AGGREGATORS**  
INTEGRATES AVAILABLE  
OPTIONS & PAYMENT

**MAAS  
OPERATORS**  
COMPREHENSIVE  
"TRAVEL AGENT"

Open access, incl.  
ticketing & payment

All options, ease of  
use, transparency

# Business says: Build your own MaaS



## The MaaS Alliance

Building an open market in seamless, demand-based travel

[LEARN MORE](#)

**OPEN / ROAMING**

# Your customers: Worst case scenario



**Would you be happy if your city procured  
just one mobile phone operator ?**

*Use that or stick to landline telephones !*

*Might not work in next city as their tender was won by diff operator*

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**Kiitos, Thank you !**

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*vimeo*



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