Mobility as a Service - The End of Car Ownership?
It starts with a single app

Combining old and new ways of getting around will transform transport policy

Stop obsessing about trains, and start using a single app

Simon Jenkins

Ministers are dazzled by the idea of using a single app for all forms of public transport.

A Slow Ride Toward the Future of Public Transportation

Through an app called Whim, MaaS Global lets customers order transportation from point A to point B and then guarantees it will provide it, using a combination of trams, buses, taxis, rental cars and car-sharing services.

“You’re covered,” said Sampo Hietanen, the chief executive of MaaS Global. “You can just
Toyota opened the door – a Finnish growth company in a billion market

Posted by Michael Marcano from talouselama.fi · 6h

the Movement as a service to developing Maas Global has received giant investment from the japenese car great giants Toyota Financial services as well as its insurance partner Aioi Nissay Dowa Insurance Company, as well as from previous investors.

the financing round the final sum will be confirmed in a couple of weeks, but the money is together already more than 10 million.

the Sum is a Finnish growth company great, in the case of early-stage seed financing round. This means, for example, car rental, taxis and public transport.

Maas stands for Mobility as a Service.

Maas Global announced last fall the services of hundreds of test users, and has now opened it to all.
Mobility as a Service – The Netflix of Transportation

WHAT IF ALL TRANSPORTATION WAS CONVERGED…

… AND TAILORED TO YOUR NEED AS MONTHLY PACKAGES?

Freedom of Mobility
Mobility Operator to Cover All Your Mobility Needs

**Pay as you’re moved:**
- Bike and segway service included
- 20 cents per minute in vehicles with others in
- 30 cents per minute for a nice car
- 50 cents per minute for a personal driver
- Only vehicles that use renewable energy

**15 minutes package for 135 € / month:**
- 15 minutes from call to pick up with no more than 15 minutes delay compared to driving.
- No parking hassle

**Business world package for 800 € / month:**
- 5 minutes pickup in all EU
- Black car status everywhere
- Working conditions guaranteed

**Family package for 1 200 € / month:**
- Enough space and child seats guaranteed
- Always traceable and safe trips for kids
- Includes one long family trip every month
- Home delivery included

**Cup of tea guarantee**
- All your rides combined
- Morning tea included
- Tinder extension for a great weekend
- Movember special rides
Competitive advantage – freedom of mobility

Our service promise is total freedom of mobility.

The only available option today

Tomorrow’s freedom of mobility
Transportation is being hit by a DIGITAL TSUNAMI.
Finland

ARPU (Average Revenue Per User)
in Transport
~300 € / month
Telecom
~30 € / month

Global Market

9 000 000 000 000 € market reshaped

MaaS

Private car usage < 4%
240 € / month

Decline of car ownership
New means of transport
Sharing economy
Servicizing
Expensive traffic space
Internet of vehicles
Self driving vehicles
Apps for traffic

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Apps for traffic
Changing Urban Demographics Are Leading To Travel Problems That Today’s Mobility Services Aren’t Solving

<table>
<thead>
<tr>
<th>Factors</th>
<th>Impact To Mobility</th>
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<tbody>
<tr>
<td><strong>Urbanisation</strong></td>
<td>• More concentrated density</td>
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<tr>
<td>• Over 54% of the World’s population lives in cities, expected to rise to 67% by 2050; urbanisation exceeds 80% in OECD countries</td>
<td>• Limited space</td>
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<tr>
<td></td>
<td>• Increased mobility demand</td>
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<tr>
<td></td>
<td>• <strong>Unbalanced Supply &amp; Demand</strong></td>
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<td><strong>Travel Problems</strong></td>
<td>• Unproductive time spend</td>
</tr>
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<td>• Drivers spend 50 hours per year in congestion which stifles the economy of 1% of GDP</td>
<td>• Inconvenience &amp; high costs</td>
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<td>• 7 million lives are lost prematurely each year due to air quality; mobility is the largest sector contributor</td>
<td>• <strong>Opportunity for innovation in new mobility services</strong></td>
</tr>
<tr>
<td><strong>Insufficient Solutions</strong></td>
<td>• Inconsistent Transport Provisions</td>
</tr>
<tr>
<td>• Private cars are utilised 4% of the time and account for 29% of transport trips on average, but account for 85% of our mobility expenditure</td>
<td>• Multiple apps &amp; fragmented markets with several providers</td>
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<td></td>
<td>• Fixed, inflexible routes</td>
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<td></td>
<td>• <strong>Lack of information, integration &amp; user experience</strong></td>
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Global mobility market needs new type of mobility services.

Sources: World Bank, World Health Organisation, Inrix, European Commission, Eurostat
Money flows directly from end users to the whole ecosystem.
Three ways for markets to evolve

Winner takes it all

Public transportation takes it all

Roaming ecosystem

Mobility as a Service (aggregators)

Transportation providers
MARKETS OPENING WITH INVESTMENTS
Mobility as a Service Revenues will Reach $1 Trillion

Urban transportation is undergoing a revolution that's being driven by a variety of technologies. They've enabled new and disruptive business models. Recent research findings now indicate more changes are coming.

Where there's big change, there's often big opportunities. The emerging category of Mobility as a Service (MaaS), which provides aggregated, single account, on-demand multi-modal transportation services, is quickly gaining momentum.

According to the latest market study by ABI Research, global MaaS revenues will exceed $1 trillion by 2030. The anticipated impact on traditional transportation modes -- such as car ownership, buses, trains, taxis, and rental cars -- is causing a reevaluation of the economic foundation for legacy transportation companies.

Everything as a Service Market Development

"Driverless technology, through the Car as a Service (CaaS) paradigm, will be the defining factor for the success of on-demand mobility, offering consumers the possibility to summon transportation on the fly," said Dominique Ronco, vice...
| Volkswagen Group is getting into the ride-hail game with a $300 million investment in Uber competitor Gett.” | Apple invests $1 billion in Chinese ride-hailing service Didi Chuxing.” | NuTonomy raises $16M to make self-driving taxis a reality by 2018.” |
| 24.5.2016 Recode | 13.5.2016 Reuters | 24.5.2016 Techcrunch |

| Lyft raises $530 million in funding to battle Uber in the U.S.” | At $68 Billion Valuation, Uber Will Be Bigger Than GM, Ford, And Honda” | Chinese taxi app Travice gains $600 million investment from Softbank, Alibaba “ |
"Volkswagen preps new strategy to become 'mobility provider’”
20.5.2016 Automotive News

“BMW’s Head of Sustainability and Environmental, Ursula Mathar: "It’s all about selling mobility”“
12.5.2016 FIA Mobility Conference

“General Motors CEO Mary Barra has said she expects the auto industry to change more in the next five years than it has over the last 50.”
21.1.2016 World Economic Forum

“Ford chairman: Our new transportation revolution will be like going from horses to cars”
19.2.2016 Business Insider
• Transportation is being tied even more closely to cell phone, while autonomous driving technology is turning car into a computer.

Development is expensive: Carmakers’ R&D budgets jumped 61 percent, to $137 billion from 2010 to 2014.

• Building alliances to share some of the risk and cost: Incumbent automotive giants and their "would-be" disruptors are teaming up.
Whim scales because the pieces exist and grow
CITIES WILL CHANGE
Huge Implications for Society as a Whole

- Use of time
- Urban planning
- Transport offering
- Environment
- World economy
FROM CORRIDORS TO HUBS
“2025 in Helsinki you can lead a perfectly good life without being forced to own a car”
MaaS Global to revolutionize the global transportation market with Whim

"THE NETFLIX OF TRANSPORTATION"
YOUR EVERY MOVE ON A WHIM
LESS HASSLE
TAKING AWAY THE PAIN OF “HOW DO I GET THERE”

HAPPIER LIVING
OFFER YOU A TRUE FREEDOM OF MOBILITY

MORE FREE TIME
GIVING BACK YOU 90 MINUTES TO YOUR DAY

GREENER CITIES
MAKING SURE YOU ARE NOT A POLLUTER

Your every move on a Whim
Life situation and unexpected incidents affecting your daily mobility

**Situation of life**
What kind of major events does the user experience in her life?

**Lifecycle**
What needs and necessities different phases of life bring?

**INVESTMENT**
"MONTHLY PACKAGE"

**CONSUMPTION**
"SINGLE JOURNEY"

**Hours**
What does the day of a user look like?

**Calendar**
What does the year of the user look like?
ONE SINGLE SOLUTION (APP)

Better than owning a car

Variety of operators and transport providers in same platform. Both public and private (taxi, public transport, train, car sharing, car rental, ride sharing, parking, logistic services, ferries, ships, bikes) will ensure that customers are getting where ever they want.
From Ownership to Experience

WHY OWN AND DRIVE AN OLD CAR – WHEN YOU COULD USE A BRAND NEW ONE, WHENEVER YOU NEED?
Enter your destination

Plan journey

Current location

London Victoria Station

Right now

Options

Upcoming

18:00
Business meeting
Landor St

2 days
Next friday
Whim Car Booked

Book Your Whim Car

This is your car. Whenever you need it.

Show more

Arrive faster:

Leave now

21 min

Taxi - 18km

Public transport

SiXT

Taxi
Public transport Internal
Valid until 12:50
Valid for 58 min

Taxi number 253
is arriving soon!

Pickup at 4 minutes
from Rauhankatu 11, Helsinki
to Finnoo, Espoo

Expired tickets

Today 09:05
Taxi trip to
Katajanokka Harbour, Helsinki

Today 08:25 - Expired 9:50
HSL Regional ticket

Whim car Booked
Wed 9. (09:00) to Fri 11. (15:00)
Mercedes Benz C-class wagon or similar
Sixt, Helsingin Rautatieasema

Make another booking
From 950 points a day

Weekend
Friday to Monday from 2544 points
Whim for West Midlands coming soon!

The Whim mobile app frees you to travel wherever and whenever, with public transport, taxis, brand-new cars and more. Buy a monthly package to cover all your daily journeys, or pay as you go for multi-transport tickets.

Sign up now and we'll be in touch when you can start using Whim:

Email address

Mobile number

Submit
Whim for Netherlands – Amsterdam live in 2017
LOOKING FOR 15 NEW LOCATIONS FOR 2018
Expansion Strategy

Phase 1 – Expansion in Helsinki, Neighboring areas and 4 cities

Phase 2 – Expansion into 15 additional cities

Phase 3 – Expansion into over 40 additional cities
Results from Helsinki 2016-2017
Trips made with Whim in Helsinki before and after Whim*

- 74% of trips are made by Public Transport (PT)
- 48% are by Private Car
- 9% are by Taxi
- 3% are by Rental Car
- 1% are by Bike

Walking and cycling are excluded from the result data. The data is based on surveys done among Whim users.
Spending on transportation services per month*

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<thead>
<tr>
<th></th>
<th>Average all</th>
<th>Average Whim users</th>
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</thead>
<tbody>
<tr>
<td>0</td>
<td>31</td>
<td>125</td>
</tr>
</tbody>
</table>

Number of taxi trips per user per month*

<table>
<thead>
<tr>
<th></th>
<th>Before Whim</th>
<th>Whim users</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>4.5</td>
</tr>
</tbody>
</table>

*"Before" based on a survey executed among Whim users
What does a MaaS operator need?

• **Step 1:** Contracts between transportation providers and MaaS operators to buy transportation from at least:
  – Public transport (urban, intercity)
  – Taxi or taxi-like service
  – Access to car (car share, car rental etc.)

• **Step 2:** API’s allowing 3rd party service providers including
  – Information about transportation services (timetables, routing, locations, disturbances etc.)
  – Background payment, hailing, ticketing, validation.

• To learn more about technical integrations for MaaS, go to:
  [www.maas-api.org](http://www.maas-api.org)

• No need for city financing, just co-operation and active enabling.
• If a city or government wants to speed MaaS incentivise the end user
Get more information and be part of the MaaS ecosystem

MaaS-API: www.maas-api.org
Whim: www.whimapp.com
MaaS Global: www.maas.global