Title: MaaS service combinations for different geographical areas

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Citation: 24th World Congress on Intelligent Transportation Systems, 29 October - 2 November 2017, Montreal, Canada

Date: 2017

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MaaS service combinations for different geographical areas
Background and motivation

Changes in our environment…
- Decreasing importance of owning a car
- Sharing economy
- Modal shift targets (public transport)
- Sustainability
- Smartphones and applications
- Digitalization and automatization

…require and enable new transport services
- New mobility services, e.g. car sharing, ride sharing…
- Strong IT-support for new mobility services
- Access to services at any time and from anywhere
- Real-time information
- Automated passenger and freight services

Emergence of Mobility as a Service (MaaS) can make the use of alternative transport modes even more attractive
Finland as a forerunner?

- The Government is pushing heavily to develop Finland into the forerunner in transport digitalization.
  - “Transport code enables better transport services: the code will make market access easier and promote interoperability of the different parts of the transport systems” (MinTC 19.4.2016)

International visibility and marketing of concrete services is guaranteed!
MaaS definition by MAASiFiE (2016)

“Multimodal and sustainable mobility services addressing customers' transport needs by integrating planning and payment on a one-stop-shop principle”

Multimodal transport; shared mobility
+ Multimodal traveller information
+ Integrated booking/ticketing/payment
MaaS in urban areas

Value creation system

- Bikes
- Car sharing
- Trams
- Subway & local trains
- Public ferries
- Taxies

MaaS operator

Distribution and offering

Value proposition

- Reduced use of private cars
- Reduced emissions
- Enhanced urban planning
- Sustainable low-carbon mobility
- Multimodal one-stop-shop
  - Interoperable services
  - Integrated routing, booking and payment
- Individual preferences, priorities, constraints and needs

Revenue model

- Pay per usage: A mobility service directory helps in finding the smartest mobility option for the single journey (for occasional users, and ad-hoc and exceptional needs)
- Prepaid monthly commuter package: Single access point to multimodal service base (trains, buses, trams and sufficient amount of taxi) for regular everyday needs
- Tailored all-in-one package: Highly customized travel solutions for users with varying travel needs (Monthly fee + pay per usage)
MaaS in Suburban areas

Value creation system

- Buses
- Carpools
- Parking lot
- Taxies
- Public ferries
- Trams
- Subway & local trains

Value proposition

- No need for the 2nd car
- Integrating private transport with public transport services in city areas
  - Park & Ride
  - Demand responsive transport
  - Integrated routing, booking and payment
- Individual preferences, priorities, constraints and needs

Revenue model

- Pay per usage: A mobility service directory helps in finding the smartest mobility option for the single journey (for occasional users, and ad-hoc and exceptional needs)
- Prepaid monthly package: Single access point to multimodal service base (trains, buses, trams and sufficient amount of taxi)
- Tailored all-in-one package: Highly customized travel solutions for users with varying travel needs (Monthly fee + pay per usage)
MaaS in rural areas

Value proposition:
- Increased efficiency and utilization rate of publicly subsidized transport
- Sustaining current services and levels
- Accessibility for different user groups (inhabitants, tourists etc.)
- Integrating private transport with public and social services
  - Combined passenger transport and logistics
- Individual preferences, priorities, constraints and needs

Revenue model:
- Pay per usage: A service directory helps in finding the smartest option that may contain journey or related services
- Monthly package: Single access point to multimodal service base (short + long-haul trains and buses, and sufficient amount of taxi)
- Tailored all-in-one package: Highly customized travel solutions for users with varying travel needs. May also include socially supported services (Monthly fee + pay per usage)

MaaS operator

Distribution and offering

(Private) car sharing
Parking lot
Buses
Taxies
(Local) trains
Social services

Relevant sessions:
ITS WORLD CONGRESS 2017
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**Value creation system**

- Car sharing
- Buses
- Taxies
- Local and long-haul trains
- Planes
- Accommodation

**Revenue model**

The whole travel chain can be bought from the one-stop-shop principle to fulfil all the travellers' needs

- **Negotiated series ticket**: Option may include combination of services for a given period negotiated in advance (e.g., flying + accommodation)

- **Case-specific pricing**: A service directory helps in finding, booking and paying the preferred option that may contain journey and entertainment services

**Value proposition**

- One-stop-shop for all the travel services

- Door to door transport services + entertainment

- To fulfill the ultimate need and objective behind the travelling
  - Combining short- and long-haul transport
  - Mobile ticketing and payment

- Individual preferences, priorities, constraints and needs

**CROSS-BORDER SERVICES**

**MaaS on international level**

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## Summary

### Cities
**Objectives:**
- Reduce the use of private cars (congestions, parking)
- Reduce emissions

**Based on:**
- Existing public transport
- Extended with rental and shared cars and bikes...

### Suburban areas
**Objectives:**
- No need for a 2nd car
- First-/last-mile accessibility

**Based on:**
- Park & ride services, on-demand transport and other services connecting suburban to city transport services

### Rural areas
**Objectives:**
- Increase efficiency and utilization rate
- Maintain sufficient service level
- Improve accessibility

**Based on:**
- Demand-responsive transport, taxis, busses and connections to long-haul transport, and car pooling
- Additional services: parcel deliveries, library services, and food and medicine distribution...

### National and international levels
**Objective:**
- Offer easy all-in-one packages

**Based on:**
- Long-haul transport including air traffic
- Additional services: accommodation, event tickets, activities...
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