Public Agencies and the MaaS Environment

Western ITE Conference

Lew Gaskell – Director of Urban Mobility
Mobility as a Service
An emerging concept for distributing transportation services that treats transportation supply and demand as commodities

Mobility on Demand Operational Concept Report, USDOT, September 2017, FHWA-JPO-18-611
Mobility as a Service Ecosystem

SMART CITIES & REGIONS
- Initiate and orchestrate Mobility as a Service ecosystems.

TRANSPORT SERVICE PROVIDERS
- Provide optimized and connected local transport offerings.

ENABLING SERVICES
- Support the setup and operation of collaborative MaaS.

MOBILITY SERVICE PROVIDERS
- Offer intermodal mobility services for customers.

MOBILITY SERVICE CUSTOMERS
- Demand and pay for a seamless travel experience.
**MaaS Topology**
*(Sochor, Arby, Sarasini, Karlsson, Holmberg)*

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Integration of societal goals</td>
</tr>
<tr>
<td></td>
<td>Governance &amp; PP-cooperation</td>
</tr>
<tr>
<td>3</td>
<td>Integration of service offering</td>
</tr>
<tr>
<td></td>
<td>Bundling/subscription - responsibility</td>
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<tr>
<td>2</td>
<td>Integration of payment:</td>
</tr>
<tr>
<td></td>
<td>Single trip - find, book and pay</td>
</tr>
<tr>
<td>1</td>
<td>Integration of information:</td>
</tr>
<tr>
<td></td>
<td>Multimodal travelplaner, price info</td>
</tr>
<tr>
<td>0</td>
<td>No integration:</td>
</tr>
<tr>
<td></td>
<td>Single, separate services</td>
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MaaS integrates various transport services that use the physical infrastructure of cities and regions.

“MaaS is the integration of various forms of transport services into a single mobility service accessible on demand.” MaaS Alliance
Technologies

- End-user frontend
- Commercial business tools
- Integration and Standardization
- Transport Operations
- Infrastructure Management

MaaS Solution

- Personalization
- Payment
- Integration
**Dimensions**

**Architectures**
- Monolith
- Standards
- Shared Platform
- Shared Platform with App

**Roles**
- Observe
- Influence
- Regulate
- Own

**Themes**
- Cost of inaction
- Potential benefits
- Dependency on private sector services
- Cost of failure
- Protecting privacy
- Improve services
- Address equity and accessibility
Collaborative/Open MaaS Platform | Orchestrating supply & demand

Demand:
- Private MaaS Operators
- Verticals (TSP) incl. Public T.
- Start-ups
- Corporations
- Property developer
- Tourism
- ..Value add

Analysis
Public Authorities
Governance

Supply:
- Local Public TSPs
- Local Private TSPs

Unified access to transport offerings
- Availability
- Routing
- Booking
- Registration
- Reporting

Standardized provision of transport offerings

Governance

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Architectures

Building Blocks

Mobility Service Providers

Data, Services, Communications

Transportation Service Providers

Template source: Final report, ITS Switzerland work group, September 2018
**Standalone Mobility App**

*Monolithic*

- No shared services
- “Just an app”
- Used by large, national providers and others
- Transit agencies

<table>
<thead>
<tr>
<th>Observe</th>
<th>Has been happening for years</th>
</tr>
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<tbody>
<tr>
<td>Influence</td>
<td>Limited hooks or connection points for this</td>
</tr>
<tr>
<td>Regulate</td>
<td>Requires enforcement of infrastructure use</td>
</tr>
<tr>
<td>Own</td>
<td>Risk app failure with nothing to show</td>
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**Regional Standardization**

- No shared infrastructure
- Standards based communication
- Scope may vary
- Los Angeles, Finland

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<th>May not arise spontaneously (standards non-existent or nascent)</th>
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<tr>
<td>Influence</td>
<td>Promote voluntary adoption of standards</td>
</tr>
<tr>
<td>Regulate</td>
<td>Requires enforcement of data standards</td>
</tr>
<tr>
<td>Own</td>
<td>Nothing to own</td>
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Shared Platform

- Common platform provides single access point for multiple services
- May offer integrated routing/payment etc. within platform
- Aarhus, Bilbao, Vienna, Netherlands

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<tr>
<td>Influence</td>
<td>Without ownership require promotion of private system</td>
</tr>
<tr>
<td>Regulate</td>
<td>Requires enforcement of digital infrastructure use</td>
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<tr>
<td>Own</td>
<td>Allows quid pro quo</td>
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Shared Platform with App

- Common platform provides single access point for multiple services
- May offer integrated routing/payment etc. within platform
- Also includes one or more apps supported by agency
- Stockholm, Helsinki, Birmingham, Columbus

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</table>
Regulate coverage & business areas, observe which zones get transport and govern the mix of offerings

Perform demand analytics to determine infrastructure usage and plan investments
Thank you

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