Virtual Final Conference

October 29th, 2020
2:00 PM – 5:30 PM (CET)
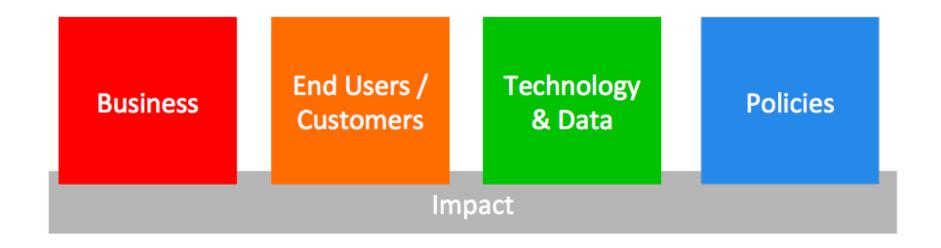
Challenges & lessons learned

Hypotheses, Challenges & Lessons Learned

MaaS Operator Types

Initial assumption: The key consideration is that a **Public Transport Authority** is already responsible for all public transit modes/operators. Moreover, in most cases, it is the authority regulating and authorizing (or procuring) the operation of all the other private transport operators (i.e. taxi, car-sharing etc.). In addition, as a not-for-profit organisation, the PTA might be able to cultivate the trust needed for the uptake of the endeavour. However, on the downside, this might require an organisational change and flexible collaboration with other PTAs when addressing connectivity with other regions.

Tested in: Greater Manchester

Opportunities, Challenges & Lessons learned:

- PTA has already established relationships with all transport providers in the city. Easy access to them to discuss and explore new concepts.

- It takes time for a PTA to change organisational structures or secure approvals for a new service.

- Complexity in receiving the money from the MaaS products and distributing them to the MSPs.

- Difficult to operate outside its jurisdiction area; some areas left outside.

Hypotheses, Challenges & Lessons Learned

MaaS Operators Types

Initial assumption: A **transport operator** might also drive the MaaS Business Ecosystem by creating the conditions to attract other relevant service providers, who might appreciate the advantages of collaboration, as this may support cost savings in operation and co-investments. This effort is based on the notion of coopetition (collaboration between competing actors), as all the competitors in network industries are recognising the benefits of collaborating on innovative approaches.

Tested in: Luxembourg

Opportunities, Challenges & Lessons learned:

- It is too difficult for a TO to collaborate with competitors.

- Especially for TOs who offer a variety of mobility services, it is almost impossible to collaborate with others.

- Even setting up discussions with other MSPs was difficult.

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Hypotheses, Challenges & Lessons Learned

MaaS Operators Types

Initial assumption: A **trailblazer of MaaS services private company**. A new actor dedicated to operate and drive the MaaS Business Ecosystem might be more equipped to support the above characteristics and promote trust, collaboration and coopetition amongst existing transport operators and travel service providers. Such an operator might also be in a better position to transverse existing boundaries and silos in the mobility sector. At the same time, a new actor might also face inertia and lock-in effects from previous efforts.

Tested in: Budapest

Opportunities, Challenges & Lessons learned:

- The beginning was quite difficult as there are no previous relationships between the MO and the MSPs.

- With the support of the PTA, communication channels were established with the MSPs.

- Wide participation of MSPs in the pilot.

- Some issues with MSPs in terms of the agreements and data sharing. It took time, but they were solved.

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Lessons learned

- **Establishing communication channels with MSPs takes time**
  - New concept | Hypothetical and not concrete business models | Competition among MSPs
- **Agreements with MSPs are very challenging**
  - Need for clear and specific business models & clear incentives for the MSPs
  - Small scale MaaS pilots sometimes is a concern (limited number of customers;
  - Relactunce to devote resources with low return
  - Financial side and profit
- **MSPs worry about commoditisation**
  - Lose brand identity (especially big companies with mature platforms are not ready to give this up) | Small MSPs are positive
  - Concerns about user experience and liabilities
  - Exclusivity is a selling point for big MSPs

Lessons learned

- **Data sharing agreement betweeen the MO and the MSP is critical**
  - Customer data is part of the MSP's business intelligence and future development:
    - Key interchange points (fleet management allocation and routes establishment)
    - Customer satisfaction
- **Value of co-creation among MSP who offer different services to create synergies**
- **Importance of clear goals and alignment with policy**

From the final interviews with MSPs who offered their services through the platform:

=> PTA is preferable to not act as a MaaS Operator, but rather sit above the MaaS Operator and help facilitate interaction between MO and MSPs;

=> PTA should provide policy goals/requirements to the MO to offer the services to end-users (i.e. Focus on walking trips/ first-last mile using certain modes etc.)

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EU vs US: MaaS Business Ecosystem

Workshop during the IATBR 2018 conference in Santa Barbara, California | 20 participants from industry & academia

EU: the role and participation of PTAs is considered critical for a successful deployment of MaaS.

USA: PTAs have not that much power and emerging mobility service providers are more likely to be the champions of MaaS.

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Challenges & Lessons Learned

- Several operators do not have the APIs needed to integrate to a MaaS platform (including booking, ticketing, payment, timetables)

- Reluctant to share access to APIs if they were available

- Payment systems – MSPs wanted to be in control of this (despite technology exists)

- Paper ticketing in some modes of transport – be ready to use legacy systems as we transition towards MaaS

- Pilot app
  - Payment was not an option for all modes
  - Still limited integration of services into the app

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Challenges & Lessons Learned

- **Importance of information provision and data sharing**
  - Live data and updating information regarding travel routes

- **Engage early with technology (basis for the rest of the solution)**

- **Flexibility with regards to implementation of different operators' services - Interoperability** (difficulty to get all on board with the same systems)

Challenges & Lessons Learned

- **Recruiting users to participate**
  - Pay their own money for this
  - Additional effort required (service was accompanied with surveys)
- **The benefits of MaaS are difficult to be processed by end users before they use a MaaS service**
  - Brand new solution
  - Information and explanation regarding what MaaS is and the potential benefits
  - Too many mobility apps
- **Promising concept once it is explained: majority of end users like the idea**
- **Difficulty in competing with pricing from existing mobility services**
  - Initial fears of locked-in to subscription services

Challenges & Lessons Learned

- **Once they used the MaaS4EU app and had experience they were positive towards using such a service in the future**
  - Young professionals who do not own a car are the most popular user group to target
  - Most of those who already own a car or a bike do not find high value in this service

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MaaS and COVID-19

- **Opportunity for MaaS to support both public authorities and travellers through enhanced data**
  - Capacity information (how full are services?) to reassure passengers; safety information regarding precautions on different modes.
  - Availability of DRT and notifications for users (live changes to routes; event-management)
  - Potential support for tracing COVID-19 transmission

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MaaS and COVID-19

Stated intention scenario	Mode	Decrease # (%)	Unchanged # (%)	Increase # (%)
If MaaS available and social distancing required	Private car	9 (69.2%)	0	4 (30.8%)
	Carsharing	6 (40%)	6 (40%)	3 (20%)
	Cycling	14 (56%)	6 (24%)	5 (20%)
	Public transport	11 (44%)	5 (20%)	9 (36%)
	Ride-hailing	12 (48%)	5 (20%)	8 (32%)
	Walking	12 (48%)	8 (32%)	5 (20%)
If MaaS available and COVID-19 pandemic is over	Private car	6 (46.2%)	3 (23.1%)	4 (30.8%)
	Carsharing	4 (26.7%)	7 (46.7%)	4 (26.7%)
	Cycling	9 (36%)	9 (36%)	7 (28%)
	Public transport	7 (28%)	8 (32%)	10 (40%)
	Ride-hailing	9 (36%)	5 (20%)	11 (44%)
	Walking	11 (44%)	7 (28%)	7 (28%)

- Over 40% of respondents in scenario 2 and over 30% of respondents in scenario 1 indicated higher frequencies to travel by public transport and ride-hailing after the MaaS4EU app demonstration in comparison to their choices in the pre-app questionnaire.

Challenges, Lessons Learned

- **Passenger rights**

- **Liability**

- **Lack of data availability / APIs (openness/sharing requirements)**

- **Data interoperability**

- **Possibility to re-sell tickets in several occasions**
  - In some occasions, when this is possible, the re-selling prices are higher

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Challenges, Lessons Learned

- **Clear regulation over new modes introduced**
- **Public authorities should act as bodies overseeing transition to MaaS**
- **Help organisations to work together to deliver MaaS**
- **Support open engagement**
- **Ensure funding reaches the right modes and supports their integration**

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Which pillar hinders the most the implementation of MaaS?

Business

Technology & Data

End Users

Policy

Traffic light colors

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Take aways

- If a MaaS service/business model does not work in one area, it does not necessarily mean that it will not work in another areas

- Not one MaaS solution for all

- MaaS is a general concept that can be adapted to the needs of any local or national and international content

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www.maas4eu.eu