Comments to Report on Trends of MOD/MaaS in the U.S. Urban Areas presented by Mr. Miyamoto

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Goals of Mr. Miyamoto's Presentation

In order to identify the trend of MOD/MaaS in the U.S., this presentation focuses on specific urban areas and analyzes the current status and issues.

(From Mr. Miyamoto's slides)

Research Questions (My interpretation)

1. What are the differences between MOD in the U.S. and (European) MaaS?

2. Why do MODs attract interests in the U.S.?

3. What is the expected value of MOD in the U.S.?

What are the Differences between MOD and MaaS?

What is MaaS?

"A service that optimizes the combination of multiple public transportation and other transportation services to meet the trip-by-trip transportation needs of each local resident or traveler, and provides search, reservation, and payment services in one place."

Source: Ministry of Land, Infrastructure, Transport and Tourism, Promotion of MaaS in Japan

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Mr. Miyamoto's Conclusion 1

What are the differences between MOD in the U.S. and MaaS (in Europe)?

DOT's understanding

"MOD's highlight on user's needs is shared with MaaS, but

MOD is a concept while MaaS is a platform.

(From Mr. Miyamoto's slides)

What did the U.S. learn from Europe?

- MaaS itself is not a final goal, but a means to solve social problems and achieve regional goals.
- MOD should have public aspect through the leadership taken by public sector.

(From Mr. Miyamoto's slides)

MOD in the U.S. is mainly driven by public institutions and more policy-oriented than MaaS.

Why are Attentions Paid to MOD?

Over the past 15 years, numerous sharing and on-demand mobility services have newly emerged using app-based and GPS-based platforms.

Service type		Example
Self-driving service	C-to-C type	Car Next Door (Australia), Drivy (France), Mooval (Germany)
	B-to-C type	Zipcar (US), WhizzGo (UK), AutoLib (France)
Ride Hailing Service (RHS)		Uber (US), Grab (star), Lift (US), DiDi Cuxing (China)
Other		Bicycle sharing, e-scooters, demand buses (DRTs), etc. …

➡ A variety of benefits for users, such as

- Quick and easy booking
- Can meet a variety of needs
- Improve efficiency through effective use of vehicles

Source: ITF (2020) Reforming Public Transport Planning and Delivery. Reforming Public Transport Planning and Delivery | ITF (itf-oecd.org)

KATO Hironori, The 139th Transport Policy Colloquium - Washington Report -, 2020

Mr. Miyamoto's Conclusion 2

Why do MODs attract interests in the U.S.?

"This is largely due to the rapid agglomeration of population in urban areas and the development of digital technology."

(From Mr. Miyamoto's slides)

[Agglomeration in urban areas]
"Growing needs for public transportation and more expectations for collaboration with new mobility services."

(From Mr. Miyamoto's slides)

MOD seems gaining attentions as a result of development of new technologies and an emphasis on the needs of public transportation from the millennium generation residing in urban areas.

What is the Expected Value of MOD?

Relationship between new mobility services and public transportation

- Impacts from new mobility services on public transportation have not been well understood.
  - Evidence on negative effects
    - 15-30% of RHS users in urban U.S. answered they would use public transportation if no RHS would be available (Schaller, 2018)
  - Evidence on minor effect
    - Substitutability of RHS with public transportation depends on the urban context, but the impact is generally small (Clewlow and Mishra, 2017)

Sources:.

Schaller Consulting (2018) The new Automobility: Lyft, Uber and the Future of American Cities. http://www.schallerconsult.com/rideservices/ automobility.htm.

Clewlow, R.R. and G.S. Mishra (2017) Disruptive Transportation: The Adoption, Utilization, and Impacts of Ride-Hailing in the United States. Institute of Transportation Studies, University of California, Davis, Research Report UCD-ITS-RR-17-07.

Mr. Miyamoto's Conclusion 3

What is the expected value of MOD in the U.S.?

A view from one organization
"We are still not sure if it is noteworthy."

(From Mr. Miyamoto's slide)

[Challenges]
"Cost reduction in unprofitable service and presentation of positive attitudes towards innovation to stakeholders"

(From Mr. Miyamoto's slide)

MOD in the U.S. highlights solving the existing problems in transportation policies with somewhat conservative attitude to added value from introducing new technologies.

Impressions on Mr. Miyamoto's Presentation

- Unexpectedly, MOD in U.S. seems quite conservative.
  - This may be a realistic attitude from the standpoint of public institutions that should highlight safety and stability in transportation services.

- Surprisingly, MOD in U.S. does not expect much added value from new mobility services.
  - This may be because there are mixed understandings about positive and negative aspects in new transportation technology.

- Regretfully, public institutions and TNCs have not successfully shared the vision yet.
  - We found the difficulties in communication between them even in U.S. where the new technologies have been well introduced.

Issues Derived from the Presentation

- Who should take the leadership in MOD/MaaS?
  - Government initiative is questionable. Government-led technology management depends on their capacity.

  → Upgrading digital literacy in public institutions is highly required.

- How can we create new value from MODs?
  - Cities are too complex for private sector only to create new values from MODs.

  →Value may not be well created from MOD without the Level 4 of "policy integration"* of MaaS.

- What kind of public-private cooperation is required for developing a new vision of the city?
  - U.S. way = Trial and error through pilot projects

  → Practical solutions should be elaborated in addition to vision sharing between private and public sectors (i.e., policy integration)

*The top level of the five levels of MaaS. Level 0: no integration, Level 1: integration of information, Level 2: integration of booking and payment, Level 3: integration of service provision (Sochor et al. (2017) A Topological Approach to Mobiity as a Service, ICoMaaS 2017 Proceedings pp.187-201)

Questions to Mr. Miyamoto

1. What are the implications from the experiences of MOD in U.S. to Japan's MaaS policy?

2. Under what conditions would a private-sector-led MOD work?

3. How do (should) the goals of transportation policy change in the future with the emergence of new mobility services?