Building a shared understanding for carsharing concept using remote GMB workshops

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Abstract

Innovative mobility services, such as carsharing and Mobility as a Service (MaaS), have emerged as solutions to address urban transport issues. However, their novelties can lead related stakeholders, such as service providers and policymakers to have a diverse understanding or 'mental map' toward the concepts. The misalignment and the lack of awareness in the different mental models have been identified as a hindrance toward the concepts' wider implementations.

We explore how a participatory approach in remote group model building (rGMB) can support social learning and build a shared understanding of the concept among the stakeholders.

The rGMB process helped the stakeholders in Bangkok city to understand a novel mobility concept in carsharing from their different perspectives. The process also built a coalition between them that will be beneficial to the policymaking process. The resulting CLD diagram also provides a basis for a qualitative policy analysis process.

Method

The methodological approach of this study involved four steps: 1) knowledge elicitation (semi-structured interviews), 2) conceptualization of system and interconnectedness among variables, 3) analysis impacts of possible interventions (online GMB workshop), and 4) evaluation (post-workshop interview). They took place between May and September 2020.

More than 20 stakeholders from Policymakers & Public Sectors, Carsharing Users and Potential Users, Smart Mobility Community, Academics, Carsharing Providers, and Private Organizations took part in this exercise.

Process of the Research (April – Dec 2020)

Personal Interviews (mostly remotely)
- Define vision of a successful carsharing system
- Define KPIs, positive and negative attributes
- Propose Policy options
- Confirm transcript

Workshops (all remotely)
- Workshop 1: Construct and combined shared mental map
- Workshop 2: Confirm mental map and identify policy causalities

Post-Workshop (all remotely)
- Workshop reflections/feedbacks via online survey
- A follow-up seminar to disseminate and testing with policymakers

GMB Workshops

Objective:
- Create Causal Loop Diagram for Bangkok's Urban carsharing system; identify policies & measures

Process: 2 workshops – 2hr each 3 weeks apart

Workshop 1
- Briefing, divided into four groups, each with a facilitator
- Provide an initial CLD
- Two rounds - (4 CLDs → 2 CLDs)

--- Facilitators works on the model off-line ---

Workshop 2
- Assess and evaluate the combined model in Workshop 2
- Discussion on possible policy & intervention

Initial Causal Loop Diagram

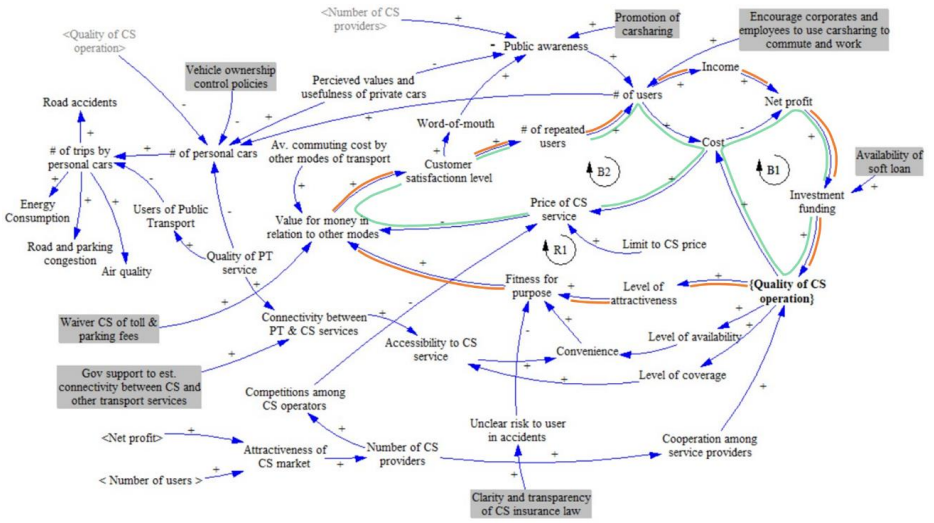

Fig. 1 Casual loop diagram of Bangkok carsharing system constructed with the participants

Findings and conclusions

- The rGMB process helped to highlight the differences in the mental models of the stakeholders.
- We found apparent differences in how participants in each group visioned a successful carsharing operation.
- Their mental models appeared to be influenced by how they see the concept contributing toward their organisations or expertise goals e.g. those from the public sectors see positive contributions to public policy objectives (e.g. GDP enhancement) as a vision of success.
- The process also helped to construct shared insights and improve awareness of the stakeholders on other's mental model
- The differences in their mental models suggests the necessity for aligning their mental models at the initial stage of the planning to implement such a novel mobility concept

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