

Successes, failures, and futures of shared micro-mobility services in Bangkok

27 August 2022

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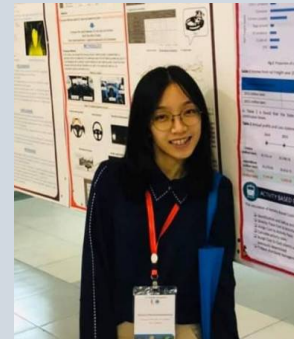
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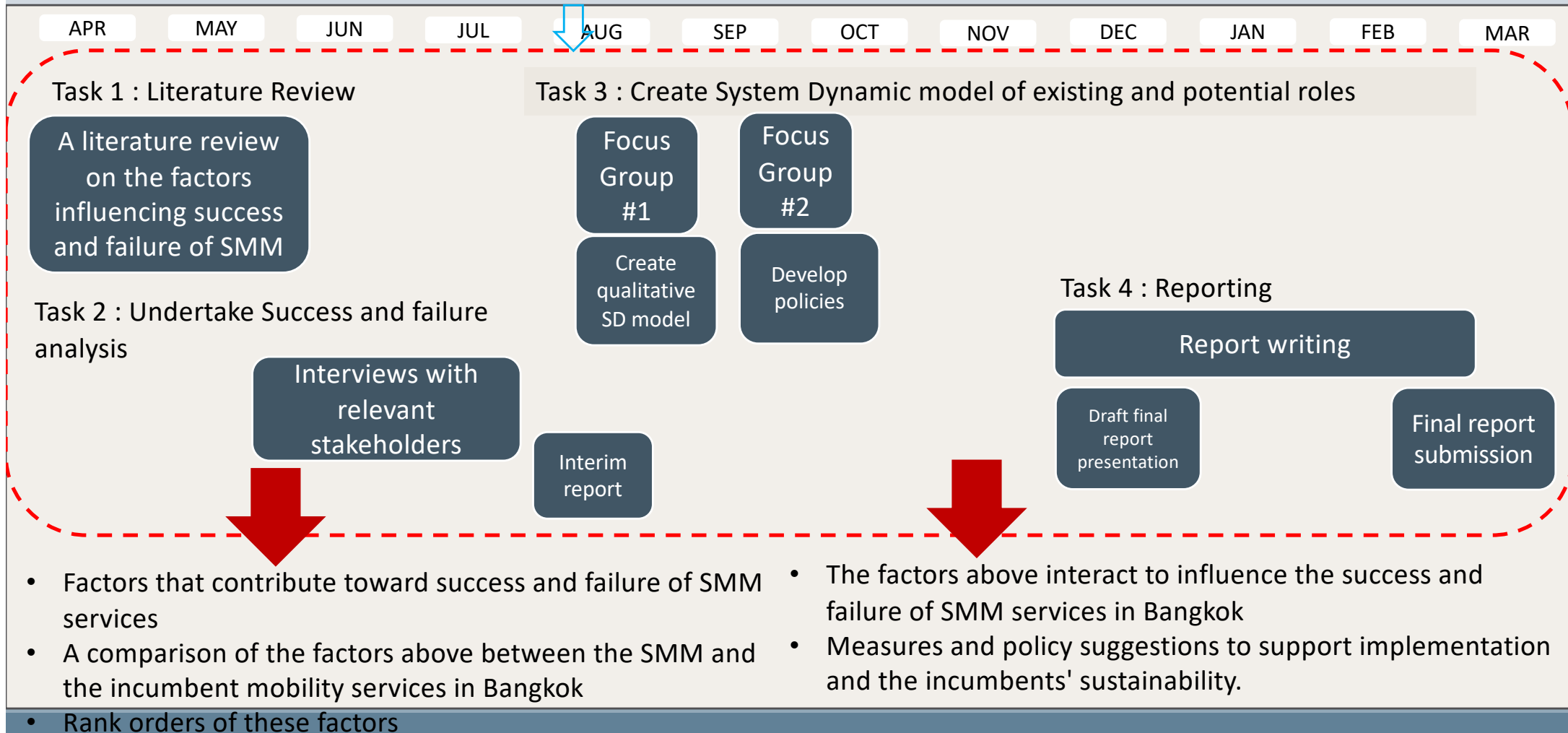


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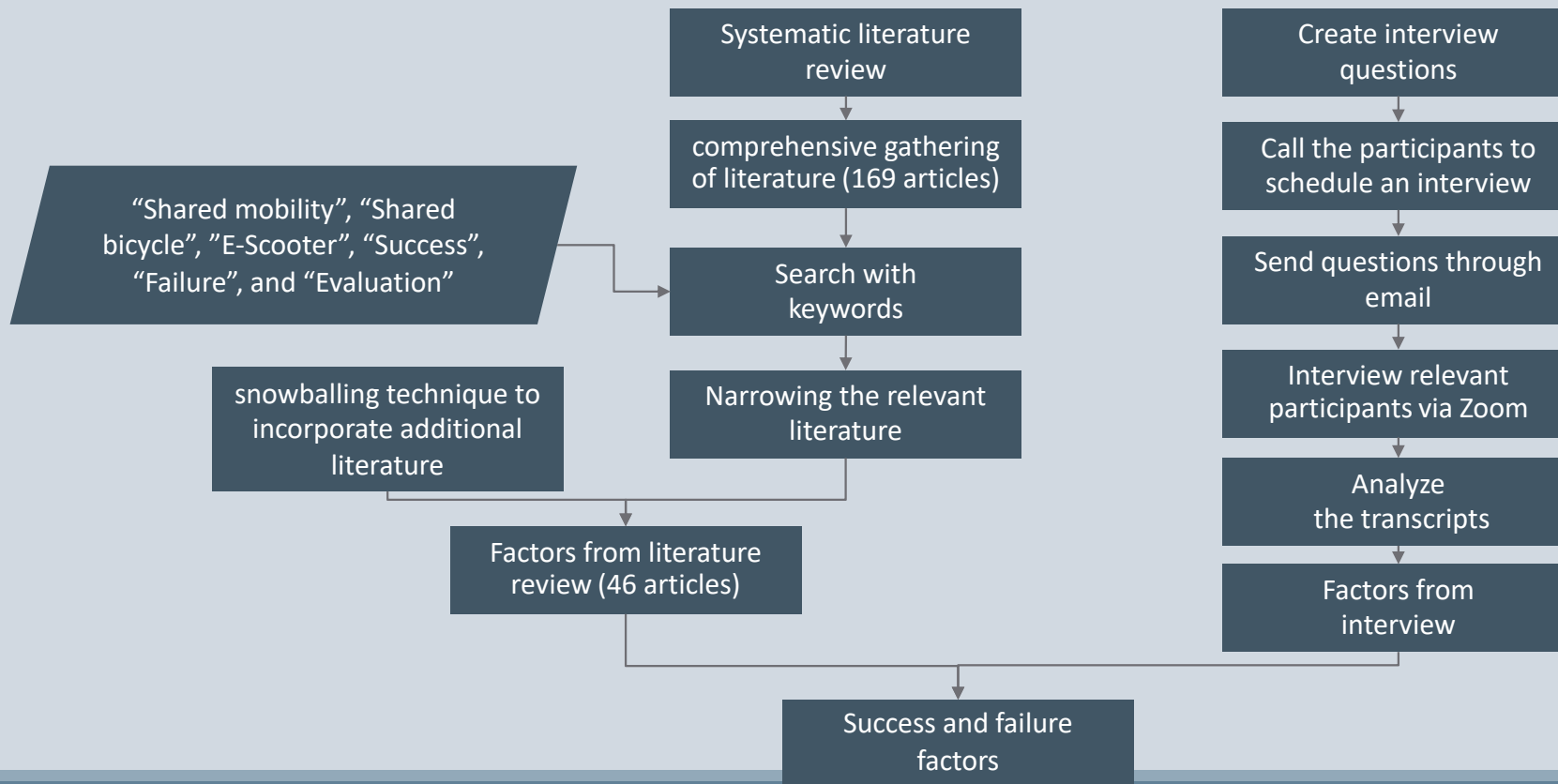


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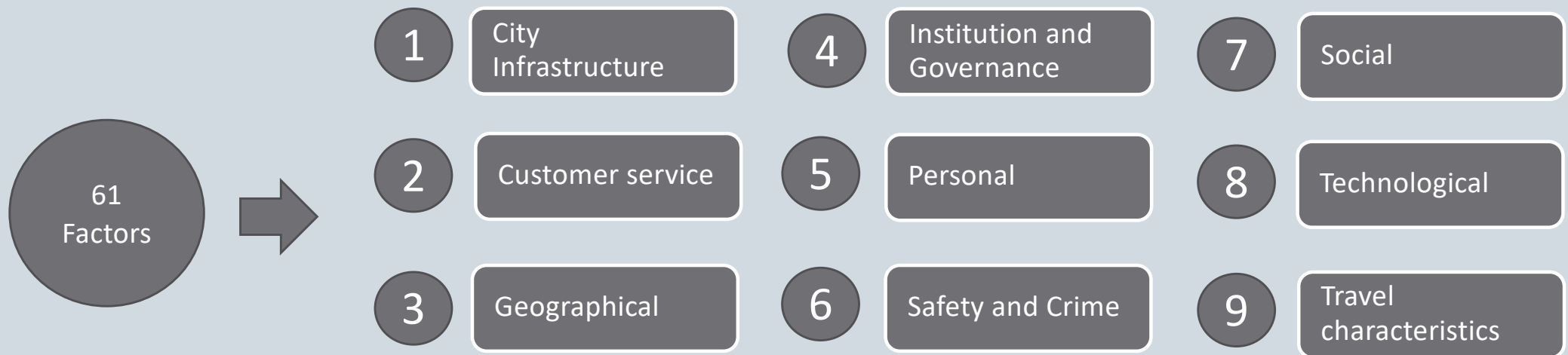
Research Process



Success/failure factors identification



Factor Grouping from Literature Review



Examples of factors:

- (+) Availability of infrastructure (bike lane, parking)
- (-) Lack of SMM awareness
- (+) Short trip usage
- (-) Poor enforcement policy regarding traffic rules

Interview Questions

- The roles you and your organization play in the fields of public transport and shared micro-mobility in Bangkok.
- Familiarity with shared micro-mobility
- What roles does shared micro-mobility play in people's commuting in Bangkok?
- Evaluation of the existing/previous SMM services in Bangkok
- What would makes shared micro-mobility in Bangkok successful? How will it affect the transport system of the city?
- The successful aspects of SMM? What measures will help making them even better?
- What are the obstacles of SMM? What measures will help removing these obstacles?
- As motorcycle taxis are widespread in Bangkok, what factors contribute to this popularity?
- Which are the existing government policies or measures that affect the SMM? How?
- What should be proposed to support shared micro-mobility? How will these policies affect the business?

Interview Schedule

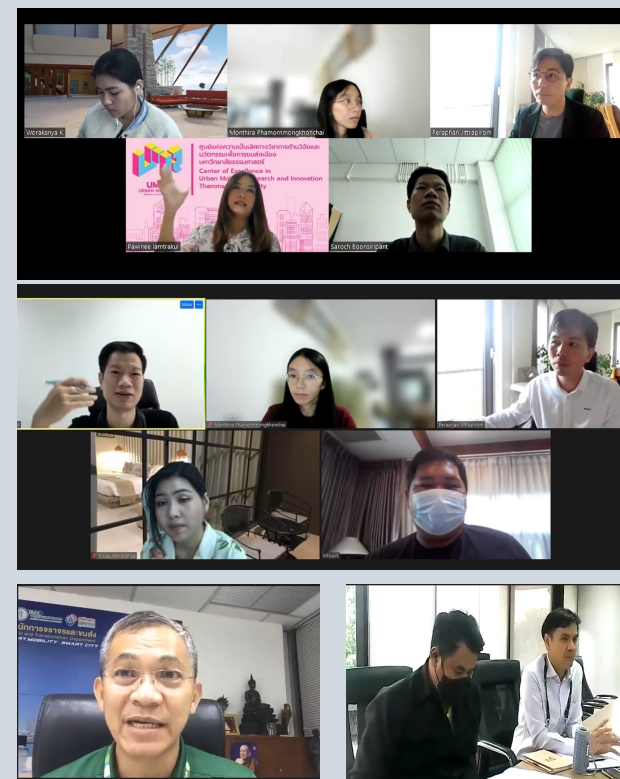
- ☐ Started: May 2022
- ☐ Finished: July 2022
- ☐ All participants: 25
- ☐ Online interview via Zoom

June						
Su	Mo	Tu	We	Th	Fr	Sa
		●	● 1	● 2	● 3	4
5	● 6	●● 7	●● 8	● 9	●● 10	11
12	13	●● 14	● 15	●● 16	17	18
19	20	21	●● 22	23	● 24	25
26	27	28	● 29	30		

July						
Su	Mo	Tu	We	Th	Fr	Sa
					● 1	2
3	4	5	●●● 6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

List of participants

Stakeholders	Organization
Service providers	PunPun, PMCU, Anywheel, Haupcar, Beam Mobility
Users	Thailand Walking and Cycling Institute Foundation, Bike sharing users, e-scooter sharing users
Academics	Chulalongkorn University, Thammasat University
Consultants	InfraTrans Consultants, Meinhard, A21
Insurance company	Viriyah insurance
Regulatory/Enforcement Agencies	Department of Land Transport, Traffic Police, Office of Insurance Company (OIC)
Local authority	Bangkok Metropolitan Administration
Planning agency	Office of Transport and Traffic Policy and Planning (OTP)
Mass transit operator	BTS
Motorcycle taxi	Motorcycle taxi association



Categories of factors (from interview)



- (+) More service points of shared micro-mobility with large coverage.
- (+) Environmental awareness of users
- (-) Safety concerns
- (-) Poor infrastructure (lack of connectivity and facilities)

Shared Mobility Seminar

- ❑ July 7, 2022 at OTP
- ❑ “MaaS, carsharing, and micro-mobility services: on-going research and how they can contribute to a more sustainable transport system”
- ❑ OTP is proposing a project to JICA.
- ❑ MaaS consortium is in consideration.



Next Steps

- Create causal loop diagram based on the stakeholder interview results.
- Focus group #1 on August 24, 2022.
 - Outcome:
 - Relationship between success and failure factors and relationship
 - SMM and the incumbent mobility services in Bangkok
 - Rank orders of these factors

Comments

Comments and Questions	Actions
When examining successful and failure cases by literature survey, it is desirable to consider the relationship among the characteristics of culture, legal system, and infrastructure development in each country. In addition, it is also preferable to examine the literature comparing the situation before and after the COVID-19 pandemic.	<ul style="list-style-type: none">• The mentioned aspects were discussed by the participants during the interviews.• Thank you. We will consider the impact of COVID-19 on the SMM as well.
This is a very timely study focusing on shared micro-mobility (SMM) services, which are being introduced in many parts of the world. It is extremely important to explore the causes of SMM successes and failures, and a variety of approaches may be proposed for this purpose.	<ul style="list-style-type: none">• Thank you very much for your comment. The identified factors will be used to develop policies to support SMM from the results of our research.

Comments

Comments and Questions	Actions
<p>It is better to treat the users who receive the SMM services as the user representatives when conducting the interview survey. In addition, it is deemed desirable to examine the contents of the survey so that quantitative evaluation such as analyses from the standpoints of economic efficiency, traffic safety and causal structure can be carried out.</p> <p>Although system dynamics modeling will be used in this research, it is also preferable that you conduct some quantitative analyses according to the contents of the interview surveys.</p>	<ul style="list-style-type: none"> • We will consider descriptive analysis of our results and frequency analysis to determine how many times each factor was mentioned by the participants. • Importance/priority of each factor will also be determined. However, the quantitative analysis of the system dynamics is not in the scope of this study as we aim to determine proper policies to support the SMM services in Bangkok.
<p>I have doubts about your research schedule because the final report of Task 4 proceeds before task 3's modeling. You would be better off reconsidering the schedule.</p>	<ul style="list-style-type: none"> • We have adjusted our research schedule accordingly.

Comments

Comments and Questions	Actions
<p>I expect a variety of policy proposals, but the challenge is what criteria to use to define success or failure. At the very least, it should not be evaluated based on the profitability of the SMM alone, but rather on whether it is functioning as part of the transportation system.</p>	<ul style="list-style-type: none"> • Success scenarios/definitions were developed during the interview process. • Based on the interview results, the success of SMM includes the business sustainability, legal endorsement, safety, equity, etc. • The starting points of the definitions are from literature review and shaped by the interview results; For examples; one stakeholder believe SMM's success is to become part of the alternative of the traveler, more detailed description will be included in the results.
<p>What is your definition of success and failure of SMM services, respectively?</p>	
<p>You are going to conduct interviews (about 20) with stakeholders, including service providers and decision-makers, to identify factors affecting the success or failure of SMM in Bangkok, but you are not going to interview regulators? I believe that interviews with regulators should be conducted to consider whether they should intervene on externalities related to the service.</p>	<ul style="list-style-type: none"> • Thank you. We have included three regulators including Office of Insurance Company (OIC), Traffic police, and Department of Land Transport.

Comments

Comments and Questions	Actions
<p>Studies on the implementation of transport services focus on whether the introduction of new SMM services reduces the external costs that land transport brings. In addition, experiments on targeted university campuses may simply reduce parking spaces and travel times and may also worsen the environment if the mode of transport is switched from walking to scooter-sharing. Therefore, careful consideration should be given to the details of any changes to transport before and after the introduction of the service.</p>	<ul style="list-style-type: none"> The case specific details are not the focus of our research, but we aim to pick up general reflection and evaluation of stakeholders. This is indeed a scope and limitation of our research that should be mentioned more specifically.
<p>The role of the Multilevel Perspective framework (MLP) is unclear. There may be limitations in clarifying causal relationships based on subjective interviews. Objective analysis or evaluations should also be considered.</p>	<ul style="list-style-type: none"> MLP was included as one of several possible frameworks to use in this research. We have since move away from MLP and now using the predictor of new product performance framework (Henand & Szymanski, 2001) that is better fit with the objectives of our project.