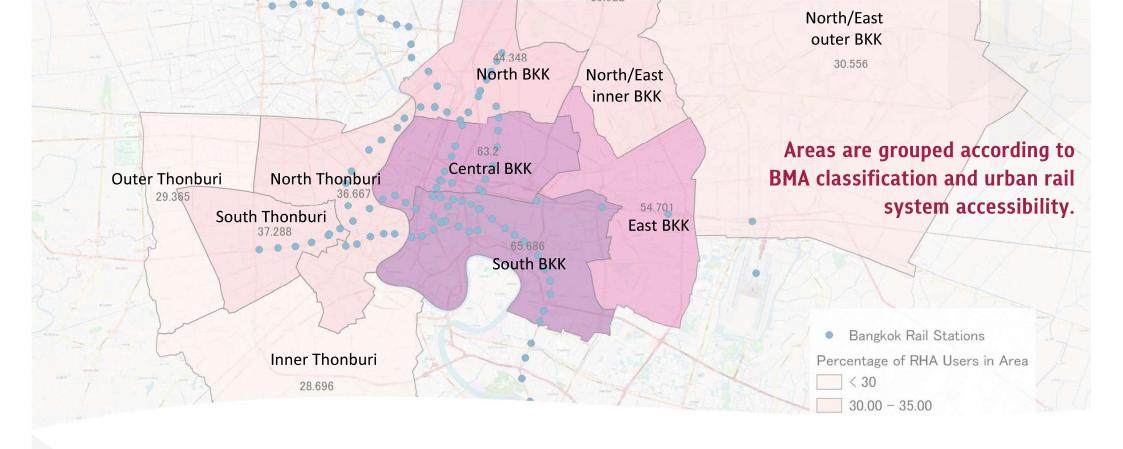
RHS survey in Bangkok

Phathinan THAITHATKUL (Lamp)
Transportation Institute, Chulalongkorn University
24 March 2021

Contents

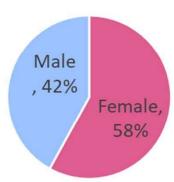
- Result of Quick Survey (Q1)
 - Proportion of RHA users
 - RHA Users Characteristics
- Result of Full Survey (Q2, Q3, Q4)
 - RHA Trip Characteristics
 - Comparison between trips that included and didn't included RHA
 - Comparison between 4-wheel and 2-wheel RHA trips
 - Frequency of RHA Use
 - Mode Substitution



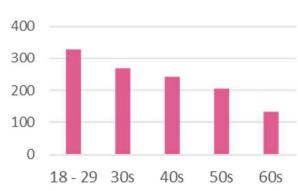
Result of Quick Survey (Q1)

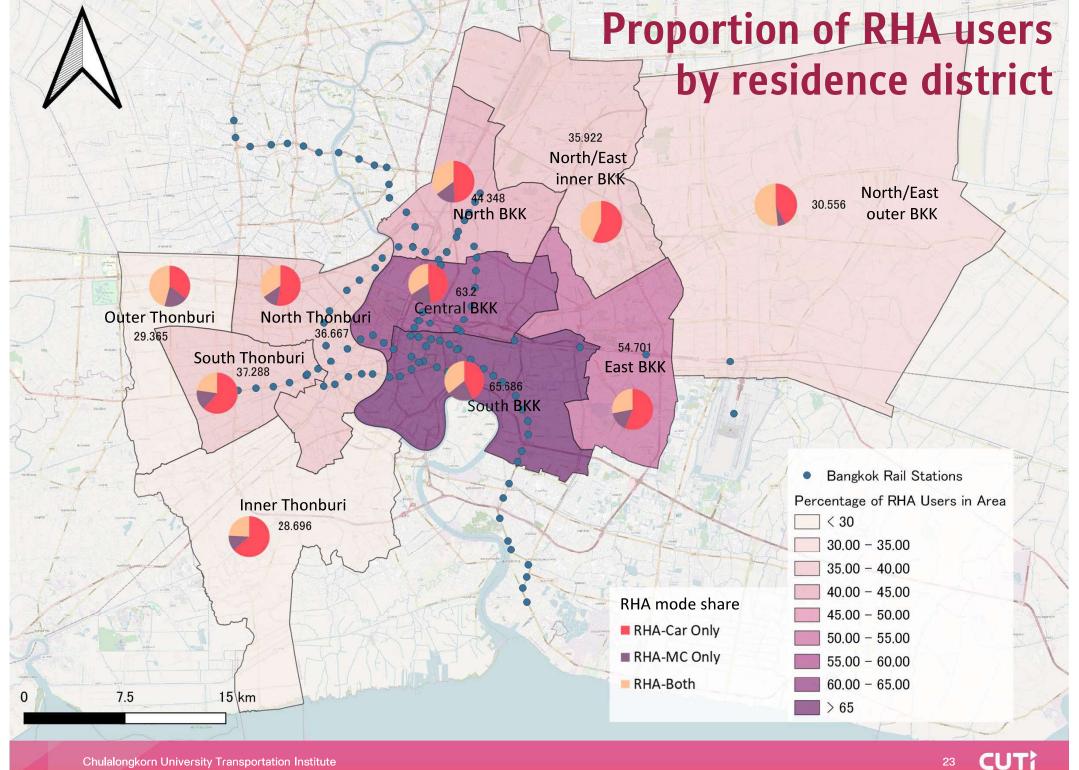
Total samples 1179
Samples in each area >100





Age Distribution





RHA Users Characteristics

Model: Binary Logistic Regression

Dependent variable: RHA adoption

Have used RHA (1), Haven't used RHA (0)

RHA Users

Socio-economic factors

- are younger
- don't own private MC

Residential factors

 live in area with high bus density

Travel-related factors

- are taxi users
- have many travel options
- have shorter travel time

	Catimata	Odd Datio
	Estimate	Odd Ratio
(Intercept)	2.14E+00***	_***
Age	-5.19E-02***	9.49E-01***
Land Price	-2.34E-06	1.00E+00
Taxi	1.97E+00***	7.19E+00***
Limited Travel Option	- 2.53E+00***	7.98E - 02***
No Travel Option	3.63E+02	3.15E+157
Bus Path Density	8.96E-03**	1.01E+00**
Private MC	-7.59E-01**	4.68E-01**
Average Daily Travel Time	-1.51E-02***	9.85E-01***
Owned Private Car	-1.05E-01	9.00E-01
Private Car	-3.18E-01	7.27E-01
Land Price : Average Daily Travel Time	1.21E-07**	1.00E+00**
Average Daily Travel Time : Owned Private Car	7.10E-03*	1.01E+00*
Land Price : Limited Travel Option	9.32E-06.	1.00E+00.
Land Price : No Travel Option	-9.18E-03	9.91E-01
Age : Limited Travel Option	2.73E-02.	1.03E+00.
Age : No Travel Option	-6.40E+00	1.66E-03

McFadden Adj R2

0.137

Results of Q2, Q3, Q4

Questionnaires for RHA users

Q2: Information about general adoption of RHA

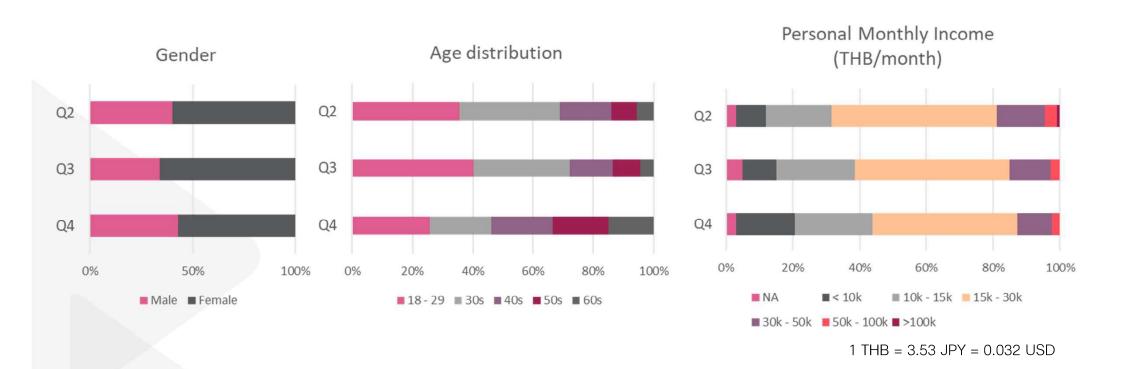
Q3: Information about the most recent trip that included RHA

179 samples

200 samples

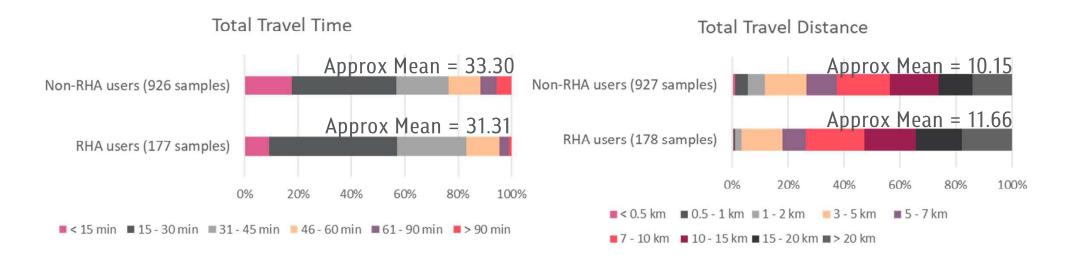
Questionnaire for Non-RHA users

Q4: Information about the most recent trip and Reasons for not using RHA 936 samples



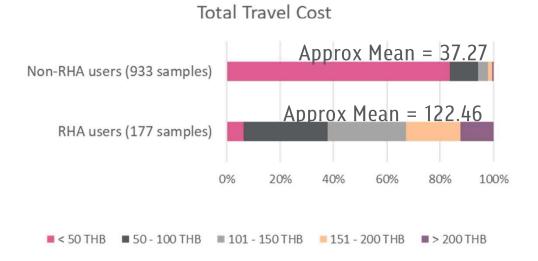
Trip Characteristics: Comparison between trips that included and not included RHA

Results from RHA users (Q3: most recent trip that included RHA) and Non-RHA users (Q4: most recent trip)



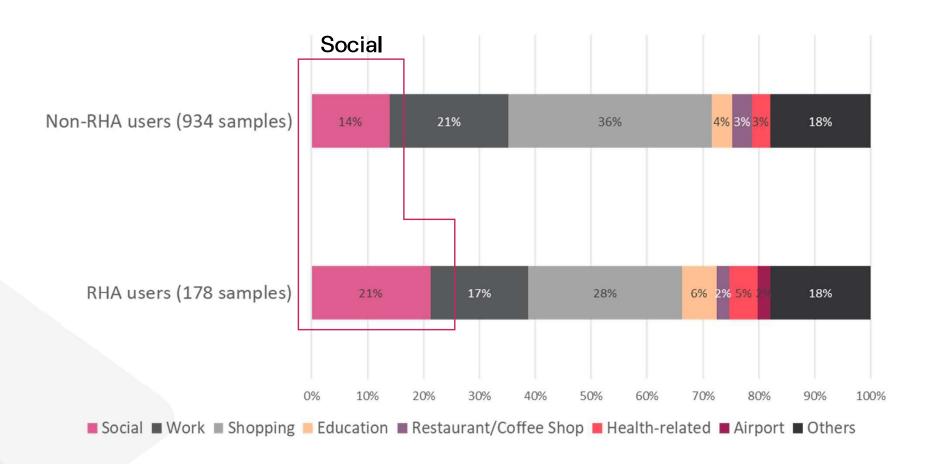
Trips that included RHA are

- Shorter travel time
- Longer travel distance
- More expensive



Trip purpose

Results from RHA users (Q3: most recent trip that included RHA) and Non-RHA users (Q4: most recent trip)



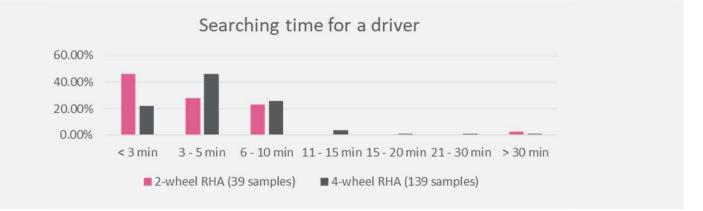
RHA trip quatitative characteristics

Comparison between 2-wheel RHA and 4-wheel RHA

Results from RHA users (Q3: most recent trip that included RHA)

Searching time for a driver Approximate mean

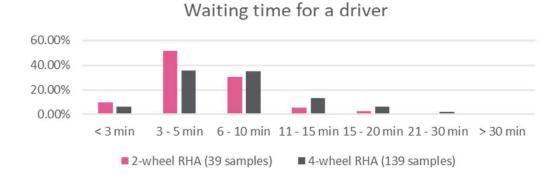
2-wheel 4.43 < 5.24 4-wheel



Waiting time for a driver

Approximate mean

2-wheel 5.78 < 7.80 4-wheel



In-vehicle travel time

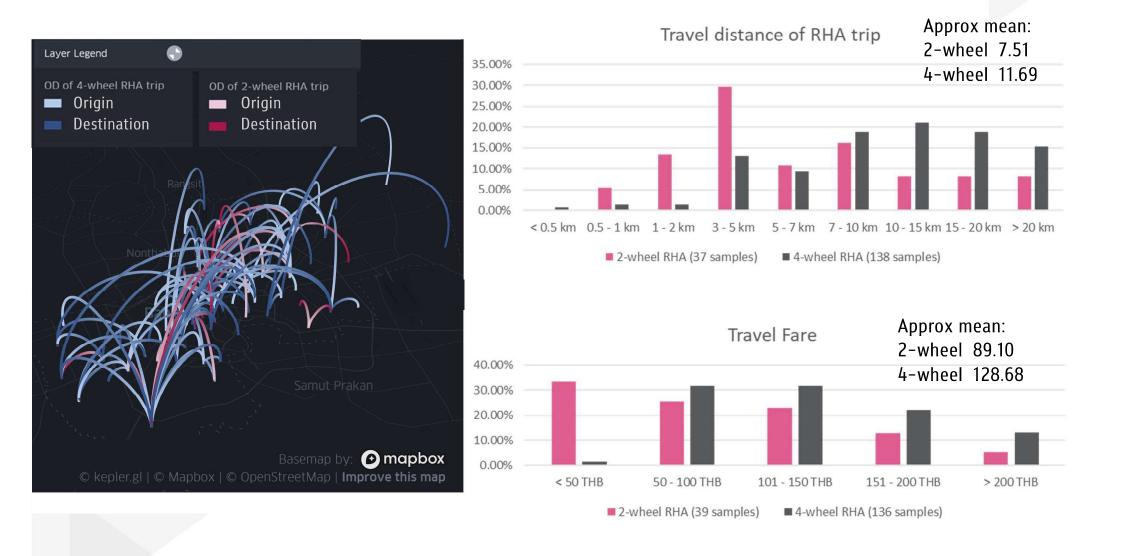
Approximate mean

2-wheel 20.96 < 31.75 4-wheel



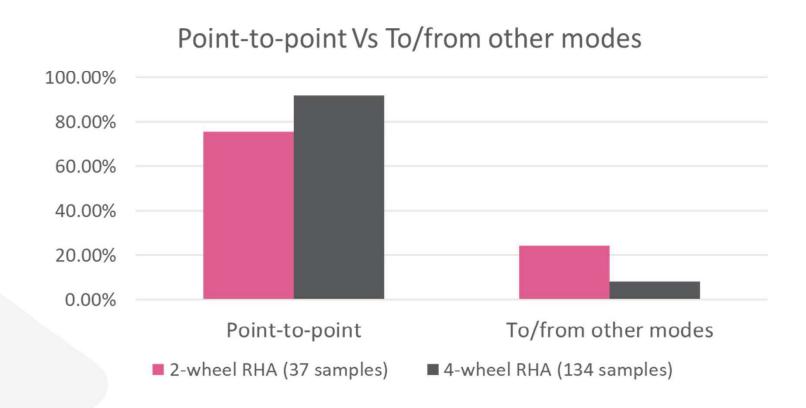
RHA trip quantitative characteristics

Results from RHA users (Q3: most recent trip that included RHA)



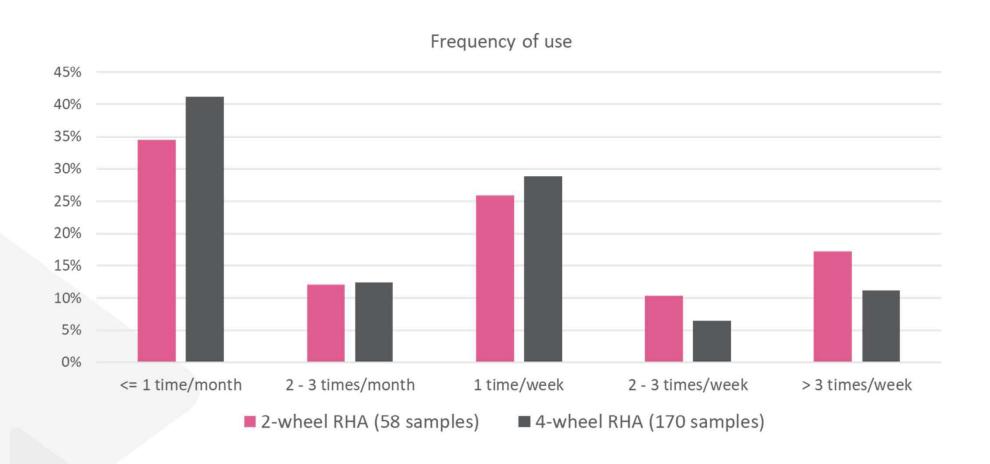
RHA trip qualitative characteristics

Results from RHA users (Q3: most recent trip that included RHA)



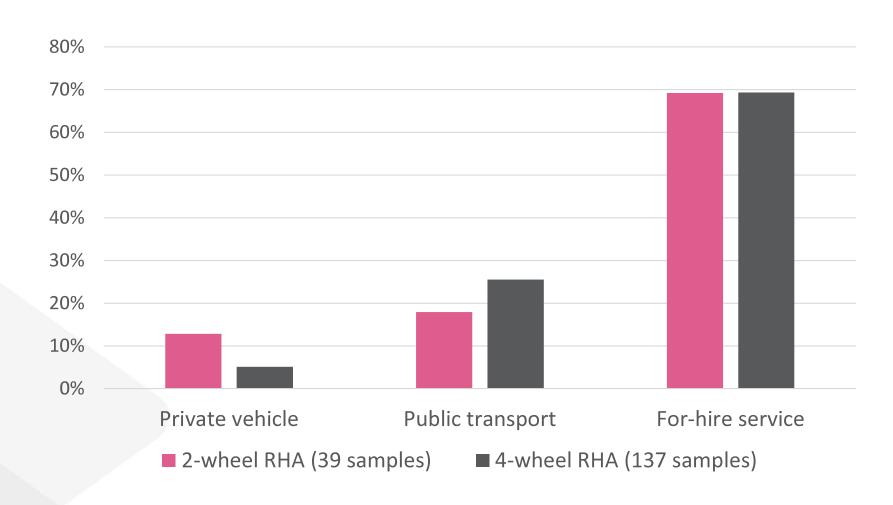
Frequency of use

Results from RHA users (Q2: General adoption of RHA)



Mode substitution

Results from RHA users (Q3: most recent trip that included RHA)



Thank you