THE STUDY OF CONSUMER BEHAVIOR AND SELECTION CRITERIA ON ALTERNATIVE TAXI SERVICE IN BANGKOK

BY

MR. WORAPONG ARCHARWORARIT

AN INDEPENDENT STUDY SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF SCIENCE PROGRAM IN MARKETING
(INTERNATIONAL PROGRAM)
FACULTY OF COMMERCE AND ACCOUNTANCY
THAMMASAT UNIVERSITY
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ENTITLED

THE STUDY OF CONSUMER BEHAVIOR AND SELECTION CRITERIA ON
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was approved as partial fulfillment of the requirements for
the degree of Master of Science Program in Marketing (International Program)

on......... 6 JUN 2016 ....

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Independent Study Advisor	Professor James G. Hutton, Ph.D.
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ABSTRACT

The study of "Consumer behavior and selection criteria on alternative taxi service in Bangkok" has been selected to be an independent study topic which focused on the societal issues. This study is a contemporary topic in applied marketing. The objectives of this study are to understand the customer behavior in term of frequency of using, period of using, purpose of using etc., to determine selection criteria on choosing alternative taxi service and the most important factor that customers concerned, and to compare the customer satisfaction between Uber and Grabtaxi.

Both exploratory research and descriptive research were conducted during the study. Qualitative research was collected by conducting a focus group with 5 participants and in-depth interview with 6 alternative taxi users to discover their behaviors, selection criteria, and also their satisfaction toward alternative taxi service in Bangkok. Quantitative research was complete by 126 respondents via both online and offline questionnaires. Lastly, data from quantitative survey was input to SPSS program to gather some essential statistic test.

The study showed that the most important factors that people always concern while choosing taxi are safety, driver's manners, and convenience. In term of

customer satisfaction, all ten factors that were studied can explain customer satisfaction by 28%. In addition, the study also compared satisfaction between Uber and Grabtaxi and found that people are more satisfied with Uber than Grabtaxi. The key finding from this study will help both companies to better understand their customers. They could use these data to develop new business strategies to improve their service quality.

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Worapong Archarworarit

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CHAPTER 1
INTRODUCTION

Bangkok is a big city that consists of more than 8.5 million residents. People travel around town by using many type of transportation. One of the main public transportation that has been used by most of the Bangkok residents is taxi service. However, there are lots of problems happen to the users from taking this traditional taxi service such as refusal of passenger's request, impolite manners of drivers, taking the indirect route, going to the wrong destination, reckless driving etc. And the numbers of complaints keep increasing every year and seem to have no any improvement.

Recently, the new alternative taxi service called Uber and Grabtaxi have come up with the new ways of service in order to solve all those unsatisfied services. Both of them start operating their business in Thailand since 2011 and received lots of positive feedbacks from their customers because the overall service is better and gain more satisfaction than the traditional taxi. However, Uber and Grabtaxi still have limitations on their services as they are mobile application based; therefore, customers need to have smartphone to get to their ride. Moreover, their services still have some faults and got complaints from the current customers such as shortage of drivers in the peak hours, uncertainty of service quality, unfair surge rate pricing etc.

Therefore, this study will help existing players and also potential new players to understand customers' behavior and selection criteria on alternative taxi service in Bangkok in order to develop new business strategies to satisfy customer needs. The research will start from identifying current customer profile, and then understanding their behavior and selection criteria by developing specific research questions.

1.1 Research Objective

The purpose of this research is mainly to explore the consumer behavior toward alternative taxi in Bangkok by finding insight on what consumer think and why they choose to use alternative taxi service instead of traditional taxi by finding the following objectives;

1. To understand the customer behavior in term of frequency of using, period of using, purpose of using etc.
2. To determine selection criteria on choosing alternative taxi service and the most important factor that customers concerned
3. To compare the customer satisfaction between Uber and Grabtaxi

CHAPTER 2
REVIEW OF LITERATURE

There is a little specific research about alternative taxi user behavior and their selection criteria at the time of the study, since this kind of service is quit new to Thai society and also other countries. The following reviews provided some study of consumer behavior, selection criteria, and satisfaction in similar transportation service which can also use as guideline for this study and also provided some current situations related to alternative taxi service.

Study of consumer behavior

Techarattanased(2015) studied about consumer behavior on metered taxi service in Bangkok and the result showed that most of the taxi users are female aged between 19 to 28 years old who does not own car and has low income. They normally take taxi 5 to 6 times a month and spend 75 to 100 baht per trip on average. People travel during 5pm to 9pm the most. The main reason of using taxi instead of other transports is fast and comfort. The study also showed that people with different gender, education level and monthly income have significant different usage behavior. For example, people who have higher income tend to use taxi more frequent than people who have lower income. Additionally, the research found that quality of service is a main factor which leads to repurchase intention.

Study of customer satisfaction

According to the study about customer satisfaction of minicab taxi service in Cape Coast, Ghana by Horsu & Yeboah(2015), six variables which are reliability, safety, comfort, affordability, driver behavior, and continuous service were tested to see the relationship with customer satisfaction by using Pearson correlation. The result indicated that all these six variables have a significant relationship with customer satisfaction. Additionally, multiple regression analysis was also used to find the positive and negative effect of six variables toward customer satisfaction. The result showed that reliability, comfort, affordability and continuous service had positive and significant effect, while driver behavior has negative effect and safety is

not significant effect. The analysis also indicated that customer satisfaction was 53% contributed from these variables which mean another 47%, are influenced by other variables.

Study of Grabtaxi service in Bangkok

Ackaradejruangsri(2015) studied about Grab taxi service in Thailand. He stated that Grabtaxi is an alternative ride service in Thailand that help improving satisfaction of both market demand and market supply. Thai passengers can get prompt ride, safe ride and comfortable ride which are the most influencing factors for selecting taxi. Likewise, Taxi driver enjoy with multiple channels to connect with passengers and get higher income which supported to be the motivation to participate with Grabtaxi. However, the study showed that some passengers hesitate to adopt due to the major concern related to perception, accessibility and technology adoption.

Comparison of service quality between Uber and Grabtaxi

Geno(2015) compared the service quality between Uber and Grabtaxi. He stated that Grabtaxi outperformed Uber in every aspect, especially in customer service. Uber has an issue with GPS which sometimes do not indicate precisely passenger's location. Another issue is Uber charged tolls fee that never taken. Although Uber refunded this mistaken charge back, passenger still annoyed to report the issue to their contact center. In term of price, Grabtaxi charged higher rate than Uber but once demand is surplus, surge rate multiplier will be applied and Uber's price will be risen which is one of the biggest complaints from users. However, both services are still the better choices than the traditional one.

Uber in other countries

In Norway, UberPop, the same version as UberX in Thailand, is quite popular because it costs cheaper than normal taxi ride, while Thai Uber costs a bit higher. In addition, people are fed up with negative situation with taxis and feel more safe with Uber. Two-way rating system is a mechanism behind the great experiences with Uber and makes almost zero incidents with over 150,000 drivers worldwide (Nilsen, 2015). Both drivers and passengers were asked to rate 1 to 5 scale after each trip which is

also the same method in Thailand. Driver who has accumulated score less than 4.2 is at risk of being cut from the service. On the other side, passengers who were rated poorly or got less than 3 also have a high chance not getting a ride.

Current situation of taxi in Bangkok

According to the Department of Land Transport (DLT), complaints of Bangkok taxis are one of the common issues in Thai society and numbers of complaints keep rising every year. There are more than 10,000 complaints from taxi passenger in Bangkok in the past 5 months during October to February 2015 (Rattanadilok, 2014). Refusal to accept passengers ranks the top complaints against taxi driver while the second was reckless driving and followed by failure to deliver passengers. This article showed the poor service quality of traditional taxi that has been stay with Thai society for a long time and seems to have no any improvement.

The issue of Uber service in Bangkok

Although Uber currently operated in Thailand, it is still banned from the Land Transport Department (Fredrickson, 2015). The major concern from the department is safety because Uber's drivers were not properly registered to provide public service; therefore, if any accidents occur during the journey, the passenger will not cover by insurance. Additionally, the method of payment is also not in line with the standards as users have to pay through credit card only which could cause risk to the user. Uber is now facing the same problem with others country in Southeast Asia except Philippine where Uber has completely been issued a license. Currently, Uber is in the first round of negotiation with government over its ride-sharing service permission.

Resistance and protest against Uber and Grabtaxi in other countries

In Jakarta, Indonesia, thousands of taxi drivers protested against alternative taxi, including Uber and Grabtaxi. The main reason is that both companies have made them earned less money. Moreover, these alternative taxis do not face the same cost and regulation as traditional taxis do. The perception of government has divided over the issue. The transport ministry has decided to ban them, since they are not registered as public transport. However, the communication ministry said they are legitimate to

operate. It is still unclear in Jakarta that this kind of service is legal or not, but both of Uber and Grabtaxi are still available for a service.

Uber seem to cause similar problems to transportation industry across the world after it has expanded aggressively in recent years. The conflicts are mainly with regulators and traditional taxi companies. In France, after Uber launched their service in Paris on early 2014, Directorate-General for Competition, Consumer Affairs and Product Quality/Safety (DGCCRF), which is an agency of consumer protection in France, considered to ban Uber as it has created the unfair competition to the industry (Jolly & Scott, 2014). Uber claimed themselves as a ride-sharing service which is not the same service as taxi. However, the government stated that carpooling with profit was considered as taxi and violated an existing regulation because Uber driver do not hold the public driver license, provide insurance for the passenger, and pay the right taxes rate.

In New Delhi, India passenger was raped by the Uber driver with the criminal record of sexual offences (Parkinson, 2014). Within one week of this rape scandal, more than 7,000 customers have called on Uber to conduct on driver background in order to make sure that driver are clean from the criminal records and would not be harmful to the passenger. However, two years after the incident, Delhi's transport department mention a number of things that Uber violated such as type of driver's license, installation of GPS tracking system, quality of driver etc. and then banned Uber from all type of their service activities.

New service of Alternative taxi

Uber has introduced its new food delivery application "UberEats" in mid-March 2016 after it has been testing under its main application, Uber app, for 18 months (Kosoff, 2016). At first launch, the application is available in only 13 cities such as New York, Los Angeles, and Paris etc. UberEats offers two options for their customers to order food. The first one is like any others food delivery services, in which customers can order food from any of hundreds local restaurants and Uber would take care of delivery. The second option is "instant delivery" menus which highlighted on 2-3 lunch menus that prepared by a group of restaurants and will be

delivered in 10 minutes or less. This new service is a big challenge for Uber as food delivery industry is now full of competitive players, however, UberEats still benefit from its previous reputation.

On the other side, Grabtaxi rebranded itself as Grab at the beginning of year 2016 after operated under brand Grabtaxi for more than 4 years. The main reason is because Grab would offer more variety of transportation beside taxi. They are now providing two more kind of transports which are private car (GrabCar) and motorbike (GrabBike). In addition, Grab also launched GrabExpress, offering delivery of medium-size parcels or documents within 30 kilometers distance by motorbike. User can set pick up and drop off location through application like using Grabtaxi service. Moreover, the application allows you to track your biker until he/she reach to the destination. Currently, Grab manages more than 1.5 million transactions per day in 28 cities of 6 countries in Southeast Asia (Lim, 2016).

CHAPTER 3
RESEARCH METHODOLOGY

3.1 Research design

The research will be conducted by using both exploratory and descriptive research as following;

1. Exploratory research

The exploratory research will be consisted of focus group and in-depth interview in order to identify the current issues of the alternative taxi. Passenger's attitude towards alternative taxi will be explored in this stage in order to identify the influential factors. These findings will be beneficial to design questionnaires for descriptive research. Details of all research methods are described as below.

a. Focus group and in-depth interview

The focus group will be conducted with 5-6 participants in 1 session. Participants will be recruited according to criterion stated in the sampling selection part, which are basically related to target consumer profiles. The session of focus group will take approximately 45-60 minutes depend on the situation.

b. In-depth interview

In part of in-depth interview, there will be 6 sessions of customer interview, 3 sessions of Uber users interview and 3 sessions of Grabtaxi users interview. The criterion for choosing the interviewee will be the same as focus group. The interview will take around 15 - 20 minutes per session.

2. Descriptive research

A descriptive research will be used to describe the characteristics of the target customer. It can test consumers' attitudes, needs and satisfaction. These will be conducted by using questionnaires survey.

a. Questionnaire

Questionnaires will be distributed through both offline and online channels in order to receive at least 120 to 150 respondents from current users. Respondents will be recruited according to criterion stated in the sampling selection part.

3.2 Sample selection

Due to time constraint of this study, the sampling method to recruit participants will be convenience sampling, so the result cannot be used to make generalizations about the population of interest.

    a. Focus group

The focus groups will be divided into two groups. Each group will consist of both Uber and Grabtaxi customers who are the moderate to heavy users in order to bring more discussion topics to the group.

    b. In-depth interviews

6 respondents will be recruited for in-depth interview. Three respondents will be Uber users and other three respondents will be Grabtaxi users.

    c. Questionnaire survey

Questionnaire will be distributed through both online and offline channel. Target respondents are male or female who lived in Bangkok and used taxi as their main transportation. Numbers of respondents are expected to be at least 120 in order to make the sample size significant enough to run in SPSS program.

3.3 Data analysis

    1. Focus group and in-depth interview

The data from qualitative research will be analyzed to find out consumer insight to match with the objective of the research.

    2. Questionnaire survey

Quantitative research will be collected and interpreted by using SPSS program to run statistic test.

3.4 Project timeline

This study started from October 16th, 2015 to April 6th, 2016.

3.5 Limitations of the study

- Due to the limited budget and time constraint, the sampling method to recruit participants will be convenience sampling, so the result cannot be represent the entire population.
- The location for recruiting respondents will take place in some specific area where the demand for taxi is normally high.
- The size of the sample of the survey may be too small to represent the entire population and if the criterion of sample changed, the result may also change as well.
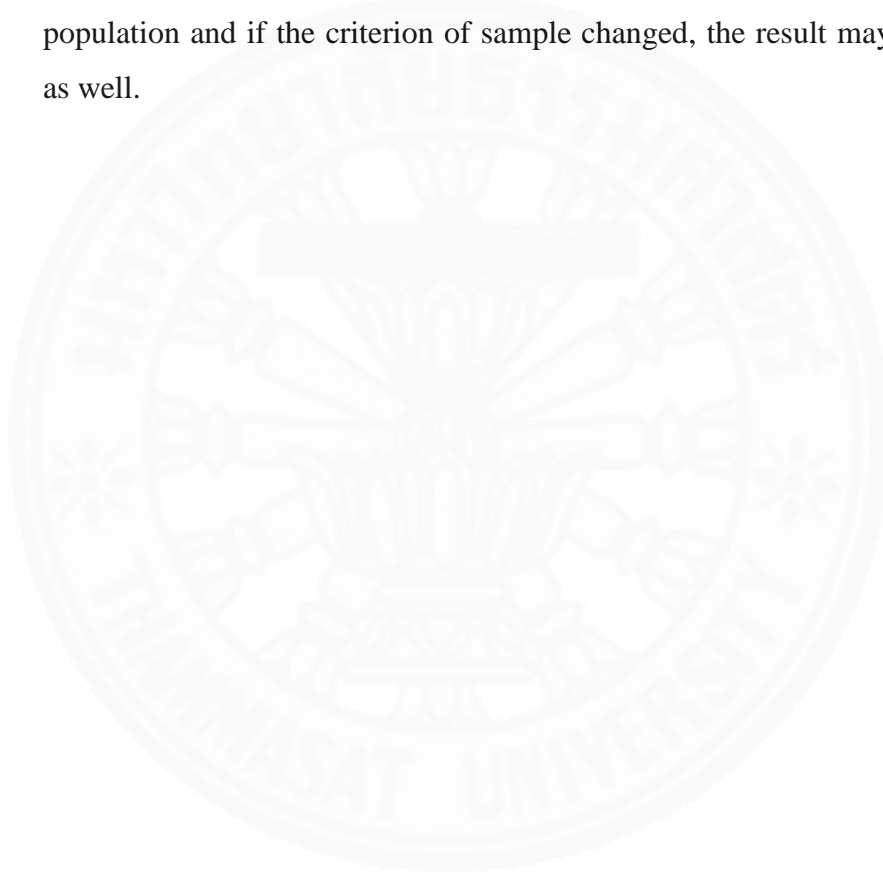
CHAPTER 4
RESULTS AND DISCUSSION

4.1 Key finding from exploratory research

a. Focus group

One focus group was conducted during the first week of January 2016 with 5 participants who lived in Bangkok and used to experience Uber and Grabtaxi service in the past few weeks. The purpose of this focused group is to understand their usage behavior and selection criteria on taxi service.

Key finding from focus group

Most of the participants choose to use Uber and Grabtaxi because they had bad experiences with traditional taxi such as refusal for their destination, impolite manners of driver, reckless driving etc. Since Uber and Grabtaxi are available in Bangkok, participants are very delighted to have more choices to take beside traditional taxi. However, both of new players still had some faults. Many participants had a hard time to call for their service during the peak hours which are between 6.00 to 9.00 in the morning and 16.00 to 20.00 in the evening. Another issue is the density of the driver that usually dense in the downtown area, so people who stay around the suburb are hard to reach to their service.

There are several factors that participants give importance when they decided to choose taxi. However, 10 factors which were mentioned the most are safety, convenience, price, cleanness, driver's manner, appearance of car, car type, waiting time, payment method and promotion. Therefore, all these factors were listed into the questionnaires and asked to rate by using likert scale in order to measure into quantitative analysis.

b. In-depth interview

In-depth interviews were conducted during the second week of January 2016 with 6 interviewees and divided into 3 Uber users and 3 Grabtaxi users. The purpose

of this in-depth interview is to gather the insight of satisfaction toward each alternative taxi.

Key findings from in-depth interview

Uber users are satisfied because they feel more comfortable while travelling with Uber. The safety and cleanness of the car are better than traditional taxi because driver use their own car as taxi. They like the method of payment as they do not have to carry any cash or get upset for incorrect change. Price is also reasonable and not much higher than traditional taxi unless they were charged with surge rate during the peak hours. Driver also has better manners and never talks with the passengers unless you start first. However, there are some errors with their GPS since it is not definitely accurate, so passenger was charged for toll fee sometimes.

On the other hand, people who decided to choose Grabtaxi feel more safe because it recruited licensed drivers who were well-trained by the company. Taxis are also registered legally with department of land and transportation, so they have no worry on driver's record. Moreover, pricing method is not complicated like Uber and no surge rate during the peak hours. Promotion is also attractive and launched occasionally. However, Grabtaxi do not force driver to accept every cases, so users sometimes have to wait longer than usual. Additionally, the estimated fare is not accurate since it does not consider on traffic condition and people have to pay more than expected.

4.2 Key finding from descriptive research

Questionnaire was distributed to 160 respondents through both online and offline channel. However, only 126 out of 160 respondents are qualified as alternative taxi user. The rest respondents never experience Uber or Grabtaxi, so they are not able to give any further information. Demographic of all 126 respondents are shown in the following table.

		N=126	Percentage	Cumulative Percentage
Gender	Male	30	24%	24%
	Female	96	76%	100%
	Total	**126**	**100%**	
Age	Less than 23 years old	2	2%	2%
	23-28 years old	88	70%	71%
	29-34 years old	30	24%	95%
	35-40 years old	4	3%	98%
	more than 40 years old	2	2%	100%
	Total	**126**	**100%**	
Education level	Secondary school	2	2%	2%
	Bachelor's degree	82	65%	67%
	Master degree	42	33%	100%
	Total	**126**	**100%**	
Occupation	Business owner	6	5%	5%
	Office worker	100	79%	84%
	Government officer	12	10%	94%
	Merchant	4	3%	97%
	Unemployed	4	3%	100%
	Total	**126**	**100%**	
Income	Less than 15,000 baht	2	2%	2%
	15,001-30,000 baht	42	33%	35%
	30,001-45,000 baht	20	16%	51%
	45,001-60,000 baht	58	46%	97%
	More than 60,000 baht	4	3%	100%
	Total	**126**	**100%**	

Table 1: Summary of respondents' profile (n=126)

According to the table above, the sample consist of 126 respondents which divided into 76% of female and 24% of male.

In term of age, the majority is between 23-28 years old at 70%, followed by 29-34 years old at 24%. The rest are 3% of 35-40 years old, 2% of age over 40 years old and 2% of age less than 23 years old.

Most of the respondents graduated Bachelor's degree at 65%, while Master degree account for 33%. The minority graduated secondary school or below at 2%.

In part of occupation, more than 79% of respondents are office worker. Government officer accounts for 10% and business owner is only 5%. The rest of respondents are merchant and unemployed equally at 3%.

Among the respondents, the average income of majority is between 45,001 to 60,000 baht at 46%, followed by 33% of 15,001 to 30,000 baht. The range between 30,001 to 45,000 baht account for 16% while income over 60,000 baht is 3% and less than 15,000 baht is only 2%.

Consumer behavior

    a. **Travel purpose**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	work	24	19.0	19.0	19.0
	go home	76	60.3	60.3	79.4
	travel	26	20.6	20.6	100.0
	Total	**126**	**100.0**	**100.0**	

Table 2: Frequency distribution of travel purpose

According to the table 2, the majority of respondents take taxi for going home purpose by 60.3% or 76 respondents. Another 20.6% or 26 respondents use taxi as general travel purpose and the rest of 19% or 24 respondents take taxi for work purpose.

    b. **Time period of using**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	06.01-10.00	22	17.5	17.5	17.5
	10.01-14.00	8	6.3	6.3	23.8
	14.01-18.00	13	10.3	10.3	34.1
	18.01-22.00	56	44.4	44.4	78.6
	22.01-02.00	25	19.8	19.8	98.4
	02.01-06.00	2	1.6	1.6	100.0
	Total	**126**	**100.0**	**100.0**	

Table 3: Frequency distribution of time period of using

As shown in table 3, 56 out of 126 respondents or 44.4% take taxi during the peak hour at 18.01 to 22.00, followed by 22.01 to 02.00 at 19.8% or 25 respondents and 06.01 to 10.00 at 17.5% or 22 respondents. While using taxi during 14.01 to 18.00, 10.01 to 14.00, and 02.02-06.00 account for 10.3% or 13 respondents, 6.3% or 8 respondents, and 1.6% or 2 respondents, respectively.

c. Time spending

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 20 min	22	17.5	17.5	17.5
	21-40 min	72	57.1	57.1	74.6
	41-60 min	32	25.4	25.4	100.0
	more than 60 min	0	0.0	0.0	100.0
	Total	**126**	**100.0**	**100.0**	

Table 4: Frequency distribution of time spending

According to the table 4, 57.1% or 72 respondents spend time on taxi 21 to 40 minutes per trip, while 25.4% or 32 respondents spend time around 41 to 60 minutes. The minority of 17.5% or 22 respondents spends time less than 20 minutes and no any respondents take taxi more than an hour.

d. Using frequency per week

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 2 times	93	73.8	73.8	73.8
	3-5 times	29	23.0	23.0	96.8
	6-8 times	2	1.6	1.6	98.4
	more than 8 times	2	1.6	1.6	100.0
	Total	**126**	**100.0**	**100.0**	

Table 5: Frequency distribution of using frequency per week

As shown in the table 5, most of the respondents take taxi less than 2 times in a week at 73.8% or 93 respondents, followed by 3 to 5 times at 23% or 29

respondents. The remainders take taxi 6 to 8 times and more than 8 times at 1.6% or 2 respondents each.

e. Average fare per trip

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 50 baht	4	3.2	3.2	3.2
	51-100 baht	63	50.0	50.0	53.2
	101-150 baht	42	33.3	33.3	86.5
	151-200 baht	15	11.9	11.9	98.4
	more than 200 baht	2	1.6	1.6	100.0
	Total	**126**	**100.0**	**100.0**	

Table 6: Frequency distribution of average fare per trip

According to the table 6, 50% or half of the respondents spend 51 to 100 baht per trip, while 33.3% or 42 respondents spend 101 to 150 baht. 11.9% or 15 respondents pay around 151 to 200 baht and 3.2% or 4 respondents pay less than 50 baht. The minor respondents who spend more than 200 baht are only 1.6% or 2 respondents.

f. Advance booking time

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	suddenly	47	37.3	37.3	37.3
	5-10 min in advance	52	41.3	41.3	78.6
	11-20 min in advance	19	15.1	15.1	93.7
	21-30 min in advance	2	1.6	1.6	95.2
	more than 30 min in advance	6	4.8	4.8	100.0
	Total	**126**	**100.0**	**100.0**	

Table 7: Frequency distribution of advance booking time

According to the table 7, the majority of 41.3% or 52 respondents book for a taxi 5 to 10 minutes in advance, followed by 37.3% or 47 respondents usually book in suddenly and 15.1% or 19 respondents book 11 to 20 minutes earlier. The rest of

4.8% or 6 respondents book more than 30 minutes in advance and 1.6% or 2 respondents book 21 to 30 minutes ahead.

Selection criteria

a. Important level of each factor

Factors	Not important at all		Slightly important		Fairly important		Important		Very important		Mean	SD
	N	%	N	%	N	%	N	%	N	%		
Safety	0	0.0%	0	0.0%	4	3.2%	31	24.6%	91	72.2%	4.70	0.52
Convenience	0	0.0%	2	1.6%	17	13.5%	56	44.4%	51	40.5%	4.24	0.74
Price	0	0.0%	4	3.2%	30	23.8%	52	41.3%	40	31.7%	4.01	0.82
Cleanness	0	0.0%	2	1.6%	23	18.3%	66	52.4%	35	27.8%	4.07	0.72
Driver's manners	0	0.0%	0	0.0%	13	10.3%	60	47.6%	53	42.1%	4.31	0.65
Appearance of car	0	0.0%	4	3.2%	17	13.5%	75	59.5%	30	23.8%	4.04	0.70
Car type	9	7.1%	38	30.2%	49	38.9%	26	20.6%	4	3.2%	2.82	0.95
Waiting time	0	0.0%	2	1.6%	23	18.3%	71	56.3%	30	23.8%	4.03	0.69
Payment method	10	7.9%	20	15.9%	40	31.7%	46	36.5%	10	7.9%	3.21	1.04
Promotion	2	1.6%	14	11.1%	39	31.0%	42	33.3%	29	23.0%	3.66	0.99

Table 8: Summary of descriptive statistics on importance of each influenced factor

The table 8 above is the frequency distribution of how important of each factor when passengers chose taxi. These 10 factors were listed based on the information from focus group discussion and in-depth interview. All 126 respondents were asked to rate the important level on each factors which divided into 5 tier; not important at all, slightly important, fairly important, important, and very important. The answer was analyzed by using descriptive statistic from likert scales.

The first factor is safety. The majority of respondents answered very important at 72.2% or 91 respondents, while 24.6% or 31 respondents answered important and only 3.2% or 4 respondents feel fairly important. No one answered not important and

slightly important. The average mean is 4.70 which is the most important factor among 10 factors.

In part of convenience, 44.4% or 56 respondents feel that convenience is an important factor and 40.5% or 51 respondents answered very important. Other 13.5% or 17 respondents answered fairly important and only 1.6% or 2 respondents feel slightly important. The average mean for this factor is 4.24 which is the third thing that respondents concerned.

In term of price, 41.3% or 52 respondents answered important, followed by 31.7% or 40 respondents rated very important. 23.8% or 30 respondents feel fairly important and 3.2% or 4 respondents answered slightly important. The average mean score of this factor is 4.01.

The next factor is cleanness. The major respondents give important for this factor by 52.4% or 66 respondents, while 27.8% or 35 respondents answered very important and 18.3% or 23 respondents feel fairly important. The rest is slightly important at 1.6% or 2 respondents and no one answered not important. The average mean of this factor is 4.07.

47.6% or 60 respondents answered important for driver's manner, followed by 42.1% or 53 respondents answered very important. The minority answered fairly important at 10.3% or 13 respondents and no one rated not important and slightly important. The average mean is 4.31 which is the second factor that respondents concerned.

In part of the appearance of the car, the major respondents answered important by 59.5% or 75 respondents, while 23.8% or 30 respondents feel very important and 13.5% or 17 respondents answered fairly important. The rest answered slightly important at 3.2% or 4 respondents. The average mean score is 4.04.

The next factor is car type, 38.9% or 49 respondents feel that car type is fairly important, while 30.2% or 38 respondents answered slightly important and 20.6% or 26 respondents feel important. The rest respondents answered not important at all and

very important by 7.1% or 9 respondents and 3.2% or 4 respondents, respectively. This factor got the lowest average mean score at 2.82.

In term of waiting time, 56.3% or 71 respondents answered important and 23.8% or 30 respondents answered very important. Another 18.3% or 23 respondents feel fairly important and only 1.6% or 2 respondents answered slightly important. The average mean score for this factor is 4.03.

The next factor is payment method, 36.5% or 46 respondents answered important, followed by 31.7% or 40 respondents feel fairly important and 15.9% or 20 respondents answered slightly important. Not important at all and very important were chosen by 7.9% or 10 respondents each. The average mean score is 3.21.

The final factor is promotion. The majority answered important at 33.3% or 42 respondents, while 31% or 39 respondents answered fairly important and 23% or 29 respondents answered very important. Other 11.1% or 14 respondents feel slightly important and 1.6% or 2 respondents answered not important at all. The average mean score for this factor is 3.66.

In conclusion, among 10 factors that were listed up from in-depth interview and focus group, the most important factor that people concerned is safety (mean=4.70). The second highest mean score is driver's manners (mean=4.31). The third one is convenience (mean=4.24).

b. Mean difference of important factors between two groups

Factors	Uber user		Grabtaxi user		t	P-value
	Mean	SD	Mean	SD		
Safety	4.85	0.37	4.69	0.47	1.313	0.009
Convenience	4.46	0.65	4.46	0.76	0.397	0.338
Price	4.15	0.78	3.77	0.91	1.634	0.461
Cleanness	4.15	0.78	4.00	0.69	0.750	0.149
Driver's manners	4.23	0.71	4.41	0.59	-0.411	0.235
Appearance of car	4.00	0.57	3.85	1.05	0.659	0.001
Car type	2.69	0.84	2.62	0.85	0.328	0.775
Waiting time	4.08	0.63	4.00	0.80	0.386	0.157
Payment method	3.31	1.01	2.92	1.16	1.272	0.662
Promotion	3.69	1.16	3.81	1.01	-0.698	0.518

Table 9: Independent sample T-test on important factors between Uber users and Grabtaxi user

The table 9 above showed the result of mean comparison on ten important factors between Uber users and Grabtaxi users by using independent sample t-test. Based on the result, it showed that mean of only 2 factors are significantly different which are safety (t=1.313, p=0.009) and appearance of car (t=0.659, p=0.001) since p-value is less than 0.05. It can interpret that Uber users are more concerned on safety and appearance of car than Grabtaxi users, since Uber's mean score in both factors are greater than Grabtaxi's mean score. Mean of other eight factors are not significantly different because p-value of each factor is less than 0.05 (p-value<0.05).

Customer satisfaction

a. Uber satisfaction

Factors	Very disappointed		Disappointed		Neutral		Satisfied		Very satisfied		Mean	SD
	N	%	N	%	N	%	N	%	N	%		
Safety	0	0.0%	0	0.0%	14	11.1%	64	50.8%	48	38.1%	**4.27**	**0.64**
Convenience	0	0.0%	0	0.0%	13	10.3%	59	46.8%	54	42.9%	**4.33**	**0.65**
Price	0	0.0%	11	8.7%	46	36.5%	48	38.1%	21	16.7%	**3.63**	**0.86**
Cleanness	0	0.0%	0	0.0%	13	10.3%	65	51.6%	48	38.1%	**4.28**	**0.64**
Driver's manners	0	0.0%	0	0.0%	15	11.9%	73	57.9%	38	30.2%	**4.18**	**0.62**
Appearance of car	0	0.0%	0	0.0%	18	14.3%	49	38.9%	59	46.8%	**4.33**	**0.71**
Car type	0	0.0%	2	1.6%	26	20.6%	58	46.0%	40	31.7%	**4.08**	**0.72**
Waiting time	0	0.0%	13	10.3%	40	31.7%	50	39.7%	23	18.3%	**3.66**	**0.89**
Payment method	0	0.0%	4	3.2%	34	27.0%	46	36.5%	42	33.3%	**4.00**	**0.83**
Promotion	3	2.4%	5	4.0%	36	28.6%	42	33.3%	40	31.7%	**3.88**	**0.95**
Overall satisfaction of Uber											**4.06**	**0.75**

Table 10: Summary of descriptive statistics on Uber satisfaction

The table 10 is the result of how satisfied are customer toward Uber service. The questions were asked to rate 1 to 5 scale of satisfaction level on 10 important factors.

The first factor is safety. 50.8% or 64 respondents answered satisfied, while 38.1% or 48 respondents answered very satisfied and only 11.1% or 14 respondents feel neutral. No one answered disappointed or very disappointed. The average mean is 4.27.

In part of convenience, 46.8% or 59 respondents feel satisfied and 42.9% or 54 respondents answered very satisfied. Other 10.3% or 13 respondents answered

neutral. The average mean for convenience is 4.33, which is the highest score among 10 factors.

In term of price, 38.1% or 48 respondents answered satisfied, followed by 36.5% or 46 respondents rated neutral. 16.7% or 21 respondents feel very satisfied and 8.7% or 11 respondents answered disappointed. This factor got the lowest average mean score at 3.63.

The next factor is cleanness. The major respondents give satisfied for this factor by 51.6% or 65 respondents, while 38.1% or 48 respondents answered very satisfied and 10.3% or 13 respondents feel neutral. The average mean of this factor is 4.28.

57.9% or 73 respondents are satisfied with driver's manner, followed by 30.2% or 38 respondents answered very satisfied. The minority answered fairly important at 11.9% or 15 respondents and no one rated disappointed. The average mean is 4.18.

In part of the appearance of the car, the major respondents answered very satisfied by 46.8% or 59 respondents, while 38.9% or 49 respondents feel satisfied and 14.3% or 18 respondents answered neutral. The average mean score is 4.33.

The next factor is car type, 46.0% or 58 respondents feel satisfied with car type, while 31.7% or 40 respondents answered very satisfied and 20.6% or 26 respondents feel neutral. Another 1.6% or 2 respondents answered disappointed. This factor got average mean score at 4.08.

In term of waiting time, 39.7% or 50 respondents answered satisfied and 31.7% or 40 respondents answered neutral. Another 18.3% or 23 respondents feel very satisfied and only 10.3% or 13 respondents answered disappointed. The average mean score for this factor is 3.66.

The next factor is payment method, 36.5% or 46 respondents answered satisfied, followed by 33.3% or 42 respondents feel very satisfied and 27.0% or 34

respondents answered neutral. Another 3.2% or 4 respondents are disappointed. The average mean score is 4.00.

The final factor is promotion. The majority answered satisfied at 33.3% or 42 respondents, while 31.7% or 40 respondents answered very satisfied and 28.6% or 36 respondents answered neutral. Another 4.0% or 5 respondents feel disappointed and 2.4% or 3 respondents answered very disappointed. The average mean score for this factor is 3.88.

It can summarize that overall satisfaction score for Uber is 4.06. The top three greatest factors are convenience, appearance of car and cleanness. On the other side, the lowest three mean score are price, waiting time, and promotion.

b. Grabtaxi satisfaction

Factors	Very disappointed		Disappointed		Neutral		Satisfied		Very satisfied		Mean	SD
	N	%	N	%	N	%	N	%	N	%		
Safety	0	0.0%	0	0.0%	40	31.7%	62	49.2%	24	19.0%	**3.87**	**0.70**
Convenience	0	0.0%	2	1.6%	40	31.7%	54	42.9%	30	23.8%	**3.89**	**0.78**
Price	0	0.0%	0	0.0%	52	41.3%	64	50.8%	10	7.9%	**3.67**	**0.62**
Cleanness	0	0.0%	6	4.8%	67	53.2%	35	27.8%	18	14.3%	**3.52**	**0.80**
Driver's manners	0	0.0%	2	1.6%	52	41.3%	54	42.9%	18	14.3%	**3.70**	**0.73**
Appearance of car	0	0.0%	2	1.6%	64	50.8%	40	31.7%	20	15.9%	**3.62**	**0.77**
Car type	0	0.0%	2	1.6%	72	57.1%	32	25.4%	20	15.9%	**3.56**	**0.78**
Waiting time	2	1.6%	4	3.2%	53	42.1%	45	35.7%	22	17.5%	**3.65**	**0.87**
Payment method	0	0.0%	2	1.6%	66	52.4%	38	30.2%	20	15.9%	**3.60**	**0.77**
Promotion	0	0.0%	4	3.2%	50	39.7%	36	28.6%	36	28.6%	**3.83**	**0.89**
Overall satisfaction of Grabtaxi											**3.69**	**0.77**

Table 11: Summary of descriptive statistics on Grabtaxi satisfaction

According to table 11 above, the result of how satisfied are customers toward Grabtaxi service. The questions were asked to rate 1 to 5 scale of satisfaction level on 10 important factors.

The first factor is safety. 49.2% or 62 respondents answered satisfied, while 31.7% or 40 respondents answered neutral and only 19.0% or 24 respondents feel very satisfied. No one answered disappointed or very disappointed. The average mean is 3.87.

In part of convenience, 42.9% or 54 respondents feel satisfied and 31.7% or 40 respondents answered neutral. Another 23.8% or 30 respondents answered very satisfied and only 1.6% or 2 respondents feel disappointed. The average mean for convenience is 3.89 which is also the highest score among 10 factors as same as Uber.

In term of price, 50.8% or 64 respondents answered satisfied, followed by 41.3% or 52 respondents rated neutral. The rest of 7.9% or 10 respondents feel very satisfied. This factor got the lowest average mean score at 3.67.

The next factor is cleanness. The major respondents give neutral for this factor by 53.2% or 67 respondents, while 27.8% or 35 respondents answered satisfied and 14.3% or 18 respondents feel very satisfied. Only 4.8% or 6 respondents answered disappointed. The average mean of this factor is 3.52.

42.9% or 54 respondents are satisfied with driver's manner, followed by 41.3% or 52 respondents answered neutral. The minority answered very satisfied at 14.3% or 18 respondents and 1.6% or 2 respondents rated disappointed. The average mean is 3.70.

In part of the appearance of the car, the major respondents answered very neutral by 50.8% or 64 respondents, while 31.7% or 40 respondents feel satisfied and 15.9% or 20 respondents answered very satisfied. Only 1.6% or 2 respondents feel disappointed. The average mean score is 3.62.

The next factor is car type, 57.1% or 72 respondents feel neutral with car type, while 25.4% or 32 respondents answered satisfied and 15.9% or 20 respondents feel

very satisfied. Another 1.6% or 2 respondents answered disappointed. This factor got average mean score at 3.56.

In term of waiting time, 42.1% or 53 respondents answered neutral and 35.7% or 45 respondents answered satisfied. Another 17.5% or 22 respondents feel very satisfied and 3.2% or 4 respondents answered disappointed. Only 1.6% or 2 respondents answered very disappointed. The average mean score for this factor is 3.65.

The next factor is payment method, 52.4% or 66 respondents answered neutral, followed by 30.2% or 38 respondents feel satisfied and 15.9% or 20 respondents answered very satisfied. Another 1.6% or 2 respondents are disappointed. The average mean score is 3.60.

The final factor is promotion. The majority answered neutral at 39.7% or 50 respondents, while 28.6% or 36 respondents answered satisfied and 28.6% or 36 respondents answered very satisfied. Another 3.2% or 4 respondents feel disappointed. The average mean score for this factor is 3.83.

It can summarize that overall satisfaction score is 3.69. The top three greatest factors are convenience, safety and promotion. On the other hand, the lowest three mean score are cleanness, car type, and payment method.

c. Mean comparison between Uber and Grabtaxi satisfaction

		Mean	**SD**	**t**	**Sig. (2-tailed)**
Safety	Uber	4.27	0.64	4.78	0.00
	Grabtaxi	3.87	0.70	4.80	0.00
Convenience	Uber	4.33	0.65	4.83	0.00
	Grabtaxi	3.89	0.78	4.85	0.00
Price	Uber	3.63	0.86	-0.35	0.73
	Grabtaxi	3.67	0.62	-0.35	0.73
Cleanness	Uber	4.28	0.64	8.26	0.00
	Grabtaxi	3.52	0.80	8.29	0.00
Driver's manners	Uber	4.18	0.62	5.60	0.00
	Grabtaxi	3.70	0.73	5.62	0.00
Appearance of car	Uber	4.33	0.71	7.61	0.00
	Grabtaxi	3.62	0.77	7.63	0.00
Car type	Uber	4.08	0.72	5.88	0.00
	Grabtaxi	3.56	0.78	5.89	0.00
Waiting time	Uber	3.66	0.89	0.19	0.85
	Grabtaxi	3.65	0.87	0.19	0.85
Payment method	Uber	4.00	0.83	4.21	0.00
	Grabtaxi	3.60	0.77	4.21	0.00
Promotion	Uber	3.88	0.95	0.77	0.45
	Grabtaxi	3.83	0.89	0.76	0.45

Table 12: Independent sample T-test compared satisfaction between Uber and Grabtaxi

The table 12 above is the result of satisfaction compared between Uber and Grabtaxi in term of the ten most important factors. There are 7 out of 10 factors

different significantly since p-value is less than 0.05. The first factor is safety. Average mean score of Uber is 4.27, while Grabtaxi got only 3.87. In part of convenience, Uber mean score is 4.33 which is greater than Grabtaxi at 3.89. Uber also has greater mean score for cleanness at 4.28, while Grabtaxi mean score is only 3.52. In term of driver's manners, Uber average mean score is 4.18, while Grabtaxi mean score is 3.70. Appearance of car, car type and payment method mean scores of Uber are 4.33, 4.08, and 4.00, respectively. On the other hand, mean scores of appearance of car, car type and payment method for Grabtaxi are 3.62, 3.56, and 3.60, respectively.

It can summarize that customers are more satisfied with Uber than Grabtaxi in those seven aspects, and other three factors of price, waiting time, and promotion are not significantly different.

d. Multiple regression analysis on Uber satisfaction

Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.841	0.452		4.072	0.000
Safety	0.152	0.090	0.166	1.682	0.095
Convenience	0.164	0.066	0.243	2.495	0.014
Price	0.114	0.055	0.189	2.088	0.039
Cleanness	0.042	0.074	0.063	0.569	0.571
Driver's manners	-0.030	0.082	-0.041	-0.364	0.716
Appearance of car	0.211	0.086	0.306	2.445	0.016
Car type	-0.110	0.055	-0.215	-2.006	0.047
Waiting time	-0.096	0.066	-0.140	-1.468	0.145
Payment method	0.088	0.045	0.183	1.949	0.054
Promotion	-0.027	0.045	-0.054	-0.610	0.543

Table 13: Regression analysis on Uber satisfaction

The table 13 above is the multiple regression analysis between dependent variable of Uber satisfaction and independent variables of ten important factors. The

result is significant with R square of 0.282 and p-value less than 0.05, which means all these ten independent variables together explain 28.2% of Uber satisfaction.

e. Multiple regression analysis on Grabtaxi satisfaction

Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.886	0.532		3.544	0.001
Safety	0.071	0.106	0.063	0.667	0.506
Convenience	0.000	0.074	0.000	-0.004	0.997
Price	-0.039	0.061	-0.056	-0.629	0.530
Cleanness	-0.122	0.086	-0.155	-1.419	0.159
Driver's manners	0.022	0.096	0.025	0.231	0.817
Appearance of car	0.244	0.092	0.304	2.650	0.009
Car type	0.118	0.063	0.190	1.889	0.061
Waiting time	0.070	0.075	0.085	0.932	0.354
Payment method	0.097	0.050	0.178	1.929	0.056
Promotion	0.032	0.051	0.054	0.618	0.538

Table 14: Regression analysis on Grabtaxi satisfaction

The table 14 above is the multiple regression analysis between dependent variable of Grabtaxi satisfaction and independent variables of ten important factors. The result is significant with R square of 0.286 and p-value less than 0.05 which means all these ten in dependent variables together explain 28.6% of Grabtaxi satisfaction.

CHAPTER 5
CONCLUSIONS AND RECOMMENDATIONS

According to the study, the objectives are to understand the customer behavior in term of frequency of using, period of using, purpose of using etc., to determine selection criteria on choosing alternative taxi service and the most important factor that customers concern, and to compare the satisfaction between Uber and Grabtaxi. All keys finding from this study were summarized as follow details;

In part of alternative taxi users' behavior, the most frequent purpose of taking taxi is to go back to their home and people normally take taxi during 18.01 to 22.00. It takes around 21 to 40 minutes per trip and average fare is approximately at 51 to 100 baht. People like to book taxi 5 to 10 minutes in advance and take taxi around 2 times a week.

There are several factors that people concerned while choosing taxi service but it can summarized into 10 factors which are safety, convenience, price, cleanness, driver's manner, appearance of car, car type, waiting time, payment method and promotion. Based on the table 8, the top 3 most important factors are safety, driver's manners, and convenience. On the other hand, the three least important are car type, payment method, and promotion. In addition, according to the table 10, if compared the influence factors between Uber users and Grabtaxi users, it is shown significant difference in term of safety and appearance of car which Uber users gave more important than Grabtaxi users.

In term of customer satisfaction, the overall mean score of Uber is 4.06 based on the table 10. The top three greatest factors are convenience, appearance of car and cleanness and the lowest three mean score are price, waiting time, and promotion. On the other hand, the overall mean score of Grabtaxi is 3.69 based on the table 11. The top three greatest factors are convenience, safety and promotion and the lowest three mean score are cleanness, car type, and payment method. Additionally, the comparison of satisfaction between Uber and Grabtaxi from the table 13 shows that 7 out of 10 factors are different significantly. Uber's average mean scores of safety, convenience, cleanness, driver's manners, appearance of car, car type, and payment

method are greater than Grabtaxi which means people are more satisfied with Uber than Grab in term of these 7 factors. The rest three factors of price, waiting time, and promotion are not significant difference. Additionally, the multiple regression analysis was used to measure or predict customer satisfaction based on ten important factors, which can explain consumer satisfaction around 28%. Hence, there are other variables of 72% that influence customer satisfaction and need to do further research to find out those variables.

According to the study, we can conclude that people are more satisfied with these alternative taxi services than traditional one. Uber and Grabtaxi provide better service quality in every aspect, especially safety and convenience. However, the future challenges of both Uber and Grabtaxi are not only concern of customer satisfaction or keep adding new services, but also to deal with the conflicts with taxi regulators and traditional taxi companies. Whether or not, both companies can accomplish their mission to enhance the living of Bangkok passengers, as well as transform taxi industry and to what extent, the next step of these alternative taxi services depends on the involvement of all stakeholders.

In conclusion, the information from this study will be benefit to both Uber and Grabtaxi to understand more on their customers. They could use these data to develop new business strategies in order to enhance their service quality. However, the result from this study may not definitely represent the entire population because convenience sampling was used as sampling method and respondents were recruited from some specific area in Bangkok due to the limited budget and time constraint.

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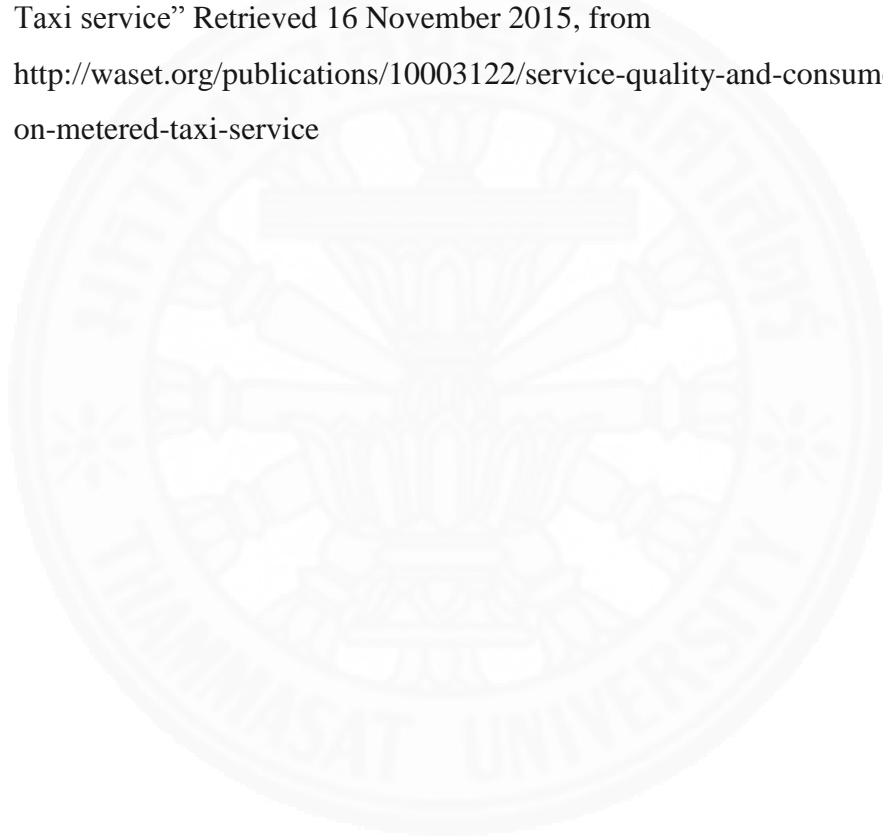
APPENDICES
APPENDIX A
QUESTIONNAIRE

Section 1: Screening questions

Q1: Do you have a chance using taxi service in your daily life?

    a. Yes

    b. No

Q2: Have you ever use Uber or Grabtaxi service?

    a. Yes

    b. No

Section 2: Consumer behavior

Q3: Which alternative taxi do you normally take?

    a. Uber

    b. Grabtaxi

Q4: What is the most frequent purpose when you called taxi?

    a. for work

    b. for getting home

    c. for travel

Q5: What period of time do you normally call taxi?

    a. 06.01-10.00

    b. 10.01-14.00

    c. 14.01-18.00

    d. 18.01-22.00

    e. 22.01-02.00

    f. 02.01-06.00

Q6: How long does it normally take to your destination?

    a. less than 20 minutes

    b. 21-40 minutes

    c. 41-60 minutes

    d. more than 60 minutes

Q7: How many times do you call taxi per week?

    a. less than 3 times

    b. 3 to 5 times

    c. 6 to 8 times

    d. 8 to 10 times

    e. more than 10 times

Q8: What is the average fare per trip?

    a. less than 50 baht

    b. 51-100 baht

    c. 101-150 baht

    d. 151-200 baht

    e. more than 200 baht

Q9: How long do you usually book taxi in advance?

    a. less than 5 minutes

    b. 5-10 minutes

    c. 11-20 minutes

    d. 21-30 minutes

    e. more than 30 minutes

Section 3: Selection criteria

Q10: Why do you choose to take Uber and Grabtaxi instead of traditional one? (can answer more than one)

    a. Do not reject passenger

    b. Reasonable price

    c. More convenience

    d. Driver has better manner

    e. More safety

    f. Better appearance

    g. Faster

    h. Others Please specific _____

Q11: How important are the following factors when you used taxi? (rate 1 to 5)

Factor	Not important at all	Slightly important	Fairly important	Important	Very important
Safety	1	2	3	4	5
Convenience	1	2	3	4	5
Price	1	2	3	4	5
Cleanness	1	2	3	4	5
Driver's manners	1	2	3	4	5
Appearance of car	1	2	3	4	5
Car type	1	2	3	4	5
Waiting time	1	2	3	4	5
Payment method	1	2	3	4	5
Promotion	1	2	3	4	5

Section 4: Customer satisfaction

Q11: Are you satisfied with Uber and Grabtaxi than traditional one?

    a. Yes

    b. No

Q13: How satisfied are you when you used Uber? (rate 1 to 5)

Factor	Very disappointed	Disappointed	Neutral	Satisfied	Very satisfied
Safety	1	2	3	4	5
Convenience	1	2	3	4	5
Price	1	2	3	4	5
Cleanness	1	2	3	4	5
Driver's manners	1	2	3	4	5
Appearance of car	1	2	3	4	5
Car type	1	2	3	4	5
Waiting time	1	2	3	4	5
Payment method	1	2	3	4	5
Promotion	1	2	3	4	5

Q14: How satisfied are you when you used Grabtaxi? (rate 1 to 5)

Factor	Very disappointed	Disappointed	Neutral	Satisfied	Very satisfied
Safety	1	2	3	4	5
Convenience	1	2	3	4	5
Price	1	2	3	4	5
Cleanness	1	2	3	4	5
Driver's manners	1	2	3	4	5
Appearance of car	1	2	3	4	5
Car type	1	2	3	4	5
Waiting time	1	2	3	4	5
Payment method	1	2	3	4	5
Promotion	1	2	3	4	5

Section 5: Respondents profile

Q15: Please specify your gender

    a. Male

    b. Female

Q16: Please select your age range

    a. Less than 23 years old

    b. 23-28 years old

    c. 29-34 years old

    d. 35-39 years old

    e. More than 40 years old

Q17: What is your highest education level?

    a. Secondary school

    b. Bachelor's degree

    c. Master degree

    d. Doctoral degree

Q18: What is your occupation?

    a. Business owner

    b. Office worker

c. Government employee

d. Merchant

e. Unemployed

Q19: What is your average income per month?

a. Less than 15,000 baht

b. 15,001-30,000 baht

c. 30,001-45,000 baht

d. 45,001-60,000 baht

e. More than 60,000 baht

BIOGRAPHY

Name	Mr.Worapong Archarworarit
Date of Birth	December 5, 1988
Educational Attainment	2011: Bachelor's Degree in Business Administration, Faculty of Commerce and Accountancy, Chulalongkorn University
Work Position	Senior Supervisor Toyota Motor Thailand