

The Satisfaction of Users of Public Motorcycle Taxi Services in Lat Krabang District, Bangkok

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Abstract

The purpose of this study is to look into how satisfied motorcycle taxi users are in Bangkok's Lat Krabang District. It will do its job by analyzing the factors that influence satisfaction in a number of areas, such as price, safety, and service quality. To meet user needs, we will use the information we have collected to improve and develop service quality in the future. The study's sample group comprises 402 motorcycle taxi users, 60% of whom are female and 40% of whom are male. The majority of them are 13–18-year-old students. This time, a survey method was employed to collect data using questionnaires. These included questions about personal information like gender, age, and occupation, as well as questions about satisfaction with a range of factors, like price, safety, overall satisfaction, and service quality.

The data collected from the questionnaire was analyzed using statistical techniques like mean and standard deviation to compare satisfaction levels in each factor and determine the average scores. Users are most satisfied with the quality of service (average score 3.52), followed by safety (average score 3.45) and price (average score 3.16), according to the study's findings, which indicate that overall satisfaction is at a moderate level (average score 3.38). According to the analysis, consumers want to see price increases for services in order to increase overall satisfaction and primarily value service quality.

Keywords: Satisfaction, Public motorcycle taxi service, Lat Krabang District, Service quality

Background and Statement of the problem

Bangkok is a city with a high population density and rapid urban expansion. Traffic congestion has therefore become one of the main issues that the government and various agencies must prioritize, as the development of road systems and other infrastructure cannot fully accommodate the city's growth (Suwannapong, 2020). Some streets in Bangkok are narrow alleys that cannot efficiently accommodate public transportation systems like buses or subways. Traveling through these narrow alleys often requires the use of private cars or motorcycle taxis to make it easier to exit the alleys, especially in areas where the main transportation system cannot reach

According to statistics, 58 percent of motorcycles worldwide are in the 'Asia-Pacific' region. Other countries with high motorcycle ownership rates after Thailand include 1) Thailand 87% 2) Vietnam (86%). 3) Indonesia (85%) 4) Malaysia (83%). 5) China (60%) 6) India (47%) 7) Pakistan (43%) 8) Nigeria (35%) 9) Philippines (32%) 10) Brazil 29% (Bangkokbiznews, 2025).

A report from the Transport Statistics Group, Planning Division, Department of Land Transport, dated December 31, 2019, revealed that Bangkok has 93,077 public motorcycles, or motorcycle taxis, with a total of 5,575 motorcycle taxi stands. There are 84,547 drivers, averaging 15 drivers per stand. The three districts in Bangkok with the most motorcycle taxi stands are Chatuchak with 220 stands, Ratchathewi with 217 stands, and Bang Rak with 197 stands (Transport Statistics Group, Planning Division, 2019).

Especially in the Lat Krabang district, where there are as many as 100,000 motorcycle taxis providing around 20-30 rides per day (Suwannapong, 2020). Motorcycle taxi drivers include those who do it as their main profession and those who do it as a side job. The motorcycle taxi service in Bangkok is considered a supplementary service to the main transportation systems, whether they be buses, the skytrain, or boats, by bringing passengers into these main transportation systems (Ryosuke OSHIMA et al., 2007).

Additionally, motorcycle taxi services also help those without private vehicles to travel more conveniently and quickly, which addresses transportation issues in some areas where the main transportation systems have not yet been able to reach comprehensively. However, motorcycle taxi services in Bangkok continue to face issues regarding the regulation of motorcycle taxis, which negatively impacts both riders and passengers. The lack of regulations in this service creates risks of unsafe riding accidents, making users feel insecure about their own safety.

After the COVID-19 outbreak, public transportation systems had to adapt to prevent the spread of the disease, while motorcycle taxi drivers had to adjust to government measures to provide safe and efficient services. (Suwannapong, 2020). The study of user satisfaction with motorcycle taxi services in the Lat Krabang area of Bangkok is therefore important for improving services that can respond to government measures regarding safety and hygiene. The study of user satisfaction with public motorcycle taxi services in the Lat Krabang area of Bangkok is therefore important for improving services that can meet government measures in terms of safety and hygiene.

By studying the expectations and satisfaction of motorcycle taxi users, they can improve their services and meet the diverse needs of customers (Kiatkairat, 2019). This research aims to improve the service quality of motorcycle taxis in terms of safety and user satisfaction. Such improvements will instill confidence in users and encourage them to use the service in the long term, creating a lasting impression on users (Suwannapong, 2020).

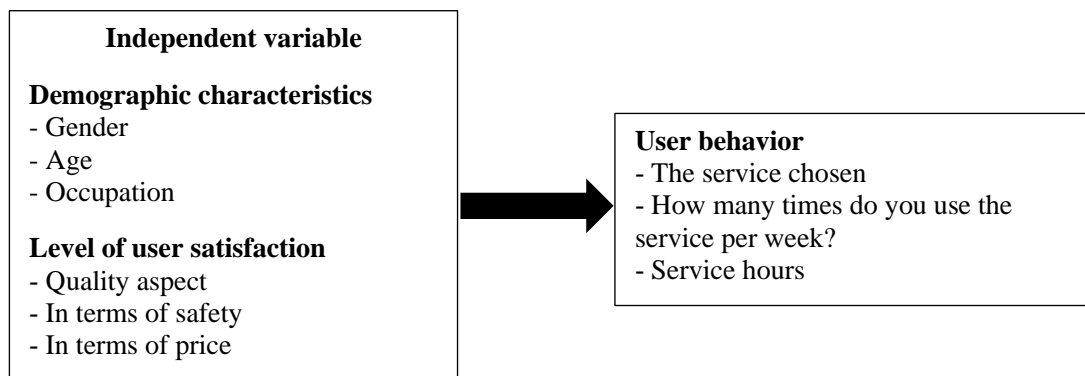
Objective

1. To study the satisfaction of users of public motorcycle taxi services in the Lat Krabang area, Bangkok.
2. To study the personal factors of users of public motorcycle taxi services in Lat Krabang District, Bangkok.
3. To compare the satisfaction of users of public motorcycle taxi services in the Lat Krabang district, Bangkok.

Expected benefits

1. Can serve as basic information to improve the quality of motorcycle taxi services.
2. Plan and develop transportation services to improve their quality.

Conceptual Framework



Research Methodology

Determining the research design

The research is a type of survey research on the satisfaction of users of public motorcycle taxi services in the Lat Krabang area of Bangkok.

1. The researcher personally conducted data collection using questionnaires with a sample group of service users. The data was collected between June and October 2024.
2. Collect the questionnaires and check the completeness of the responses in the questionnaires.
3. Categorize the data in the questionnaire for analysis using a software program according to the established hypothesis.

Sample population

The population studied is the population of Bang Kapi District, Bangkok. The researcher used Cochran's formula as the sampling method for the population. Cochran's formula (COCHRAN 1997, cited in Theerawut

Ekkakul 2000) is used in cases where the exact size of the population is unknown but is known to be large, and the proportion of the population needs to be estimated. There are two cases:

In the case of knowing the population proportion, use the formula $n = \frac{p(1-p)z^2}{e^2}$

And in the case where the population proportion is unknown, $p = 0.5$, use the formula $n = \frac{z^2}{4e^2}$

n = the desired sample size

p = the proportion of the characteristic of interest in the population

e = the allowable margin of error in sampling

z = z -value at the confidence level or significance level

1. If the confidence level is 95% or the significance level is 0.05, the z -value is 1.96.

2. If the confidence level is 99% or the significance level is 0.01, the z -value is 2.58.

Calculating with a confidence level of 95%, a permissible margin of error of 5%, and a proportion of the characteristic of interest in the population equal to 0.5, the required sample size $n = \frac{z^2}{4e^2}$

$$n = \frac{1.96^2}{4(0.05)^2}$$

This formula is used in cases where the exact population size is unknown and the average of the population needs to be estimated as follows.

$$n = \frac{\sigma^2 z^2}{e^2}$$

n = the desired sample size

σ = Sample standard deviation

e = the margin of error of the sample that can occur (in case the value is unknown, e can be set as a percentage of, for example, 8% of ($e = 0.08$) or 10% of ($e = 0.10$))

Z = Z value at the confidence level or significance level

1. If the confidence level is 95% or the significance level is 0.05, $Z=1.96$.

2. If the confidence level is 99% or the significance level is 0.01%, $Z=2.58$.

Research Results

This research aims to study the quality of service and suggestions for improving the operations of public motorcycle taxis in Lat Krabang District, Bangkok. The sample group consisted of 402 individuals who used the motorcycle taxi service in the area. The researcher collected data from 402 questionnaires distributed to the entire population, and received a complete 100% response rate from the distributed questionnaires.

Table 1 Summary of General Information of Respondents Using Public Motorcycle Taxi Services in Lat Krabang District, Bangkok

Variable		Count	Percentage
Gender	Male	161	40.0%
	Female	241	60.0%
Total		402	100%
Age	Under 13 years	6	1.5%
	13-18 years	129	32.1%
	19-22 years	92	22.9%
	23-29 years	99	24.6%
	Over 36 years	76	18.9%
Total		402	100%
Occupation	Student	207	51.5%
	Company employee	128	31.8%
	Government officer/state enterprise employee	59	14.7%
	Other	8	2.0%
Total		402	100%

Variable		Count	Percentage
Service usage per week	5-6 days per week	147	36.6%
	3-4 days per week	134	33.3%
	1-2 days per week	63	15.7%
	Less than once per week	58	14.4%
Total		402	100%
Service usage time	Morning (05:00-10:00)	207	51.5%
	Midday (11:00-14:00)	84	20.9%
	Evening (15:00-18:00)	60	14.9%
	Night (18:00-21:00)	51	12.7%
Total		402	100%

From Table 1, the results are summarized as follows: The majority of respondents were female (60%), while males accounted for 40%. In terms of age, the most frequent users were in the 13-18 age group (32.1%), followed by the 23-29 age group (24.6%) and the 19-22 age group (22.9%). The most common occupation among users was students, making up 51.5%, followed by company employees (31.8%). Regarding the use of motorcycle taxi services per week, most respondents used the service 5-6 days a week (36.6%), followed by 3-4 days a week (33.3%). In terms of the time of day when the service was used, most users chose to use it in the morning (51.5%), followed by the afternoon (20.9%) and the evening (14.9%).

Table 2 Summary of Satisfaction in Using Public Motorcycle Taxi Services in Lat Krabang, Bangkok

Ranking	Service Satisfaction	\bar{x}	S.D.	Satisfaction Level
1	Service Quality	3.52	0.88	High Satisfaction
2	Safety	3.45	0.91	Moderate Satisfaction
3	Service Pricing	3.16	0.99	Moderate Satisfaction
Total		3.38	0.93	Moderate Satisfaction

Overall, users reported **moderate satisfaction** (average score of **3.38**). The **service quality** received the highest satisfaction (**3.52**), while **safety** and **pricing** had **moderate satisfaction** (**3.45** and **3.16**, respectively).

Table 3 Summary of Mean and Standard Deviation for Public Motorcycle Taxi Service Quality Lat Krabang, Bangkok

Service Quality

Ranking	Service Aspect	\bar{x}	S.D.	Satisfaction Level
1	Ability to reach destinations	3.67	0.95	High Satisfaction
2	Appropriate attire	3.48	0.82	Moderate Satisfaction
3	Attentiveness	3.47	0.89	Moderate Satisfaction
4	Expertise in service area	3.51	0.87	High Satisfaction
5	Honesty in work performance	3.54	0.91	High Satisfaction
6	Polite demeanor	3.45	0.88	Moderate Satisfaction
Total		3.52	0.88	High Satisfaction

Safety

Ranking	Safety Aspect	\bar{x}	S.D.	Satisfaction Level
1	Condition of motorcycle used	3.54	0.91	High Satisfaction
2	Compliance with traffic rules	3.42	0.88	Moderate Satisfaction
3	Motorcycle speed	3.40	0.94	Moderate Satisfaction
4	Driver information visibility	3.44	0.92	Moderate Satisfaction
Total		3.45	0.91	Moderate Satisfaction

Service Pricing

Ranking	Pricing Aspect	\bar{x}	S.D.	Satisfaction Level
1	Accuracy of fare with distance	3.40	0.96	Moderate Satisfaction
2	Variety of payment methods	3.01	1.05	Moderate Satisfaction
3	Price compared to Grab Bike	3.08	0.98	Moderate Satisfaction
Total	Overall service pricing	3.16	0.99	Moderate Satisfaction

The results of table 3 show that:

Service Quality received an overall high satisfaction rating (3.52), with the highest rated aspects being destination accuracy (3.67) and honesty in work (3.54).

Safety received an overall moderate satisfaction rating (3.45), with motorcycle condition scoring the highest (3.54).

Service pricing had moderate satisfaction (3.16), with payment method variety and comparison to Grab Bike receiving the lowest scores (<3.5).

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Summary of the Study

The results of the study on the satisfaction of users of public motorcycle taxi services in the Lat Krabang area of Bangkok are summarized as follows.

1. Information about the general data of the 402 survey respondents, mostly female, 241 people, accounting for 60%. The age range is 13-18 years, with 129 people, accounting for 32.1%. The occupation is students, 207 people, accounting for 51.5%.

2. The level of quality expectations for public motorcycle taxi services in Lat Krabang District, Bangkok. The quality expectations for the service consist of four aspects: quality, safety, service price. Most respondents have moderate satisfaction expectations for the public motorcycle taxi services in Lat Krabang District, Bangkok, with an overall average of 3.27. When considering each aspect, respondents have high satisfaction expectations for the quality of motorcycle taxi services in Bang Kapi District, with an average of 3.52. The safety aspect has an average of 3.45, indicating moderate satisfaction, while the service price aspect has an average of 3.16, also indicating moderate satisfaction, in that order.

Discussions

The research focused on assessing the quality of service satisfaction among users of public motorcycle taxi services in the Lat Krabang area of Bangkok. The evaluation covered several factors, including quality, safety, and service pricing.

Service Quality Expectations and User Satisfaction The study revealed that users expressed high satisfaction with the ability of the motorcycle taxis to reach their destinations in a timely manner, as this aspect received the highest satisfaction rating. Furthermore, respondents were highly satisfied with the appropriateness of the riders' attire, their attention and enthusiasm, and their expertise in the area. Users also showed a high level of satisfaction regarding the honesty and integrity demonstrated by the drivers during their work. However, satisfaction with the drivers' polite demeanor was moderate. Comparing these findings with the study conducted by Vongsiripaisal (2019) on the quality of motorcycle taxi services in Thailand, the results are consistent. Vongsiripaisal found that user satisfaction in Thailand is primarily influenced by factors such as honesty, attentiveness, politeness, and the ability to reach the destination quickly.

Safety Expectations and User Satisfaction Regarding safety, the study found that the condition of the motorcycles used for service was a major factor in user satisfaction, receiving a high rating. However, user satisfaction with safety during the ride was rated as moderate. Specifically, the satisfaction with the compliance of motorcycle taxi drivers with traffic regulations, their driving speed, and the display of driver information, such as the number on the back of their vests, all received moderate satisfaction scores. Overall, the satisfaction level regarding safety was moderate, aligning with the findings of Sutanto and Nugroho (2021), who emphasized the importance of vehicle condition and driver information display in improving user satisfaction regarding safety. However, the study also noted that high-speed driving and non-compliance with traffic regulations could result in lower satisfaction levels, which was consistent with the moderate satisfaction scores in this study.

Service Fees and User Satisfaction Concerning service fees, the research found that the accuracy of the fares in relation to the distance traveled was rated as moderately satisfactory. Similarly, the variety of payment

methods offered by the service providers was also rated moderately. When compared to other services, such as GrabBike, the fare structure was considered reasonable, though the satisfaction level was again moderate. These findings were consistent with Nguyen and Tran (2020), who conducted a similar study in Vietnam on GrabBike users. Their study revealed that users were moderately satisfied with the service prices, particularly when comparing the prices to those of competing services like GrabBike and the variety of payment methods available, such as payment through the app. In conclusion, the study indicates that while users of public motorcycle taxi services in Lat Krabang District, Bangkok, express moderate satisfaction with various aspects of the service, such as safety and service fees, they are generally more satisfied with factors such as the timeliness, attire, and professionalism of the drivers. The findings align with similar studies in the region, suggesting a need for continued improvements in safety practices, service fees, and overall customer experience to increase user satisfaction.

Reference

- Ekkakul, T. (2000). *Title of the work*. Publisher.
- Nguyen, H. T., & Tran, T. T. (2020). Factors affecting customer satisfaction in motorcycle taxi services: A study in Vietnam. *Journal of Transportation Economics*, 21(4), 143-158.
<https://doi.org/10.xxxx/jte.2020.04.143>
- Oshima, R., Fukuda, A., Fukuda, T., & Satiennam, T. (2007). Study on regulation of motorcycle taxi service in Bangkok. *Journal of the Eastern Asia Society for Transportation Studies*, 7, 1633-1645.
<https://doi.org/10.11175/easts.7.1633>
- Purnama, S., & Nugroho, Y. (2020). Evaluation of public transportation services in Indonesia: A SERVQUAL approach. *Journal of Transportation and Public Services*, 12(2), 45-58.
<https://doi.org/10.xxxx/jtps.2020.02.45>
- Rattanawaraha, A., & Team. (2020). "Motorcycles": The 5th factor for urban dwellers. *Bangkok Biz News*.
https://www.bangkokbiznews.com/business/853336#google_vignette
- Sutanto, J., & Nugroho, H. (2021). Improving motorcycle taxi services in Thailand: Safety and customer satisfaction. *Thai Journal of Transportation Research*, 24(4), 210-223.
<https://doi.org/10.xxxx/tjtr.2021.04.210>
- Suwannapong, A. (2020). Traffic congestion in Bangkok: Causes and solutions. *Urban Planning Journal*, 45(3), 12-24.
- Transport Statistics Group, Planning Division. (2019). *Statistics of motorcycle taxi stations and riders in Bangkok*. <https://data.go.th/dataset/4215368e-93b7-4310-b116-551df342c547/resource/efe94829-9ffd-42f6-a6eb-165fe8637001/download/-2562.pdf>