

Service quality development Organization buses Bangkok Mass Transit Area 2

Kitiporn. Meesee & Suthum Phongsamran

Abstract—Study of Service quality that affects the development of the quality of bus service of the Bangkok Mass Transit Authority. 2 The objective is to study the quality of service of Bangkok Mass Transit Authority buses. Zone 2 Satisfaction level with the use of Bangkok Mass Transit Authority buses. Zone 2 compares satisfaction in using the services of Bangkok Mass Transit Authority buses. Zone 2 classified according to personal information, and study the quality of service that influences the development of the quality of bus service of the Bangkok Mass Transit Authority, District 2 Using 400 sets of questionnaires as a tool for collecting data and using statistics to analyze the data, namely percentage, average, hypothesis testing using t-test, (One-Way ANOVA), Correlation and Multiple Regression Analysis. Response to customers has a significant influence on service satisfaction at the .01 level. Recommendations from the study that service providers should wear equipment to prevent COVID infection. There are signs informing various service points. Clearly give advice and answer customer questions. correctly Providing bus services that were punctual. Serve passengers with good hospitality. and has a service mind Perform work to be reliable Leave the car at the specified time. Providing service with consideration to passenger safety throughout the service route. Set fares for each type of passenger to be appropriate. There are modern services such as top-up tickets via online channels.

Keywords— Service Quality, Satisfaction, Bangkok Mass Transit Authority buses, District 2.

I. INTRODUCTION

The history of the bus business in Bangkok, according to the history, the past passenger buses were. It is believed that name was probably named after the mail boats. The first public bus Use horse power to pull instead. No need to rely on fuel to be a burden to operators. such as at present which Phraya Phakdi Narasetha (Mr. Lert Setthabut) was the initiator of the bus business around the year 1907, running from Yotse Bridge. (King Suek) reached Pratunam Sa Pathum, but because it was horse-drawn, it was not quick. and was unable to provide sufficient convenience to passengers. Later in the year 1913

Phraya Phakdee therefore has revamped his business. Including changing the method of bus operation By bringing in Ford brand cars to run instead of the original cars that were horse-drawn and expanding the route further. From Pratunam Sa Pathum to Bang Lamphu (New Gate, Talad Yot), cars used It was the first public bus with 3 wheels, the size of one-third of

the current public bus. It had 2 rows of seats, painted white with a red cross. Can seat about 10 people. People commonly call it Ai Krong. Because running along the road there was a loud noise. People receive convenience and speed. In traveling it is widely popular. Buses therefore expanded widely. Go out all over Bangkok On behalf of Nai Lert Company Limited or the White Bus Company. Occupation of driving Bus transportation has expanded. When the government celebrated the 150th anniversary of Rattanakosin (B.E. 2475) and built the Phra Phuttha Yot Fa Bridge. To connect transportation between the Phra Nakhon and Thonburi sides later in the year 1933 (Chambers, 2016)

There is also a duty In other areas of business related to or continuous with Personnel transportation operations Due to the bus business Classified as a public utility. A type of state that provides services to the people. low income people and moderate mainly. The operation therefore aims to respond to the government's policy in terms of providing assistance. for people with low incomes without profit Fare collection Therefore it is at a rate lower than cost. As the government sets policy, BMTA services are mainly focused on convenience, speed, safety, and cost savings for passengers.

The government has passed a Cabinet resolution to establish the Bangkok Mass Transit Authority. According to the Royal Decree, Section 26(2) of 1976, the main duty is to be responsible and to oversee buses that are important to the travel of the majority of people residing in Bangkok and the surrounding areas. Due to the surrounding area, public transportation plays an extremely important role in the movement of people in Bangkok. and the contiguous metropolitan area Most of which will involve movement of travel by public buses, more than 80 percent, and the service needs to cover all areas to help ensure continuous travel. Helps reduce the amount of personal car use to save energy. as well as the effects of various problems that follow, such as traffic congestion on the road surface, which is a big problem in Bangkok. Importantly, it also causes environmental impacts such as air pollution. which has a carbon dioxide measurement of more than 5000 ppm to solve the problem of environmental pollution. Bangkok Mass Transit Authority Affairs Committee It has been decided to purchase 489 NGV / EV electric vehicles to replace buses that use diesel fuel in 2021 and within 2022 they will be brought into service on the Bangkok route. and the contiguous metropolitan area Another number of more than 3,000 vehicles (Bangkok Mass Transit Authority (BMTA), 2018) Champecharoensuk, et al (2022)

Kitiporn. Meesee, Suthum Phongsamran, Graduate School of Business Administration, Kasembundit University, Bangkok

Travel problems mentioned above It has an overall economic and social impact. To alleviate the suffering of the people, Bangkok Mass Transit Authority District 2 has a policy to solve the problems of people's travel needs to meet standards by adopting the international standard system ISO 9001: 2015 (Bangkok Mass Transit Authority, 2015), including cleanliness. Manners Convenience Safety and savings Applied to the service of Bangkok Mass Transit Authority buses, District 2 (Kordach, Et al, 2018)

From the above background, the researcher is interested in studying the development of the quality of bus services of the Bangkok Mass Transit Authority, District 2, in order to use the results from the study as a guideline for improving the quality of the mass transit system to have the ability to Providing services for moving passengers in large numbers at a time with higher quality and efficiency to create satisfaction for the people who use the service on their next journey..

II. OBJECTIVES OF THE STUDY

To study the quality of service of Bangkok Mass Transit Authority buses, District 2. To study the level of satisfaction in using the services of Bangkok Mass Transit Authority buses, District 2.

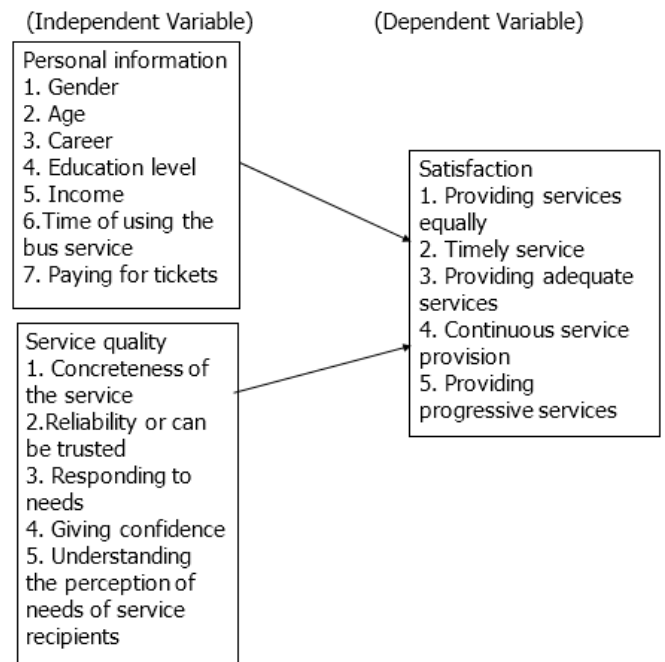
III. SCOPE OF STUDY

In terms of developing the quality of bus service of the Bangkok Mass Transit Authority, District 2 according to the service quality concept of Parasuraman (2004) it consists of the concreteness of the service (Tangibles), reliability. or can be trusted (Reliability), responding to needs (Responsive), providing confidence (Assurance), understanding the perception of service recipients' needs (Empathy) and according to the concept of measuring service satisfaction of (Millet,1954) consisting of giving Equitable Service (Equitable Service) Timely Service (Timely Service) Sufficient Service (Ample Service) Continuous Service (Continuous Service) Progressive Service (Progressive Service) Population and sample groups Used in the study were bus users of the Bangkok Mass Transit Authority, District 2, selecting a sample of 400 people in terms of the duration of the study. Starting from November 2022 to February 2023.

study of Developing the quality of bus service for the Bangkok Mass Transit Authority, District 2. The researcher studied relevant documents, concepts, theories, and research. To be used to set the conceptual framework and guidelines for the study as follows:

Conceptual framework

From the above study, the researcher relied on the theory of service quality and the theory of satisfaction, summarizing and integrating them into a conceptual framework for the study of improving the quality of bus service of the Bangkok Mass Transit Authority, District 2, as follows:



Research Methodology

Study of Developing the quality of bus service of the Bangkok Mass Transit Authority, District 2 aims to study the quality of service of the buses of the Bangkok Mass Transit Authority, District 2. The level of satisfaction with the services of the buses of the Bangkok Mass Transit Authority, District 2, compare satisfaction. of each person There are differences and study the service quality that influences satisfaction with the service of Bangkok Mass Transit Authority buses, District 2. Data from the study can be used as guidelines for improving the quality of the Bangkok Mass Transit Authority buses. Bangkok Mass Transit Area 2 has determined the methods for the study as follows.

Data sources used in the study

This study has two types of data sources: Primary Data is data obtained from questionnaires in data collection. From users of Bangkok Mass Transit Authority buses, District 2, as respondents. Secondary Data is information obtained from textbooks. Study report and related documents and internet

Population and sample used in the study

The population used in the study is people who use the buses of the Bangkok Mass Transit Authority, District 2.

A sample of 400 persons was selected for this study. Use W.G.Cochran's calculation of sample size without knowing the exact population at a confidence level of 95% as follows.

$$\text{Substitute } n = (.50)(1-.50)(1.962)/(.052)$$

$$n = (.5)(.5)(3.8416)/.0025$$

$$n = .9604/.0025$$

$$n = 384.16$$

In the calculation, there will be a sample size of 385 people, but this is to prevent errors that may occur in answering the questionnaire. The information is incomplete. The study therefore used a sample size of 400 cases. study of Improving the quality of bus services of the Bangkok Mass Transit

Authority, Area 2, the sample studied is Bus users of the Bangkok Mass Transit Authority, District 2, used 400 sets of questionnaires as a data collection tool and received 400 sets back, accounting for 100 percent of the questionnaires.

Service quality influences satisfaction in using the services of Bangkok Mass Transit Authority buses

Service quality	Std.			Test		
	B	Error	Beta	t	Sig	
(Constant)	-.154	.074		2.065	.040	
Concrete aspect of service	.102	.031	.102	3.282	.001*	yes
Reliability and trustworthiness	.149	.036	.155	4.141	.000**	yes
Response to customers	.144	.040	.147	3.632	.000*	yes
understanding customers	.186	.052	.183	3.592	.000**	yes
	.436	.046	.423	9.494	.000**	yes

** Statistically significant at the .01 level (2-tailed)

Service quality has an influence on satisfaction in using the services of Bangkok Mass Transit Authority buses, District 2. It was found that service quality Reliability and trustworthiness In terms of providing confidence to customers Knowing and understanding customers Concrete aspect of service Response to customers It has a significant influence on service satisfaction at the .01 level.

IV. SUMMARY OF RESULTS

Study of Quality of service that affects the development of the quality of bus service of the Bangkok Mass Transit Authority, District 2. The objective is to study the quality of service of the buses of the Bangkok Mass Transit Authority, District 2, the level of satisfaction with the use of the buses of the Bangkok Mass Transit Authority, District 2. Bangkok Mass Transit Authority District 2 compares satisfaction in using the services of Bangkok Mass Transit Authority buses District 2 classified according to personal information. and study the quality of service that influences the development of the quality of bus service of the Bangkok Mass Transit Authority, District 2, using 400 sets of questionnaires as a tool for collecting data and using statistics to analyze the data, namely percentages, averages, tests. Hypotheses using t- test, (One-Way ANOVA), Correlation and Multiple Regression Analysis. The results of data analysis can be summarized as follows.

Information about service quality

From the study of information on the level of importance of service quality, it was found that the level of importance of service quality Overall, the average is at a very important level. And when considering the level of importance Five items are at a very important level, consisting of responding to customers. Knowing and understanding customers In terms of providing confidence to customers Concrete aspect of service In terms of trustworthiness, in order, the details are as follows.

Concrete aspect of service The results of the study found that the level of importance of service quality is the concreteness of

the service. The average value is included at a very important level. And when considering the level of importance Six items are at a very important level, including drivers wearing equipment to prevent COVID infection. Fare collectors wear protective equipment to prevent COVID infection. Drivers provide polite and safe driving services. Alcohol gel is provided. There are clear and adequate signs informing various service points. BMTA buses are currently suitable for serving the public and are at a medium level of importance. One item is automatic ticket sales. There are sufficient numbers for the number of service users, respectively.

Reliability and trustworthiness The results of the study found that the importance of service quality in terms of reliability and trustworthiness. The average value is included at a very important level. And when considering the level of importance Two items are at a very important level, consisting of service employees who can give advice. and answer customer questions correctly fares There is a standard. Three items were at a moderate level: BMTA bus service is safe. Tools and equipment are standard and modern. If there is a problem with the bus's operation, it can be resolved quickly. bus service BMTA is punctual in order.

Response to customers The results of the study found that the importance of service quality in responding to customers The average value is included at a very important level. And when considering the level of importance Five items are at a very important level, including: There is special assistance for all types of passengers. such as the visually impaired, etc. The staff serve you with friendliness. Collecting fares according to the convenience of users There are many channels for making complaints/providing service suggestions, such as the comment box, Call Center, and employees can respond immediately to what you request, such as stopping at bus stops and asking for directions, respectively.

In terms of providing confidence to customers The results of the study found that the level of importance of service quality in providing confidence to customers The average value is included at a very important level. And when considering the level of importance Five items are at a very important level, including: The work of fare collectors is reliable. bus driver HCMC has expertise in providing safe services. The bus service driver stops safely at the bus stop. Bus ticket top-up system BMTA online is accurate and reliable. BMTA buses enter and exit. From the first bus terminal according to the schedule in order.

Knowing and understanding customers The results of the study found that the importance of service quality in knowing and understanding customers. The average value is included at a very important level. And when considering the level of importance Five items are at a very important level, consisting of fare prices for BMTA buses. Each type is appropriate, such as ticket prices for students, senior citizens, etc. Employees provide service with politeness, humility, and attentiveness to service users. Service staff recommend easy-to-understand routes to users. BMTA buses have public relations media, information, and news in many channels. Bus duration BMTA

arrives at the appropriate passenger pick-up point in order.

Discussion of Results and Recommendations

The researcher has suggestions from the study for use in improving the service quality of BMTA buses, Zone 2, as follows:

Concrete aspect of service Service providers should wear equipment to prevent COVID infection. Provide service politely and safely. There are clear and adequate signs informing various service points. Modern technology and equipment are used to provide fare collection services.

Reliability and trustworthiness Service providers should provide advice and answer customer questions. correctly Solving problems arising from bus operation to be speedy Providing bus services that are punctual.

Response to customers Service providers should serve passengers with good hospitality. and has a service mind Pay attention to providing equal service to customers without discrimination. There are many channels for receiving customer complaints and solving them in a timely manner. Give importance to special assistance for passengers such as the elderly, pregnant and children. There are facilities for the disabled.

In terms of providing confidence to customers Service providers should perform their work to be reliable. Leave the car at the specified time. Providing service with consideration to passenger safety throughout the service route. Solve problems in a timely manner. First aid is provided in case of emergency sick passengers. or had an accident

In knowing and understanding customers, service providers should set appropriate fares for each type of passenger. Provide service with politeness, humility, and care for service users. Recommend routes to users in an easy to understand way. Publicize information and news through many channels for passengers to receive. There are modern services such as top-up tickets via online channels.

Suggestions for Next Study

There should be a comparative study of the quality of service of BMTA buses in District 2 with other districts in order to use the results to develop the quality of service to meet the expectations of service users

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