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Service Quality Management of Chao Phraya Express Boat to Impress International Tourists in Thailand

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Abstract. This study is quantitative and aims to: (1) study the demographic factors of international tourists on using the Chao Phraya express boat; (2) analyze the opinions of international tourists on the quality services of the Chao Phraya Express Boat; and (3) compare the demographical factors available to the service quality management of the Chao Phraya express boat. The sample group is made up of four hundred international tourists who travel by the Chao Phraya express boat, using the questionnaire to collect data. The data were analyzed by means and standard deviations. The research discovers that the majority of the sample is female, aged during generation Y with undergraduate education, working as a private employee, and traveling from the European continent. The service quality of the Chao Phraya express boat found there was less empathy for service on the excursion boat. The comparison of demographic factors to service quality management shows that different tourist demographics influence the quality of service in different approaches.

Keywords: Service, Quality, Marine transportation, Demographic factors.

1 Introduction

Transport is a type of tourism activity and an important part of development in terms of speed and comfort. Transportation problems, therefore, have an impact on tourism, both directly and indirectly. Thailand is one of the top tourist cities in the world, with a transportation mode of overland travel, marine travel, and air travel (The Nation, 2023). Bangkok, Thailand's capital, has many canals and rivers that have been developed as tourist attractions. There is a wide range of boat transport operators. International tourists prefer to transport a boat to sightsee the beauty of the Chao Phraya riverside and to visit cultural attractions, lifestyles, trade districts, and riverside centers. Because the Chao Praya River has no natural disasters during its flow through Bangkok, tourists can visit it all year round. The major operators that provide boat transportation in the Chao Phraya River are Express Boat Company Limited, which serves express boats, tourist boats, and boat rentals. There are no fewer than 13,328,992 users a year, or about 36,618 people a day, all the way back and forth (Marine Department 2019 & Marine Department, 2020).

Although marine transport is becoming popular, the development of service quality remains a key element of tourism development. These developments require an efficient management system, whether in terms of attracting tourists or comfort, which are

critical factors that need to be developed (Mudpongdua, 2021). Besides, the Thai Marine Department, the state agency that regulates the marine transport sector in Thailand, also attaches great importance to safety (Wanwisat, 2019). Consequently, the study of service quality management of the Chao Phraya Express Boat service for international tourists in Bangkok is the service quality development guideline for marine transportation for boat operators and relevant agencies to continue their quality.

2 Research objectives

- 2.1 To study the demographic factors of international tourists utilizing the Chao Phraya Express Boat service.
- 2.2 To study the opinions of international tourists on the service quality of marine transport for tourism on the Chao Phraya Express Boat.
- 2.3 To compare the demographic factors to the service quality of marine transport for tourism on the Chao Phraya Express Boat.

3 Hypothesis

Different demographic factors of international tourists affect the service quality of marine transport for tourism on the Chao Phraya Express Boat in different services.

4 Literature Review

This research has studied the areas of service quality and marine transportation for tourism. The concepts are as follows:

4.1 Service Quality Dimensions

Service is an activity that acts on an individual or a group to generate happiness, comfort, and satisfaction. Service is tangible and does not always have to be combined with goods (Ninlapat, 2019). It is also a response to the needs and expectations of the client to feel satisfied and loyal to the service (Haianukul, 2014). Therefore, it is necessary to measure the service quality to meet customer needs. The customer satisfaction measurement is SERVQUAL, which refers to service quality. It measures the perception and process of service delivery (Otakanon, 2012). In other words, the customer has an expectation after receiving the service, the expectations are compared to the service quality. The customer expectation and perception measurement can be divided into five categories: (1) tangible is a physical evident that consumers can touch, can choose, and include various facilities in the service to shape the consumer comfortable; (2) assurance is confidence, knowledge of the service and service provider's courtesy toward the consumer; (3) empathy is the attention of the service provider for the customer, even if the consumer does not ask for it, so that mindfulness should happen to everyone; (4) reliability is consistent with the performance of the service and the confidence,

which can be generated by the impression on first visit; and (5) responsiveness is the service provider's willingness to respond to the service and readiness to provide a service to a consumer (Stephen, 1991).

4.2 Marine Transportation for Tourism

Transportation is one of the activities of tourism travel. It is the movement of tourists from their origins to the tourists' destinations. In addition, it not only transfers tourists, but it also attracts tourists. When transportation is convenient, it can make tourists more travel and result in the economic benefits to tourism attraction (Pothiphan, 2014). Currently, urban transportation has expanded extensively. Especially road transport, such as buses, taxis, and trains, because it is fast and comfortable. However, road transportation is still limited in times of urgency and cannot adequately support urban expansion. Marine transportation is an alternative travel mode to reduce congestion, be more comfortable, and be more connected to another mode of transportation (Rodsiri, 2012).

For Thailand, in Bangkok, there are many waterways that can be traveled. Since the river has been a source of culture and a way of life from the past to the present, the most popular marine trip is the Chao Phraya River. It has been internationally renamed Eastern Venice (Sorathan, 2010). There are many tourist attractions on the riverside and attractive tourists, such as the temple of the Emerald Buddha, Wat Rakhang Kositaram Woramahawihan, Yaowarat, Wang Lang Pier, Maharaj Pier, and so on. In 2019, there were approximately 13 million marine trips (Marine Department, 2019 & Marine Department, 2020). Most Thai and international tourists choose a boat service that is fully secure, in good condition, has strong safety, has well-informed staff, and could provide tourists with immediate service servicing, which can make them confident and revisit the service (Roicome, 2021).

5 Methodology

5.1 Conceptual Framework

Independent variables are the demographic characteristics of six variables, consisting of gender, age, education, occupation, and domicile. Dependent variables are service quality consists of five variables: tangible, empathy, assurance, reliability, and responsiveness as show in Figure 1.

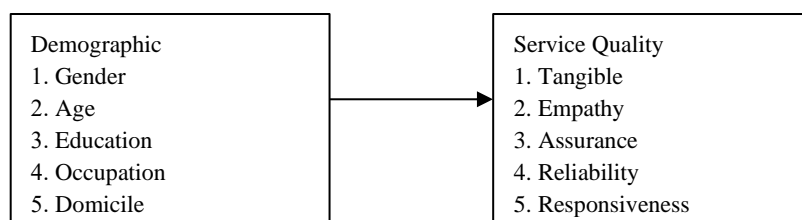


Fig. 1. The research conceptual framework.

5.2 The Population and Sampling

The population is international tourists who travel by the Chao Phraya Express Boat in 2019 about thirty million people per year (Marien Department, 2019). The sampling was done using the Taro Yamane method (Yamane, 1967). This research selected four hundred samples using a 95% confidence value.

5.3 Data Collection Area

The data collection area is a tourist attraction in Bangkok that can be traveled by the Chao Phraya Express Boat.

5.4 Research Tool and Data Analysis

A research tool is a questionnaire, which is divided into three parts. Data analysis in section one, demographics was done using descriptive statistics to find out frequency and percentage. Section two, analysis of international tourist opinions on the service quality of the Chao Phraya Express Boat, explains the mean and standard deviation. Section three is a T-test and ANOVA comparison of demographic variables and features with the opinions of international tourists on the service quality of the Chao Phraya Express Boat.

6 Research Finding

6.1 The Demographic Study

The demographic study found that the majority of international tourists who travel by the Chao Phraya Express Boat are women which is 68.2 percent, the age of Generation Y (born 1981-1996) which is 80.3 percent, graduate education which is 81.1 percent, the occupation is private sector, which is 42.2 percent, mostly from the European continent which is 82.6 percent.

6.2 An analysis of International Tourist Opinions on the Service Quality of the Chao Phraya Express Boat

An analysis of international tourist opinions on the service quality of the Chao Phraya Express Boat, as shown in Table 1, found that the overall quality is moderate, including, tangible, assurance, and responsiveness. In terms of empathy and reliability, they are insufficient quality level.

The lowest average of reliability was the availability of safety equipment on the boats, such as life jackets and lifebuoys. In terms of responsiveness, the lowest average is clearly answering the questions. For the confidence dimension, the lowest average value is a state-authorized expedition service that gives customers confidence in receiving the service. In terms of empathy, the lowest average value is good service, caring staff, and friendly service.

Table 1. Service quality of the Chao Phraya Express Boat.

SERVQUAL	Mean	Standard Deviation	Quality Level
Tangible	3.13	0.678	Moderated quality
Assurance	3.45	0.774	Moderated quality
Responsiveness	3.39	0.920	Moderated quality
Empathy	1.75	0.706	Insufficient quality
Reliability	2.40	0.683	Insufficient quality

6.3 The Comparison of the demographic factors to the service quality of marine transport for tourism on the Chao Phraya Express Boat

The results of the t-test testing research hypothesis in Table 2 have found that different genders influence different levels of service quality in terms of tangible and assurance, statistically significant at 0.05. The results of the one-way ANOVA testing research hypothesis have found that different ages influenced different levels of service quality in terms of reliability, statistically significant at 0.05. Classified by educational level, it was found that respondents with different educational levels influenced different levels of service quality in terms of reliability, statistically significant at 0.05. Classified by occupation, it was found that respondents with different careers influenced different levels of service quality in terms of responsibility, statistically significant at 0.05. Classified by domiciles, it was found that respondents with different domiciles influenced different levels of service quality in terms of responsiveness, empathy, and reliability, statistically significant at 0.05.

Consequently, it is concluded that the t-test and the one-way ANOVA assumptions support the research assumption that different demographic factors influence different levels of service quality.

Table 2. The comparison of the demographic factors to the service quality of marine transport for tourism on the Chao Phraya Express Boat.

SERVQUAL	t-test		One-way ANOVA<----->One-way ANOVA							
	Gender		Age		Education		Occupation		Domiciles	
	t	Sig.	t	Sig.	t	Sig.	t	Sig.	t	Sig.
Tangible	-0.385	0.701	1.064	0.367	2.340	0.077	1.074	0.363	1.715	0.136
Assurance	-0.049	0.46	0.073	0.974	1.742	0.162	0.956	0.416	0.845	0.521
Responsiveness	-0.461	0.632	1.600	0.193	5.781	0.001*	0.136	0.939	3.432	0.035*
Empathy	-5.297*	0.000	0.416	0.811	1.545	0.206	0.278	0.841	5.188	0.007*
Reliability	1.007	0.312	17.099	0.000*	2.016	0.137	5.787	0.000*	4.056	0.020*
	-1.706	0.090	0.684	0.578	0.595	0.620	0.694	0.558	0.104	0.991

*Statistically significant at 0.05

7 Conclusions and Discussions

The analysis of the opinions of international tourists on the quality services of the Chao Phraya Express Boat was discussed as follows:

The demographic study found that the majority of international tourists who travel by the Chao Phraya Express Boat are women, the age of Generation-Y, graduate education, the private sector, and the European continent, which is consistent with a comparison of the satisfaction of Thai and international tourists who use ferry service at Surat Thani Province. The survey found that respondents were more female than male, with degrees of education at the bachelor's degree, occupied by private companies and stores (Wanwisat, 2019).

An analysis of international tourist opinions on the service quality of the Chao Phraya Express Boat found that the overall quality ratings were moderate. The classification of SERVQUAL found that tangible, assurance, and responsiveness had medium quality ratings. In terms of empathy and reliability, there were fewer quality ratings. Some studies indicate that there is a high level of quality, such as a study of the quality of express boat service in Bangkok, that affects passenger satisfaction. There is a high level of public opinion about the overall quality of the service (Yusawut, 2021).

However, if the research analyzes the subheads on SERVQUAL dimensions in terms of reliability, it is found that the lowest average was the availability of safety equipment on the boats, such as life jackets, lifebuoys, etc. In terms of customer responsiveness, the lowest average is that the service provider is clearly answering the questions. In terms of customer confidence, the lowest average value is a state-authorized expedition service that gives customers confidence in receiving the service. In terms of knowing and understanding customers, the lowest average value is good service, caring staff, and friendly customer service. Each dimension of quality affects both empathy and reliability. It is a necessity that needs to be developed, even with a high level of quality and satisfaction (Noipream, 2015).

The hypothesis testing of the comparison of demographic variables and features with the opinions of international tourists on the service quality of the Chao Phraya Express Boat found that different demographic factors of international tourists affect the service quality of marine transport for tourism on the Chao Phraya Express Boat in different levels of services quality, which is consistent with Thongliamnak & Ruying (2021) that explains a comparison of the quality of maritime transportation services to foreigners of the Sulawesi Ferries province found that different personal and residential factors of foreign tourists influenced difference service quality that statistically significant at level 0.05.

The guidance on the development of the physical evident quality by the Marine Department should be improved to meet safety standards. Boat service providers must comply with the control conditions of the Marine Department and attend to the safety measures of the marine transportation process. Besides, Thanasottigulanun (2020) found that customer relationship management is highly correlated with administration performance in the central marine transportation business of Thailand. Therefore, the quality of marine transport services for tourism should be given priority to safety, and the development of the service provider will increase the level of service experience.

8 Suggestions

8.1 Research Suggestions

The sample group provides further suggestions on the service quality of the Chao Phraya Express Boat, recommending that the boat provider should pay attention to the large number of tourists at important piers. The suggestion is as follows:

(1) The management of getting in and out of the boat should be regulated. The number of users of the service should be limited and not too tight to ensure the safety of the tourists.

(2) There is an increased development of English language knowledge and skills as English uses international communication. Communication is also the core of the service that can help facilitate and respond to tourists' needs.

8.2 Future Research Suggestions

The proposal for the subsequent research should be to investigate the concept as follows:

(1) The study develops a service quality plan that the relevant agencies can implement to increase the efficiency of the business and meet the tourists' needs.

(2) Collect quality research data to obtain guidelines for managing the quality of marine transportation services with greater clarity.

(3) Study of the quality management of the service of other transportation systems to increase readiness to support more and more foreign tourists.

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