CUSTOMER SATISFACTION ON MARITIME TERMINAL: CASE STUDY AT FERRY TERMINAL FACILITIES AT KUALA KEDAH, KEDAH

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Abstract

Tourism industry can be a significant contributor to a country's economy. Ferry terminal facilities is chosen as it will influence the level of customer satisfaction to use the facilities provided at the ferry terminal at a tourist destination island. This study focuses on the facilities provided at the ferry terminal, Kuala Kedah. In addition, an investigation on the relationship between customer satisfaction and facilities provided there is also another aim of this research. By using survey questionnaires, data from the customers using Kuala Kedah ferry terminal has been collected and analyzed. A total of 68 questionnaires are collected and the data analyzed using Statistical Package for the Social Science (SPSS) to measure and analyze the relationship between customer satisfaction and the facilities provided at the ferry terminal, Kuala Kedah. It is found that there is a strong relationship between the facilities provided and customer satisfaction.

Keywords: Ferry Terminal, Terminal Facilities and Customer Satisfaction

1. INTRODUCTION

Langkawi is an island on the west coast of Malaysia consisting of 99 islands. The primary island's interior, surrounded by turquoise ocean, is a combination of scenic paddy fields and mountains clad in jungle. Also, one of the factors that would affect the rapid growth of tourism on this island is the availability of infrastructure and good quality facilities (Ibrahim & Ahmad, 2011). This study is about to determine the facilities condition provided and to measure the relationship between customer satisfaction and facilities provided at ferry terminal Kuala Kedah.

Customer Satisfaction (CSAT) is a measure of quantifies a customer's degree of satisfaction with either a product, service, or experience. Usually, the uses of this metric are to calculate deploying a customer satisfaction study that asks on a five or seven point of scale on how a client felt over a support interaction, buying, or general customer experience, with responses to choose from between "extremely satisfied" and "extremely unsatisfied". According to Moscardo (2001), lack of facilities will develop an unwanted feeling and therefore invites customer to be dissatisfied or complained.

The influence of facilities towards customer satisfaction can affect a country's revenue. Influence of facilities can help to gain the amount of customer that come to this country to develop an increasing tourism industry. Besides that, safety of the customer can be guaranteed with high quality facilities at the ferry terminal. According to Zainuddin et al. (2006), about 85% of customer arrive on the sea routes to Langkawi Island, based on the Langkawi Development Authority (LADA) tourist arrival records. As Langkawi Island is also considered one of the most popular destinations among tourists, the facilities provided also should be excellent to attract more customers to the island for their holiday destinations. Therefore, the study on customer satisfaction towards the facilities provided at the ferry terminal is Crucial.

2. PROBLEM STATEMENT

The most common problem faced at Kuala Kedah ferry terminal is the poor condition of facilities provided at the ferry terminal. Lack of chairs at the waiting places especially during public holidays and peak seasons presents customers with limited seats while waiting for their ferry trip. Furthermore, cleanliness of toilet which most of the toilet are in bad situation and dirty. According to Ibrahim and Ahmad (2008), customers who are dissatisfied with the facilities provided at the terminals in Kedah state including at Langkawi Island in terms of toilet cleanliness, facilities, vandalism to the point where it did not work, lack of maintenance, lack of facilities and aspects of tourist safety and comfort. Therefore, this research is done to identify the relationship between customer satisfaction and Kuala Kedah ferry terminal facilities.

3. RESEARCH OBJECTIVE

The research objective is to determine the facilities condition provided at ferry terminal Kuala Kedah and to measure the relationship between customer satisfaction and facilities provided at the ferry terminal in Kuala Kedah.

4. RESEARCH QUESTION

Based on the research objectives, the following research questions have been identified:

i) How is the condition of facilities provided at ferry terminal Kuala Kedah?

ii) What is the relationship between customer satisfaction and facilities provided at the ferry terminal in Kuala Kedah?

5. SIGNIFICANCE OF STUDY

By determining the customer satisfaction towards facilities provided at the ferry terminal, the management of Kuala Kedah ferry terminal can get more information to focus on the customer satisfaction in order been used for their further improvement. This study seeks that the information taken from the level of customer satisfaction will give favorable to the government authority as it will be used to inform them. This research will give benefits and significance to the authority and other related agencies to play a better role in developing the economy and address the identified problems stated.

6. LITERATURE REVIEW

I) Terminal

A terminal is a place that people and items are charged or removed, such as a bus terminal, ferry terminal or

a rail terminal. Simply put, marine terminals can be said to be facilities or platforms for ships or vessels. Nevertheless, it should be remembered that the ships do not have a marine terminal as a separate port. Marine ports are just part of the port where merchandise and freight can be packed into a vessel or removed if a ship arrives at the dock. Fah and Kandasamy (2011) stated that terminal is used to load and empty people and goods into transport ports and standby terminals.

Marine terminals essentially surround a part of the port where goods and freight can be stored in a ferry or discharged from a ship when it reaches the port (Fah & Kandasamy, 2011). Moreover, Arof and Awis Khadzi (2018) (Karam et al., 2014) has stated and defended that marine terminals are extraordinarily prevalent and create a critical need for the loading component.

II) Terminal Facilities

Terminal facilities also shall mean all property, premises, systems, installations, machinery and devices that are useful in the service of public warehouses, storage facilities or transportation facilities for the purpose of hosting or selling on water or on ground or in the air or are useful as an assist or as an advantage or convenience. According to Amalia and Litinas (2007) stated that ampleness relates to the availability of port offices relevant to the volume or quantity that fits several customers and supported by Singh (2006) stated that additionally, departments are also organized and harmonized with the planned amounts of customers.

Based on previous study, according to Hairie et al. (2017) stated that one of the factors that would contribute to the development of tourism can be taken up to the best amenities and service accessibility. It is therefore not shocking to notice that the governments have regularly given a large measure of budgetary allowance for the construction of these facilities. According to Shardy et al. (2013) has stated that together with this growth, the need for constant monitoring and appraisal of tourist satisfaction rates has become a necessity with a tourist item, service, or facility.

III) Customer Satisfaction

The satisfaction of customers demonstrates the pleasure that consumers obtain from doing business with a company. In other terms, how satisfied the clients are with their purchase and the company's overall service. Philip Kotler describes customer satisfaction (Kotler et al. 2013) says that how the customer's needs are achieved then been decided. Customer satisfaction is directly linked to the desires of the customer.

Customers find satisfaction from a product or service in a comfortable manner that makes them faithful to the company based on whether their requirements are fulfilled easily. To achieve customer loyalty, customer satisfaction is therefore an important step. Furthermore, Hill and Alexander (2006, 213) have stated that customer satisfaction is predominantly defined by the hotel service and its value in the lodging and tourism industries. In placing more emphasis, according to Gladys et al. (2019) through analyzing the supposition of product and expectations, performance is evaluated.

7. METHODOLOGY

I) Research Design

Quantitative research is a quantitative study that generally uses more objective statistical analysis, and the results are oriented. It means how many or more, referring to the term "quantity". Quantitative research focuses on collecting and generalizing numerical data across groups of individuals or explaining a specific phenomenon (Babbie, 2010).

II) Closed Ended Questions

Close-ended questions are characterized as types of questions that allow respondents to choose from a separate set of pre-defined answers, such as "yes/no" or multiple-choice questions. Closed-ended questions are used in a typical scenario to gather quantitative data from respondents.

A Likert Scale is a metric of points, mostly used in survey forms, measuring how people feel about something. This includes several questions you ask people to answer, so hopefully can be choose from 5-7 positive responses. It often starts with a midpoint that is positive. To assess attitudes explicitly (i.e. the person knows their behavior is being studied), various types of rating scales have been created.

Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6

50% Negative   50% Positive

Figure 1 Example of Likert-scale in questionnaire design

This survey questionnaires consist of three sections:
Part A: Demographic background
Part B: Knowledge on Ferry Terminal
Part C: Condition Level of Facilities
Part D: Customer Satisfaction Level Towards Facilities

III) Sampling

Sampling is the method by which a lot of subjects are selected from a community as survey respondents. The selection of unsuitable samples decreases study validity and reliability. The results of the sampling could be unfair and make it difficult for all population elements to participate equally in the sample and is purposeful sampling one of the types of non-probability sampling that will be used (Singh, 2018).

IV) Determination of Sample Size

The formula used to calculate and determine the sample size is from Krejcie & Morgan (1970):

$$s = \frac{X^2NP(1-P)}{d^2(N-1) + X^2P(1-P)}$$

s = required sample size.
X^2 = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841).
N = the population size.
P = the population proportion (assumed to be .50 since this would provide the maximum sample size).
d = the degree of accuracy expressed as a proportion (0.05).

According to the formula above, the total sample size that been calculated is 68 respondents.

V) Data Analysis

Data analysis is a comprehensive data and knowledge analysis and examination by dividing it into its component parts to expose their interrelationships. Analyzing involves breaking down a subject or idea into its pieces to analyze and explain it and reorganizing certain sections in a manner that makes sense.

VI) Statistical Package for the Social Science (SPSS)

SPSS (Statistical Package for the Social Sciences), also known as IBM SPSS Analytics, is a software package used for statistical data processing. SPSS facilitates both the study and alteration of various data types in almost all standardized data formats. SPSS offers data analysis for descriptive and bivariate statistics, predictions of numerical results and group identification predictions.

8. RESULT AND DISCUSSION

I) Reliability Statistics

Based on the result shown in Table 1, Cronbach Alpha for the reliability test is 0.912, which is more than 0.7 and it is considered excellent in consistency.

Table 1:Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.912	.910	39

II) Descriptive Analysis

Table 2: Descriptive Statistics

	N	Mean	Std. Deviation
Age	68	2.574	.9194
Gender	68	1.721	.4520
Race	68	1.235	.6258
Current Status	68	2.147	1.1878
Travel Agency	68	1.868	.3414
Internet	68	1.250	.4362
Family/ Friends	68	1.368	.4857
Newspaper/ Magazines	68	1.882	.3246
Travel Brochures	68	1.838	.3710
Travel Guides	68	1.882	.3246
TV/ Radio	68	1.824	.3841
Other	68	1.941	.2370
Time Visited	68	2.603	.7359
Purpose	68	2.485	1.3548
Transportation used to terminal	68	1.500	1.0438
Valid N (listwise)	68		

Based on table 2 above, it shown the descriptive statistics for Part A (demographic background) and Part B (knowledge on ferry terminal) of questionnaire survey.

III) Paired Sample T-Test

Table 3 Summary of Paired Sample T-Test Result

SUMMARY Table Matrix: Summary (Comparison Difference Mean)	Data Information	Facilities	Cleanliness	Safety
Data Information		0.22353	0.21569	0.14706
Facilities	-0.22353		-0.00784	-0.07647
Cleanliness	-0.21569	0.00784		-0.06863
Safety	-0.14706	0.07647	0.06863	

Table 3 above exhibits the summary of comparison difference means between all the independent variable 1 (data information), independent variable 2 (facilities), independent variable 3 (cleanliness) and independent variable 4 (safety). Between all the independent variables, component 1 which is independent variable 1 (data information) is the highest mean difference because it shows all positive results. This shows component 1 which is data information represent independent variables that shows customers focus more on data information to show their satisfaction towards the facilities provided at the ferry terminal Kuala Kedah, Kedah.

IV) Pearson Correlation Analysis

The second objective of this research is to measure the relationship between customer satisfaction and facilities provided at Kuala Kedah Ferry Terminal, Kedah. Pearson correlation coefficient method was used by the researcher to measure the customer satisfaction level.

Table 4: Person Correlations results

Correlations		Data.Information	Facilities	Cleanliness	Safety	Satisfaction
Data.Information	Pearson Correlation	1	.656**	.555**	.481**	.614**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	68	68	68	68	68
Facilities	Pearson Correlation	.656**	1	.850**	.664**	.853**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	68	68	68	68	68
Cleanliness	Pearson Correlation	.555**	.850**	1	.704**	.850**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	68	68	68	68	68
Safety	Pearson Correlation	.481**	.664**	.704**	1	.671**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	68	68	68	68	68
Satisfaction	Pearson Correlation	.614**	.853**	.850**	.671**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	68	68	68	68	68

**. Correlation is significant at the 0.01 level (2-tailed).

One of the objectives of this study is to examine whether there is a significant relationship between the facilities provided and customer satisfaction at the ferry terminal in Kuala Kedah, Kedah. Using the Pearson correlation coefficient method, the analysis of data obtained from the sixty-eight respondents revealed that there was a positive relationship between the level of facilities provided and customer satisfaction.

   The result of correlation coefficient 0.614 for data information showed that the element had a strong relationship with the level of customer satisfaction towards the facilities provided. Besides, it was found that there was a strong relation between facilities and cleanliness because both of it scored 0.853 and 0.850(range of very strong relationship). For safety, the result was strong because the score was 0.671 which was in the

range of strong relation. All these results show the strong relationship between the facilities provided and customer satisfaction at the ferry terminal,Kuala Kedah, Kedah. This result was significant at the claim of hypothesis which is to reject H null and accept H alternative.

The result proved that the facilities provided had the highest relation towards relationship between customer satisfaction and facilities provided at ferry terminal Kuala Kedah, Kedah. The high-quality facilities provided at the terminal help to influence customer satisfaction who patronized the terminal.

9. CONCLUSION

Tourism is one of the important and essential means for development in a country, be it in economic activity or culture. There are several types of tourism, but customers have approached island tourism widely, particularly for those who love nature and as an escape from their busy life in the city.

One of the things that cannot be ignored when customers used the ferry terminal is facilities. The researcher in this study will determine the condition of facilities provided at the ferry terminal. It can be concluded that the majority of customers are satisfied with the facilities provided at the Kuala Kedah, Kedah ferry terminal.

Besides that, this study also to measure the relationship between customer satisfaction and facilities provided at ferry terminal Kuala Kedah, Kedah. Most customers are satisfied with the facilities provided at the ferry terminal as the ferry terminal is well maintained by the parties concerned, and the facilities provided also enough and readily accessible for all the customers.

10. ACKNOWLEDGEMENT

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