

CUSTOMER SATISFACTION ON MARITIME TERMINAL: CASE STUDY ON FERRY TERMINAL FACILITIES IN PANGKOR ISLAND, PERAK.

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ABSTRACT

Island tourism is fast becoming popular among tourists, and for Malaysia, this provides a fertile avenue for further extension of her tourism industry. This study to identify the condition level of facilities provided. By using survey questionnaires, data from the customers using Pangkor Island ferry terminal has been collected and analysed. The questionnaire collected customers' demographics information, condition level of facilities, and satisfaction level towards facilities provided. This study was aimed to provide a valuable insight to an organization that operates Pangkor Island ferry terminal regarding customer satisfaction. A total of 86 questionnaires were collected and the data was analysed using Statistical Package for Social Science (SPSS) to investigate the current level of customer satisfaction and to determine the relationship between terminal facilities and customer satisfaction. The result found a strong relationship between the terminal facilities and customer satisfaction.

Keywords: Customer satisfaction, ferry terminal, terminal facilities.

1. INTRODUCTION

This study analyses on the customer satisfaction on maritime terminal facilities. Consumer loyalty demonstrates the satisfaction that clients get from working with a firm. As it were, it is how upbeat the clients are with their exchange and by and large involvement with the organization. Clients get fulfilment from an item or an administration dependent on whether their need is met easily, in an advantageous way that makes them faithful to the firm. Ibrahim and Ahmed (2011), indicate that accessibility and high-quality ferry terminal offices can also be considered a factor affecting the rapid development of tourism at that terminal. Thus, consumer loyalty is a significant advance to pick up client devotion. Customer satisfaction demonstrates the satisfaction that clients get from working with a firm. Passenger or customer satisfaction is a matter of attention for practitioners, policymakers, and academics in the transport services industry. Customers' satisfaction is regarded to be one of critical issues in the transport service sector (Kai and Jen, 2006). This research was focused on the customer satisfaction on maritime terminal: case study on terminal ferry facilities at Pangkor Island ferry terminal. This research wants to determine and identify the level of customer satisfaction towards the facilities that had been provided at the terminal ferry. The level of customer satisfaction will give a huge impact on the popularity of the ferry terminal. The higher the level of customer satisfaction with the facilities provided, the more customers will be using the ferry terminal while enhancing the existing economy and profits.

PROBLEM STATEMENT

The most common problem that faced by the customers at Pulau Pangkor ferry terminal are the bad quality of the facilities provided. Hence, the cleanliness of public amenities is one of the big issues at ferry terminal. Cleanliness is the first aspect to be seen by all people in their entire life. According to Ibrahim and Ahmad (2008), customer dissatisfied with the facilities that are provided at the terminals in term of the cleanliness of toilet, facilities, vandalism to the point of did not function, deficient of maintenance, lack of facilities and the aspects of tourists' safety and comfort.

RESEARCH OBJECTIVE

The aim of this research is to identify the condition of facilities provided and to measure the level of customer satisfaction towards facilities provided.

2. LITERATURE REVIEW

Customer Satisfaction

Customer satisfaction is an analytic idea to comprehend and live by the customer success professional, and it is exceeding the limit of money back guarantee (Bernazzani, 2019). Satisfaction is the best marker of how likely it is that the affiliation's customers will make extra purchases at later stage according to statement (Manani et. al., 2013). Consumer loyalty depends on the degree of administration quality conveyed by the specialist co-ops (Saravanan & Rao, 2007). Generally, customer satisfaction can be calculated on the basis of five key criteria which are comfort, security, cleanliness, adequacy, and functions (Zakaria et. al., 2018).

Marine Terminal

A terminal is where stacking and emptying of individuals or products happen in a transport terminal or a prepared terminal (Fah & Kandasamy, 2011). Marine terminals simply structure a piece of the port where merchandise and freight can be stacked into a ship and emptied if a ship goes to the port. According to Arof & Khadzi, (2018), marine terminals are exceptionally prominent and shape a vital need with regard to the loading part.

Terminal Facilities

Terminal facilities gives the meaning of all offices, including lounge area, rest room, eating, drinking, and ticket deals offices which an engine basic transporter makes accessible to travellers of an engine vehicle worked in interstate or remote business as a standard piece of their transportation. Sufficiency alludes to the point of view of the port office availability, identified with the size or sum that suits a few clients (Amalia & Litinas, 2007). Government awareness is to keep off the blockage occurring, governments build up a few offices to guarantee that each terminal can adjust and completely work and therefore, to invoke the vacationer fulfilment (Mersat, 2012).

3. METHODOLOGY

Research Design

Quantitative methods illustrate empirical evidence and statistical, mathematical, or numerical collection of data obtained through polls, questionnaires, and surveys, or by using computational techniques to manipulate pre-existing statistical data. Quantitative analysis models are analytical, detailed, and comprehensive in nature several times (Surendran, 2019).

Close-ended Question

A closed-ended query produces a restricted set of answers that can easily be coded in a database with a certain number or symbol representing a response.

Closed-ended questions are questions that can be answered only by choosing from a limited number of options, usually multiple-choices, 'yes' or 'no' or a rating scale (e.g., strongly disagree to strongly agree).

The Likert scale is defined as a one-dimensional scale for the attitudes and opinions of the respondent (Adi Bhat, 2019). This scale is often used to understand the ratings of the respondent and the level of agreement with the subject in hand.

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| Strongly Disagree | Disagree | Undecided | Agree | Strongly Agree |
| (1) | (2) | (3) | (4) | (5) |

Figure 1: Example of Likert-scale in questionnaire design

This survey questionnaire consists of four part:

Part A: Demographic background.

Part B: Knowledge on ferry terminal.

Part C: Condition level of facilities.

Part D: Customer satisfaction level towards facilities.

Sampling

Sampling is a method used in statistical analysis that takes from a larger population a fixed number of observations (Tuovila, 2019). The purposive sampling is an unexpected sample chosen based on population characteristics and research goal (Crossman, 2019). Purposive sampling is also referred to as decision, selective or arbitrary sampling is a sampling technique in which researcher relies on his or her own judgment when selecting population members to participate in the sample.

Determination of Sample Size

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

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

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.

Data Analysis

Analysis is a mathematics branch that explores ongoing developments, including integration theories, distinction, estimation, limits, analytical functions, and infinite series. It is the numerical simulation of constant activities that are real and complex valued. It explains not only the discipline that is part of calculus and one form of empirical fact of rationale.

Statistical Package for Social Science (SPSS)

SPSS Analysis is a Windows-based program or software that can be used to create table and graphs for data entry and analysis (Wellman, 1998). SPSS is used for the processing and analysis of survey data by market researchers, health researchers, survey companies, government agencies, educational researchers, marketing organizations, data miners, and much more (Foley, 2018).

4. RESULT & DISCUSSION

Reliability Analysis

Table 1 Reliability Statistics

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|--|------------|
| .889 | .887 | 38 |

Based on the result shown in Table 1, Cronbach Alpha for the reliability test is 0.889, which is more than 0.7 and it is considered good in consistency.

Descriptive Analysis

Table 2 Descriptive Statistics

| | N | Mean | Std. Deviation |
|------------------------|----|-------|-------------------|
| Age | 68 | 2.441 | .8531 |
| Gender | 68 | 1.588 | .4958 |
| Race | 68 | 1.074 | .3984 |
| Current status | 68 | 1.897 | 1.3399 |
| Travel Agency | 68 | 1.779 | .4177 |
| Internet | 68 | 1.471 | .5028 |
| Family/ Friends | 68 | 1.279 | .4520 |
| Newspaper/ Magazine | 68 | 1.926 | .2629 |
| Travel brochures | 68 | 1.941 | .2370 |
| Travel guides | 68 | 1.897 | .3061 |
| TV/ Radio | 68 | 1.926 | .2629 |
| Other | 68 | 1.941 | .2370 |
| Time visited | 68 | 2.853 | .7583 |
| Purpose | 68 | 3.515 | 1.4812 |
| Transportation used | 68 | 1.647 | 1.1560 |
| 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.

Paired Sample T-Test

The Paired Samples t-test compares two means that are from the same individual, object, or related units. This test had been done is to analyse the first objective of this research which is to identify the condition level of facilities provided.

Table 3 Summary of paired sample t-test result

| Table Matrix : Comparison Difference Mean | | | | |
|---|------------------|------------|-------------|--------|
| | Data Information | Facilities | Cleanliness | Safety |
| Data Information | - | 0.126 | 0.069 | 0.103 |
| Facilities | -0.126 | - | -0.058 | -0.024 |
| Cleanliness | -0.069 | 0.058 | - | 0.034 |
| Safety | -0.103 | 0.024 | -0.034 | - |

Based on table 3 above, it stated the summary of the comparison differences mean between all the independent variable which is data information, facilities, cleanliness, and safety. It can be concluded that independent variable 1 which is data information is the most dominant compared to the others independent variable because have the highest mean difference when it shown all positive highest value. This shows that data information represent the most significant independent variable as the customers focus more on data information that had been provided at the Pulau Pangkor Ferry Terminal, Perak such as the signage, the time departure of the ferry, and the information on the ferry ticket.

Pearson Correlation Analysis

The second objective of this research is to measure the level of customer satisfaction towards the facilities that had been provided at Pulau Pangkor Ferry Terminal, Perak. Pearson correlation coefficient method had been used to by the researcher to measure the customer satisfaction level.

Table 4 Person Correlations results

| | | Data Information | Facilities | Cleanliness | Safety | Satisfaction |
|------------------|---------------------|------------------|------------|-------------|--------|--------------|
| Data Information | Pearson Correlation | 1 | .715** | .761** | .659** | .632** |
| | Sig. (2-tailed) | | .000 | .000 | .000 | .000 |
| | N | 68 | 68 | 68 | 68 | 68 |
| Facilities | Pearson Correlation | .715** | 1 | .821** | .737** | .776** |
| | Sig. (2-tailed) | .000 | | .000 | .000 | .000 |
| | N | 68 | 68 | 68 | 68 | 68 |
| Cleanliness | Pearson Correlation | .761** | .821** | 1 | .695** | .803** |
| | Sig. (2-tailed) | .000 | .000 | | .000 | .000 |
| | N | 68 | 68 | 68 | 68 | 68 |
| Safety | Pearson Correlation | .659** | .737** | .695** | 1 | .640** |
| | Sig. (2-tailed) | .000 | .000 | .000 | | .000 |
| | N | 68 | 68 | 68 | 68 | 68 |
| Satisfaction | Pearson Correlation | .632** | .776** | .803** | .640** | 1 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | |
| | N | 68 | 68 | 68 | 68 | 68 |

Table 4 above is the result of Pearson correlation coefficient, for data information which is 0.632 has a strong relationship to the level of customer satisfaction towards facilities provided. Same goes for facilities, it also has a strong relationship to the customer satisfaction level which

give the correlation about 0.776. Next, cleanliness has the very strong relationship to the customers satisfaction level towards the facilities, which give the correlation value 0.803. Lastly, for safety element, the result shows that, the value of the correlation is 0.640, which give the strong relationship.

As the result, it showed and proven that all of the element had a strong relation towards the level of customers satisfaction but, the highest and the strongest relation is on cleanliness element. It can be concluded that the customer will be satisfied towards the facilities that had been provided at the ferry terminal more on the cleanliness. Cleanliness is the basic hygiene care that all people should have in their life. If the ferry terminal did not focus on cleanliness, the customer will give bad review as cleanliness is the common things and can be seen with the eyes.

5. CONCLUSION

When it comes to tourism, there must be a way how customers will travel with either by air, water, or road transportation. This study research area is Pangkor Island, so customers will travel to there by using ferry. The things that hard to be ignored when customers used the ferry terminal is facilities. This study will identify the condition level of the facilities that had been provided so that the researcher knows whether the facilities provided are sufficient and good enough to be used by the customers or not. It can be concluded that the condition of facilities provided are well known good to be used.

Besides that, this study also measures on the customer satisfaction level towards the facilities that had been provided at the ferry terminal. Most customers are satisfied with the facilities provided as the ferry terminal is well maintained by the parties concerned, and the facilities provided also enough and readily accessible for all the customers

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