Customer Expectations and its Relationship Towards Public Transport in Klang Valley

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ABSTRACT

This study investigates users’ expectations towards the services provided by public transportations and its relationships to customer satisfaction, loyalty and environmental factors. Additionally, it also attempts to determine the most preferred mode of public transport. The data was then analyzed using descriptive statistics and structural equation modeling (SEM). The most preferred mode of public transportation was LRT (35.8%), and monorail (28.1%). More importantly, customers’ expectations on PT services were based generally on the account of safety. Findings also indicated positive significant relationships between customer satisfactions, environment and loyalty, as well as a positive significant relationship between environmental concern and loyalty.

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Keywords: services; customer; expectations; satisfaction; loyalty.

INTRODUCTION

Public transportation has undoubtedly play a vital role in commuting passengers to work or to places that they desire, and more importantly, to reduce traffic congestion. The public transport company in Malaysia was first introduced by the British, in 1935 by setting up a company called the General Transport Company. However, public transport was not the trend
back then, since walking and cycling were mostly favored by the people (Klang Valley Regional Planning and Development Study, 1973).

Eventually, within the period of 1960 to 1990, mini bus services were the most popular mode of public transportation. Apparently, unlike most other Asian cities, the use of PT is low as only 16 percent of the population use public transportation in Kuala Lumpur (The Star, October 13, 2006). By the end of 2012, the government is targeting 600,000 or 25 percent of the Klang Valley’s population to use public transport under the National Key Results Areas (NKRA) initiatives (Bernama, 2009). Ultimately, through the 10th Malaysia Plan (2011-2015), the government aims to improve the use of public transport from 12 percent in 2009 to 30 percent by 2015 (Bernama, 2010).

At present, PT in the Klang Valley, in particular, extends from public bus services to railway services, light rail transit (LRT) and monorail. There are several bus operators linking the city centre within the suburbs in the Klang Valley and the main operator is the government-owned company, the Rapid KL. On the other hand, Kuala Lumpur’s rail based transit system consists of two Light Rail Transit lines, a monorail line, two commuter rail systems consisting of four lines, and an airport rail link. Consequently, these PT services are held by private companies, as well as the government, resulting in poor integration and coordination (Edvardson, 1998), in ensuring safety, convenience and accessibility of all passengers, specifically, in the Klang Valley areas (Halim and Othman, 2003).

The establishment of this study is as follows: Firstly, the concept of customer expectations is defined, followed by the research hypotheses and conceptual framework. Next, the methodology used is further explained, and lastly, the results of the research, as well as its managerial implications are further discussed.

**LITERATURE REVIEW**

Expectations can be defined as “predictions made by customers on what probably will occur during an imminent transaction” (Parasuraman, Zeithaml and Berry, 1988). Tyron (1994) argued expectations as “anticipation of
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future consequences based on prior experience, current circumstances, or other sources of information.” On the other hand, Lavesque and McDougall (1996) defined customer satisfaction as an overall customer attitude towards a service provider which has different levels of specificity in various studies. Satisfaction may be associated with product attribute (Bettman, 1974), a salesperson (Swan and Oliver, 1985), and consumption experience (Bearden and Teel, 1983; Oliver, 1980, 1981). According to Yi (1990), product-level customer satisfaction can be generally defined as the customer’s response to the product or services. Therefore, customer satisfaction has become a key intermediary objective in service operations as it indicates organizational performance (Ranaweera and Prabhu, 2003). Consequently, in order for business to be successful and profitable, it must satisfy customers (Shin and Elliot, 2001).

Customer loyalty, conversely, is a combination of the customer’s likelihood to repurchase from the same supplier in the future. Apparently, customer loyalty has been recognized as the dominant factor in determining a business organization’s success. In the study by Lam and Burton (2006), they found that loyal customers are more likely to involve in repeat purchases from a supplier or increase their “share” of purchases from a particular supplier. They may also provide recommendations or engage in word of mouth promotion. Eventually, customer loyalty can lower costs and increase profitability, as well as generating better profit (Reichheld and Sasser, 1990).

Hinamen, Nijkamp and Padjen (1992) suggested that transport policy can improve environmental quality/sustainability if it decreases VMT, auto production and ownership, and increases the use of technological measures for cleaning exhaust gases. The finding is supported by a research, A Community Strategy for Sustainable Mobility, Commission of the European Communities (1992) that the overall impact of transport for “sustainable mobility,” which should enable transport to fulfil its economic and social role while containing its harmful effects on the environment. The report identifies critical issues relating to pollution and noise standards, truck size and weight, speed limits, energy consumption, land use, congestion, and the risks inherent in transporting dangerous goods, and measures that could take better account of the external costs of transportation. The goals are to encourage and improve the more environmentally friendly modes (especially rail passenger system, intermodal) to make efficient use of existing capacity.
In view of the above research context, we strongly believe that the proposed hypothesized model is novel as it attempts to explain the effect of customer expectations and in turn, its subsequent effect on satisfaction, loyalty and environment. The hypothesized model is depicted in Figure 1.

The hypotheses model is as follows:

H1: Expectation has a positive effect on satisfaction
H2: Satisfaction has a positive effect on environment
H3: Satisfaction has a positive effect on loyalty
H4: Environmental factors has a positive effect on loyalty

METHODOLOGY

A structured questionnaire was used based on the attributes derived from previous research. The survey was pre-tested with 63 PT users for content validity before the survey was carried out. Consequently, the final survey was conducted at various public transport of bus and train stations around the areas of Klang Valley, which cover Klang, Shah Alam, Subang Jaya,
Petaling Jaya, Kuala Lumpur, Gombak, and Ampang for two weeks during the weekdays. A five-point scale was used to describe the items listed in the dimensions ranging from “very strongly disagree” to “very strongly agree” for all the questions involved in the study. Five hundred questionnaires were distributed; however, 467 were collected, giving a response rate of 93.4%. 57% of the respondents were female and 54.8% were Malays. The age of the overall majority of respondents was between 26-35 years old (55.9%). Most of them were highly educated (92%) and worked in the private sectors (69%), as well as were common users of public transport (82%), although some of them owned private vehicles (40.7%).

RESULTS AND DISCUSSIONS

Respondents were asked to rank the preferred mode of public transport from 1 (the 1st choice) to 4 (the last choice) and it was found that most of them preferred to ride on the LRT, followed by the monorail, bus and train as illustrated in Figure 2.

![Figure 2: Preferred Mode of Public Transport](image)

In addition, the main important elements that influence customer satisfaction with public transportations are safety (34.3%) followed by accessibility, reliability, fares, communication and experience, as illustrated in Table 1.
Table 1: The Important Element of Public Transport Services

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important element of public transport services</td>
<td>1. Safety</td>
<td>160</td>
<td>34.3</td>
</tr>
<tr>
<td></td>
<td>2. Accessibility</td>
<td>92</td>
<td>19.7</td>
</tr>
<tr>
<td></td>
<td>3. Reliability</td>
<td>80</td>
<td>17.3</td>
</tr>
<tr>
<td></td>
<td>4. Fares</td>
<td>81</td>
<td>17.1</td>
</tr>
<tr>
<td></td>
<td>5. Communication</td>
<td>16</td>
<td>3.4</td>
</tr>
<tr>
<td></td>
<td>6. Trip experience</td>
<td>15</td>
<td>3.2</td>
</tr>
</tbody>
</table>

The sequence of analysis took the following order: firstly, exploratory factor analysis (EFA) was performed on each measurement model to assess unidimensionality in terms of the parameter estimates, the statistical significance of the parameter estimates and overall fit. Upon inspecting the results, at this point the researcher then decided whether to retain or delete any ill-fitting items. Secondly, CFA was performed on those measurement models that comprised of purified measures derived from the first step. Finally, all pertinent results on the measurement models were reported in Table 2.

Table 2: Confirmatory Factor Analysis with Factor Loadings, Variance Extracted and Construct Reliability

<table>
<thead>
<tr>
<th>Label</th>
<th>Construct</th>
<th>Loadings</th>
<th>Cronbach alpha</th>
<th>Variance Extracted (VE)</th>
<th>Construct Reliability (CR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>Reliability</td>
<td>0.766</td>
<td>0.802</td>
<td>0.51</td>
<td>0.80</td>
</tr>
<tr>
<td>S2</td>
<td>Safety</td>
<td>0.725</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S3</td>
<td>Fares</td>
<td>0.595</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S4</td>
<td>Trip experience</td>
<td>0.747</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X1</td>
<td>Reliability</td>
<td>0.920</td>
<td>0.880</td>
<td>0.80</td>
<td>0.89</td>
</tr>
<tr>
<td>X2</td>
<td>Safety</td>
<td>0.863</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E3</td>
<td>Reduce pollution</td>
<td>0.644</td>
<td>0.874</td>
<td>0.54</td>
<td>0.82</td>
</tr>
<tr>
<td>E4</td>
<td>Save energy consumption (fuel)</td>
<td>0.774</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E5</td>
<td>Reduce congestion</td>
<td>0.761</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E6</td>
<td>Reduce accident</td>
<td>0.750</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L1</td>
<td>I will to continue using public transport.</td>
<td>0.837</td>
<td>0.837</td>
<td>0.72</td>
<td>0.84</td>
</tr>
<tr>
<td>L2</td>
<td>I will recommend other people to use public transport</td>
<td>0.860</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Results of the standardized parameter estimates of the proposed model were depicted in Figure 3 respectively. The results showed that RMSEA = 0.074, IFI = 0.965, CFI = 0.964, GFI = 0.954 and AGFI = 0.917, indicating a good fit between the data and the proposed model. The statistical significance of the structural parameters was examined and it was found that all the hypotheses were supported except for the relationships between customer expectations and satisfaction as shown in Table 3.

Table 3: Overall Standardized Parameter Estimates for the Structural Model

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Path relationships</th>
<th>Significance level</th>
<th>Parameter Estimates</th>
<th>p-values (&lt;0.05)</th>
<th>Significance (yes/no)</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Expectation – satisfaction</td>
<td>0.05</td>
<td>0.084</td>
<td>0.177</td>
<td>No</td>
</tr>
<tr>
<td>H2</td>
<td>Satisfaction – environment</td>
<td>0.05</td>
<td>0.484</td>
<td>0.000</td>
<td>Yes</td>
</tr>
<tr>
<td>H3</td>
<td>Satisfaction – loyalty</td>
<td>0.05</td>
<td>0.213</td>
<td>0.000</td>
<td>Yes</td>
</tr>
<tr>
<td>H4</td>
<td>Environment – loyalty</td>
<td>0.05</td>
<td>0.663</td>
<td>0.000</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**CONCLUSION**

The customer expectations concern on PT services was safety (34.3%) followed by accessibility, reliability, fares, communication and trip experience. In addition, the relationship shows a positive significant relationship between satisfaction and environment, satisfaction and loyalty,
as well as environmental factors and loyalty. However, it is found that there is no significant relationship between customer expectations and satisfaction, which supports the findings of Wu and Ding (2007). Indeed, when a customer is satisfied with the product or services, the customer will hold a commitment to re-buy or re-patronize a preferred product or service consistently in the future (Oliver, 1999). The positive significant relationship between satisfaction and environment will relate that the public will assist in the move toward a sustainable transport system by changing mode of transport to save the environment.

REFERENCES


Kamaruddin, R., et al.,


