SERVICE QUALITY, CUSTOMER SATISFACTION AND CUSTOMER LOYALTY IN THAILAND’S AUDIT FIRMS

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Abstract- The purpose of this research is to investigate the relationship between service quality, customer satisfaction and customer loyalty and to investigate the mediating effects of customer satisfaction on the relationship between service quality perception and customer loyalty in Thailand’s audit firms. The design of this research used the survey method with data collection through questionnaire by mailing directly to the owners or department head of finance and accounting department who act as an agent for their companies and play an important role in engaging auditor for the audit works. A total of 296 respondents were selected from public companies listed on the Stock Exchange of Thailand. Correlation and regression was performed to analyze the empirical data. The research reveals that service quality has a direct effect on customer satisfaction and customer loyalty. However, the relationship between service quality and customer loyalty was partially mediated by customer satisfaction.

Keywords- Service Quality, Customer Satisfaction, Customer Loyalty, Audit Firm

I. INTRODUCTION

Customer loyalty is a competitive tool for many companies. The growth and survival of companies depend on how loyal their customers are, and the audit firm is no exception. Customer loyalty has played an important role for achieving the competitive advantages (Lin and Wang, 2006). Customer loyalty can increase a company’s income and reduce costs (Reichheld, 1996). Reichheld, Sasser and Earl (1990) also found that customer loyalty could lead to a 25 to 85 percent increase in profit. Luo and Bhattacharya (2006), Ismail, Haron, Ibrahim and Isa (2006) and Oliver (1997) found that customer satisfaction is a major driver for customer loyalty and leads to future revenue.

This paper assesses the customer satisfaction and customer loyalty of the audit firms’ customers and also focuses on functional quality offered by the audit firms to their customers in Thailand.

II. RESEARCH OBJECTIVE

The purpose of this study is to examine the relationship among service quality, customer satisfaction and customer loyalty in Thailand’s audit firms. The study adapted and modified the SERVQUAL model for analyzing service quality. Service quality was found to have a positive relationship with customer satisfaction and customer loyalty (Chodzaza and Gombachika, 2013; Cheng and Rashied, 2013; Bakti and Sumaedi, 2012, Bedi, 2010). Thus, this study used customer satisfaction to act as the mediating variable between service quality and customer loyalty. The audit firms were investigated with the following objectives set for the study: (1) to determine whether service quality will affect customer satisfaction and customer loyalty in Thailand’s audit firms. (2) to determine whether customer satisfaction will affect customer loyalty in Thailand’s audit firms. (3) To determine the mediating effects of customer satisfaction on the relationship between service quality and customer loyalty in Thailand’s audit firms.

III. LITERATURE REVIEW

A. Customer Loyalty

Customer loyalty is an important key to organization success and sustained competitive advantage for the service industry (Pullman and Gross, 2004). Increasing customer loyalty will benefit in reducing the initial cost of introducing and attracting new customers, positive word of mouth, increase the number of purchase and value of purchase (McMullan and Gilmore, 2009; Tsoukatos and Rand, 2006), increase company’s profitability, growth, and performance (Reichheld, 1996) and increase market share and higher rates of return on investment (Reichheld and Sasser, 1990; Raj, 1985).

Many researchers tried to define customer loyalty. Oliver (1997) defined customer loyalty as a strong commitment to make a repeated purchase on use a service consistently in the future. Anderson and Srinivasan (2003) defined customer loyalty as the customer’s favorable attitude towards an electronic business, resulting in repeat purchasing behavior. Pearson (1996) on the other hand defined customer loyalty as the mind set of customer who hold favorable attitudes towards a company, commit to repurchase the company’s service, and recommend the service to others. On the other hand, Kotler and Armstrong (2004) defined it were the customer has positive attitude on particular brand manifested on consistent repurchase behavior. There are two main streams in defining customer loyalty. The first main stream defines customer loyalty as a form of customer behavioral (Sancharan, 2011; Yang and...
Peterson, 2004) and actual repurchase behavior and actual recommendation action (Sancharan, 2011; Lai and Chen, 2010; Clemes, Gan, Kao, and Choong, 2008; Zeithaml, Berry and Parasuraman, 1996; Fornell, 1992). The second main stream define customer loyalty as customer attitude (Kuo, Chang, Cheng, and Lai, 2011) and is viewed as repeat purchasing behavior and recommendation intention (Sancharan, 2011; Lai and Chen, 2010; Clemes et al., 2008; Ribbink, van Riel, Liligander and Streikens, 2004; Anderson and Srinivasan, 2003; Parasuraman and Grewal, 2000; Pearson, 1996; Zeithaml et al., 1996; Fornell, 1992).

Most of researchers have been using the second definition of customer loyalty because behavioral loyalty is difficult to observe and measure (Kuo et al., 2011; Lai and Chen, 2010). Thus, this study employs the second perspective of customer loyalty as defined by Ribbink et al., 2004; Parasuraman and Grewal, 2000; and Zeithaml et al., 1996).

B. Service Quality

Service quality is defined as the difference between customer expectations of service and perceived service offered by firms (SERVQUAL). SERVQUAL model developed by Parasuraman et al. 1994, 1991, 1990, 1988, 1986, 1985) is used to measures service quality in this study. The perceived service qualities of audit firms are measured by using 22 questions of SERVQUAL instrument adapted and modified from Parasuraman et al., (1988).

Services are intangible process, but have a close relationship with customers (Soteriou and Chase, 1998). Superior service quality is related to increase customer satisfaction (Brady and Robertson, 2001) and customer loyalty (Sbpetim, 2012).

C. Customer Satisfaction

Customer satisfaction is an important factor for firms. In the high levels of competition, many firms are trying to increase customer satisfaction. Increasing customer satisfaction decreases customer complaints, increase repurchase intentions, get higher future profitability and lead to better financial performance (Babakus, Beinstock and Scotter, 2004; Ittner and Larcker, 1998; Anderson, Fornell and Lehmann, 1994; Fornell, 1992).

Customer satisfaction is the individual perception on the performance of the service in relation to the customer expectation (Rust, Zahorik and Keiningham, 1994). Customer satisfaction can be built through the quality of service (Kotler and Keller, 2006). Service quality is one of the major factors that influence the long term profitability of an organization (Parasuraman et al., 1988). Hence, perceived high level of service quality can increase customer satisfaction and can get high revenue for firm (Zeithaml et al., 1996). Therefore, the quality of service is a variable that affects customer satisfaction. Thus, this study defined customer satisfaction as the customer judgment that service feature, provided a pleasurable level of consumption related fulfillment, including levels of under or over fulfillment as defined by Oliver (1997).

D. Relationship among Service Quality, Customer Satisfaction and Customer Loyalty

Service quality and customer satisfaction were regarded as relevant factors that could affect customer loyalty. High level of service quality will affect customer satisfaction and high level of customer satisfaction may lead to increased customer loyalty, high profitability and increased market share of business (Rootman, 2006). Chodzaza and Gombachika (2013) studied service quality, customer satisfaction and loyalty among industrial customers of a public electricity utility in Malawi. They found a very strong relationship between service quality, customer satisfaction and customer loyalty. This study also found that the relationship between service quality and customer loyalty is partially mediated by customer satisfaction. Bakti and Sumaedi (2012) studied the relationship between service quality, customer satisfaction, and customer loyalty in a public university library service in Indonesia. They found that service quality has a direct affect on customer satisfaction and customer satisfaction has a direct effect to customer loyalty. In other words, service quality influences customer loyalty indirectly via customer satisfaction. Lu et al. (2007) studied the differences in factors that affect customer satisfaction and loyalty to the local and the foreign supermarkets in China. The study found that there exist a difference in factors influencing customer satisfaction and loyalty with regards to Chinese or foreign supermarkets. Post-purchase service showed greater influence upon satisfaction for foreign supermarkets and in-store goods alsohave greater impact upon loyalty. For Chinese supermarkets, store infrastructure contributes more to loyalty than foreign supermarkets. Khan (2012) investigated the impact of customer satisfaction on customer loyalty. The sample of this studied are students of different universities of Pakistan by using questionnaire. The questionnaires were distributed through electronic mail and self-administered. A five Likert scale were used to measure the impact of customer satisfaction on customer loyalty. The results showed that customer satisfaction has a significant impact on customer loyalty. Reheul, Caneghem and Verbruggen (2013) studied auditor performance, client satisfaction and client loyalty: evidence from Belgian Non-Profits (audit firms). They examined the relationship between perceived auditor performance and client satisfaction with the auditor and client satisfaction and client loyalty towards the auditor. This study found that the overall results were
indictive of a high degree of satisfaction with and loyalty towards the auditor. This study suggests that the drivers of client satisfaction and loyalty are service quality. Ismail et al. (2006) studied the relationship between audit service quality, client satisfaction and loyalty to the audit firms in Malaysia. The study found that client satisfaction has a mediating effect between audit service quality and client loyalty.

Hence, previous studies showed that service quality and customer satisfaction are important factors that influence customer loyalty. To have a competitive advantage, business needs to develop strategies and put procedures in place to ensure the degree which the service offered by the business matches the expectation of the customer.

E. Research Framework
This study seeks to determine the relationship among service quality, customer satisfaction and customer loyalty in Thailand’s audit firms. The independent variable of this study is the service quality and customer satisfaction is the mediating variable. The customer loyalty is the dependent variable. In accordance with the literature, the developed research model is shown in Figure 1.

![Figure 1. Research framework](image)

F. Hypotheses Development
Based on the literature reviews, the hypotheses are developed as follows:

\[ H_1: \text{The level of service quality is positively related to customer loyalty.} \]

\[ H_2: \text{The level of service quality is positively related to customer satisfaction.} \]

\[ H_3: \text{The level of customer satisfaction is positively related to customer loyalty.} \]

\[ H_4: \text{Customer satisfaction mediates the relationship between service quality and customer loyalty.} \]

IV. METHODOLOGY

A. Data Collection
This study gathers data from customers of audit firms in Thailand by using mailing instrument (questionnaire). A total of 507 questionnaires were distributed to the owner or department head of finance and accounting department of the public companies listed on the Stock Exchange of Thailand. Only 296 questionnaires were received resulting in a response rate of 58.38 percent.

B. Measurement
The dependent variable in this study is customer loyalty. Customer loyalty dimension was measured by using 5 statement items. The mediating variable is customer satisfaction. The customer satisfaction dimension was measured by using 7 statement items. The independent variable is service quality. Service quality dimensions were measured by using 22 items of SERVQUAL model. The seven-point Likert scale was used for measuring all of the observed variables which ranged from 1=strongly disagree to 7=strongly agree.

V. RESULTS

A. Description of Sample
There are 296 respondents; a total of 218 (73.68 percent) were female. The age group of 41 to 45 (20.95 percent), were account for the biggest portion of the sample. For education attainment, about 51.69 percent possessed bachelor degree. Most of the respondents were accounting manager (75 percent) and 71.96 percent of the respondents have been with the public companies for more than ten years.

B. Assessment of Customer Loyalty
Customer loyalty was measured using five items. The Cronbach’s Alpha values for all items of customer loyalty are above 0.70 suggested by Hair, Black, Babin and Anderson (2010) and Devellis (2003), indicating, that all items within the dependent variable being tested in this study met the statistical requirement for future analysis (please refer Table 1). The statistical test results (KMO = 0.876, Bartlett Test of Sphericity = 984.220, Significance = 0.000, Factor Loading = > 0.50) indicate that the data was appropriate for the factor analysis. All items with Eigenvalues greater than 1.0 were extracted, which accounted for 73.33 percent of the variance in the set of the items.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Factor analysis and reliability test result on customer loyalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Loyalty</td>
<td>Factor Loading</td>
</tr>
<tr>
<td>CL1</td>
<td>0.877</td>
</tr>
<tr>
<td>CL2</td>
<td>0.882</td>
</tr>
<tr>
<td>CL3</td>
<td>0.848</td>
</tr>
<tr>
<td>CL4</td>
<td>0.763</td>
</tr>
<tr>
<td>CL5</td>
<td>0.905</td>
</tr>
</tbody>
</table>

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36
The Kaiser-Meyer-Olkin Measure of Sampling Adequacy 0.876
The Bartlett’s test of Sphericity Approx. Chi-Square 984.2
Df 10.00
Sig. 0.000

C. Assessment of Service Quality
The 22 items of five dimension of SERVQUAL model were subjected to principal components analysis (PCA). PCA analysis revealed the presence of two components with eigenvalue exceeding 1, explaining 65.30 percent and 71.40 percent of the variance respectively. The first factor comprised of 16 items and was a combination of four original dimensions. Thus, this factor was labeled “service quality”. The second factor comprised of 6 items and was a combination of 3 original dimensions. Thus, this factor was deleted in this study. Finally, the study used 16 items to measure service quality. The Cronbach’s Alpha values for all items of service quality have internal consistency measures higher than 0.70 indicate that satisfactory levels of internal consistency (please refer to Table 2). Thus, the SERVQUAL scale is reasonably satisfactory to measure perceived service quality of audit firms in Thailand.

Table 2 Factor analysis and reliability test result on service quality
<table>
<thead>
<tr>
<th>Service Quality</th>
<th>Factor Loading</th>
<th>Service Quality</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQ1</td>
<td>0.849</td>
<td>SQ9</td>
<td>0.893</td>
</tr>
<tr>
<td>SQ2</td>
<td>0.809</td>
<td>SQ10</td>
<td>0.848</td>
</tr>
<tr>
<td>SQ3</td>
<td>0.811</td>
<td>SQ11</td>
<td>0.836</td>
</tr>
<tr>
<td>SQ4</td>
<td>0.832</td>
<td>SQ12</td>
<td>0.75</td>
</tr>
<tr>
<td>SQ5</td>
<td>0.856</td>
<td>SQ13</td>
<td>0.798</td>
</tr>
<tr>
<td>SQ6</td>
<td>0.852</td>
<td>SQ14</td>
<td>0.813</td>
</tr>
<tr>
<td>SQ7</td>
<td>0.851</td>
<td>SQ15</td>
<td>0.814</td>
</tr>
<tr>
<td>SQ8</td>
<td>0.884</td>
<td>SQ16</td>
<td>0.883</td>
</tr>
<tr>
<td>Cronbach’s Alpha</td>
<td>0.971</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eigenvalues</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variances Explained (%)</td>
<td>70.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cumulative (%)</td>
<td>2</td>
<td></td>
<td>70.04</td>
</tr>
<tr>
<td>The Kaiser-Meyer-Olkin Measure of Sampling Adequacy</td>
<td>0.941</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Bartlett’s test of Sphericity Approx. Chi-Square</td>
<td>5287.734</td>
<td>734</td>
<td></td>
</tr>
<tr>
<td>Df</td>
<td>120.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig.</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The statistical test results (KMO = 0.941, Bartlett Test of Sphericity = 5287.734, Significance = 0.000, Factor Loading = > 0.50) indicate that the data was appropriate for the factor analysis. All items with Eigenvalues greater than 1.0 were extracted, which accounted for 70.04 percent of the variance in the set of the items. The exploratory factor analysis results in Table 2 indicate that 16 questions of SERVQUAL scale matched as described by Parasuraman et al. (1988).

D. Assessment of Customer Satisfaction
Customer satisfaction dimensions were measured by using 7 statement items. In order to determine the scale items for this study, a principal component factor analysis were performed.

Table 3 Factor analysis and reliability test result on customer satisfaction
<table>
<thead>
<tr>
<th>Factor</th>
<th>Service Quality</th>
<th>Factor Loading</th>
<th>Service Quality</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS1</td>
<td>0.865</td>
<td>CS5</td>
<td>0.823</td>
<td></td>
</tr>
<tr>
<td>CS2</td>
<td>0.845</td>
<td>CS6</td>
<td>0.858</td>
<td></td>
</tr>
<tr>
<td>CS3</td>
<td>0.86</td>
<td>CS7</td>
<td>0.836</td>
<td></td>
</tr>
<tr>
<td>CS4</td>
<td>0.853</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cronbach’s Alpha</td>
<td>0.935</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eigenvalues</td>
<td>5.043</td>
<td></td>
<td>72.04</td>
<td></td>
</tr>
<tr>
<td>Variances Explained (%)</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cumulative (%)</td>
<td>9</td>
<td></td>
<td>72.04</td>
<td></td>
</tr>
<tr>
<td>The Kaiser-Meyer-Olkin Measure of Sampling Adequacy</td>
<td>0.915</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Bartlett’s test of Sphericity Approx. Chi-Square</td>
<td>1584.203</td>
<td>21.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Df</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig.</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3 shows the Cronbach’s Alpha values for all items of customer satisfaction (mediating variable) are above 0.70 as suggested by Hair, Black, Babin and Anderson (2010) and Devellis, (2003).All items within the mediating variable being tested in this study met the statistical requirement for future analysis. The statistical test results KMO score was 0.915, which indicated that the factor analysis technique was appropriate. The Bartlett’s test of sphericity was significant at a level of 0.000. All items had factor loading above 0.50 which achieved the rule of thumb that the communalities value of the items to be retained in the factor analysis should be greater than 0.50. All items with Eigenvalues greater than 1.0 were extracted, which accounted for 72.05 percent of the variance in the set of the items. The Cronbach’s alpha for each factor reached the...
satisfactory level, ranging from 0.823 to 0.865, and therefore indicated that the scale was reliable.

E. Correlation and Regression Analysis
Person correlation was employed to explore the relationship among independent variable (service quality), mediating variables (customer satisfaction), and dependent variable (customer loyalty).

Table 4 Correlations among service quality, customer satisfaction and customer loyalty

<table>
<thead>
<tr>
<th>Variables</th>
<th>Service Quality</th>
<th>Customer Satisfaction</th>
<th>Customer Loyalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Quality</td>
<td>1.000</td>
<td>0.817</td>
<td>0.690</td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>-</td>
<td>1.000</td>
<td>0.651</td>
</tr>
<tr>
<td>Customer Loyalty</td>
<td>-</td>
<td>-</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Note: Pearson correlation is significant at the 0.01 level (2-tailed); n=296.

Table 4 presents the results of the assessment of the relationship between service quality, customer satisfaction, and customer loyalty by using Pearson correlation analysis and significant at the 0.01 level. The results show that service quality strongly correlated to customer satisfaction (0.817) and customer loyalty (0.690). Furthermore, the results show that there is a strong correlation between customer satisfaction to customer loyalty (0.651). This means that there is a strong and significant relationship between service quality, customer satisfaction, and customer loyalty among customer in Thailand’s audit firms.

F. Testing of Mediator Variables: Customer Satisfaction
The four causal steps test for mediating variable of customer satisfaction on the relationship between service quality and customer loyalty is shown in Figure 2.
Step 1, to assess Path a, perceive service quality was used to predict the mediator variable of customer satisfaction and has a significant relationship with customer satisfaction ($\beta = 0.818; p<0.001$).

Step 2, in Path c, (when path a and b were controlled) before the inclusion of the mediator as previously revealed, the relationship between service quality and customer loyalty was $\beta = 0.696; p<0.001$. However, after the customer loyalty was regressed on both service quality and customer satisfaction, the direct affect of service quality on customer loyalty was also significant ($\beta = 0.480; p<0.001$).

Finally in Step 4, the $\beta$ value = 0.480 for service quality (independent variable) are less than $\beta$ = 0.696 for service quality (independent variable) in step 2. Therefore the relationship between service quality and customer loyalty was partially mediated by customer satisfaction.

Figure 2 Mediating effect of customer satisfaction on the relationship between service quality and customer loyalty

CONCLUSIONS
The purpose of this study is (1) to measure service quality perceptions of audit firms’ customer and to examine the relationship between service quality and customer satisfaction and customer loyalty in Thailand’s audit firms. (2) to investigate the mediating affects of customer satisfaction on the relationship between service quality perception and customer loyalty in Thailand’s audit firms. The correlation and regression analysis was used to test the constructs framework that customer satisfaction and customer loyalty were influenced by the perception of audit firms’ service quality. The results confirmed that the SERVQUAL model is a good measurement of service quality and service quality is positively associated with customer satisfaction and customer loyalty in the context of audit firms. These indicated that service quality is positively associated with customer satisfaction and customer loyalty in Thailand’s audit firms. In addition, the findings of this study are consistent with previous studies by Chodzaza and Gombachika (2013); Bakti and Sumaed (2012); Turk and Avollar (2009); Aga and Safakli (2007); Ismail et al. (2006); Rootman (2006); Saxby, Ehlen and Koki (2004); Hong and Goo (2004) who stated that there was a strong link between service quality to customer satisfaction and customer loyalty in audit firms. Furthermore, this study provides an important theoretical contribution manifested in the finding that customer satisfaction...
partially mediate the relationship between service quality and customer loyalty.

Although, audit firm’s customers are satisfied with the overall service quality provided by their audit firms, their customers will be likely to purchase more service. The ability to keep customers is related to the intensity of customer satisfaction. Therefore, it is reasonable to predict that satisfied customers in audit firms will have a higher loyalty intention toward its service. Therefore, audit firms need to improve the relationship between audit firm and customer.

REFERENCES


