

The Effectiveness of 1Malaysia Maintenance Fund on Maintenance Services for Low-Cost Apartments

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Abstract: The aims of this study are to identify the effectiveness of 1Malaysia Maintenance Fund on maintenance service for low-cost apartments and to propose a theoretical framework on service quality, customer satisfaction and trust. A survey questionnaire (SERVQUAL) was used as an instrument to collect the data from 400 respondents consisting of the residents of private and public low-cost apartments in Kuala Lumpur and analyzed using two statistical packages of computerized systems. The Statistical Package of Social Science (SPSS version 16) was used to identify the existing level of maintenance services for low-cost apartments and to compare how the level of trust for private (TP1M) and public low-cost apartments (PPP) affect quality of services for low-cost apartments. Then, the Partial Least Squares regression (SmartPLS version 3.2.7) was used to test the model in this study. The findings revealed that quality of maintenance services for private low-cost apartments (TP1M) were affected by trust more than public low-cost apartments (PPP). In addition, the findings also revealed that service quality has positively affected customer trust was supported for both case studies with a t-statistic > 1.96 (at 5 percent significance level) and p-value < 0.05 at the significance level. The findings suggest that the success of this fund could increase customer trust on maintenance services for low-cost apartments; and a good relation between the residents and management companies is the most important aspects should be kept up and improved.

Keywords: Service quality, customer satisfaction, trust, low-cost apartments

Paper type: Research paper

1. Introduction

Service quality is the life blood to all parts of business functions in the 21st century (Mohammad and Alhamadani, 2011) and it has been widely used as a key driver to create differentiation and increase competitive advantage in a new era of globalization (Ali *et al.*, 2016; Karatepe, 2016; Fotaki, 2015). In quality management literature, service quality is often used as a multi-dimensional construct (Ismail and Yunan, 2016). The current literature has highlighted that five dimensions of service quality, which include

reliability, assurance, tangible, empathy and responsiveness, have been used by recent practitioners to assess the effectiveness of service quality in various types of service sector, such as healthcare (Ismail *et al.*, 2016; Edura and Jusoff, 2009), supply chain and logistics (Yuen and Thai, 2015; Yeo *et al.*, 2015), aviation (Nasser and Hussain, 2015; Gemmel, 2007), retailing (Ahmad *et al.*, 2014; Vera and Trujillo, 2013), defense and security (Ismail *et al.*, 2014; Ridzuan *et al.*, 2013), banking systems (Kranias and Bourlessa, 2013; Sangeetha and Mahalingam, 2011), telecommunication (Segoro, 2013; Yen and Lu, 2008) and hotel businesses (Raza *et al.*, 2012; Akbar *et al.*, 2010).

In Malaysia, the property managers are unable to collect management fees because there is no specific rule or guideline to the property owners who fail to pay their fees (Mohd *et al.*, 2011). The majority of the property managers have no experience in managing stratified buildings and management fee is determined by the property developers themselves (Ta, 2014). He also added that there is a poor relationship between the management company and the resident because most of the interaction is through official letters and memoranda. Due to the element of distrust, the residents tend to not give their cooperation in paying the management fee to the management company (Ta, 2014). As a result, trust is a critical part that needs to be focused in this study. Here, 1Malaysia Maintenance Fund (TP1M) and Housing Maintenance Programme (PPP) were used as the options to test customer trust. This fund was launched by the Prime Minister of Malaysia in 2010 and was conducted by the Ministry of Federal Territories and Urban Well-being to help the residents in major repairing works. The aims of this study are to identify the effectiveness of 1Malaysia Maintenance Fund on maintenance service for low-cost apartments and to propose a theoretical framework on service quality, customer satisfaction and trust.

2. Literature Review

A. Effectiveness

There are many definitions of effectiveness. The concept of effectiveness was commonly used in empirical literature, but it was rarely defined by previous authors. Prior studies had found that effectiveness refers to doing the right things (Drucker, 1977) and the extent to which objectives are met (Erlendsson, 2002). According to Sundqvist *et al.* (2014), effectiveness refers to putting something in relation to something else and doing a comparison of A and B to acquire outcomes. Earlier researches debated the idea to justify the effectiveness by comparing private and public schools in order to acquire outcomes. Several authors had pointed out that Catholic schools had a higher effectiveness as compared to public schools in the United States (Coleman *et al.*, 1982); attainment dissimilarity between public, Catholic and Protestant schools in most European societies (Dronkers, 2004); and comparing the effectiveness of public, private-dependent and private-independent schools at an international level using PISA 2000 data (Dronkers and Robert, 2008a; 2008b). As described by Weick (1977), organizational level was used as a unit of analysis to define effectiveness criteria. Effectiveness was also used as a measurement model for the organizational performance (Mouzas, 2006; Bounds *et al.*, 2005).

B. Underpinning theory

According to Bhattacharjee (2001), Expectancy Disconfirmation theory has been used in technology adoption to predict perceived performance, satisfaction, usage continuance intentions and expectation disconfirmation (Khalifa and Liu, 2002; Susarla *et al.*, 2003; Hsu *et al.*, 2004; Bhattacharjee and Premkumar, 2004). Earlier researchers had pointed out that this theory was used to measure the level of service providers in the earlier purchase of transaction (Oliver, 1980; Oliver, 1977). However, several authors had clarified that Expectancy Disconfirmation theory seems related to Explanatory Trust theory, i.e. trust grew if trust is positively correlated, but reduced if trust is negatively correlated (Robinson, 1996;

Lewicki and Bunker, 1996). Thus, the development of trust is related to the Expectancy Disconfirmation theory. This theory is widely accepted in the marketing area and presently has become the most wanted in other academic domains (Bhattacharjee and Khalifa, 2002; Bhattacharjee, 2001). On the other hand, the Expectancy Disconfirmation theory is suitable for studying trust because personal beliefs have significant correlation with satisfaction. For example, trust is strongly correlated with satisfaction in online environments (Lin, 2005; Ribbink *et al.*, 2004).

C. Service quality

Service quality is a unique service feature with elusive model characteristics in respect to intangibility features, heterogeneity features; perish ability features and inseparability features of production and consumption (Zeithaml *et al.*, 1985; Rust *et al.*, 1996; Kotler and Armstrong, 2001). Due to these features, intangibility refers to critical goods or services which cannot be touched, felt, seen or tasted; heterogeneity refers to quality and essence of services vary from customer to customer; perishability refers to the inability of services to be saved and reclaimed; and inseparability refers to the producer and the seller as the same person in making direct distribution and high interaction toward marketing and production (Bateson, 1979; Langeard *et al.*, 1981; Bessom and Jackson, 1975; Thomas, 1978; Upah, 1980; Gronroos, 1978). Recent studies had described that service quality is one of the critical success factors that might influence the competitiveness of the service organization (Auka *et al.*, 2013). Several authors had pointed out that customers feel secure when they get better quality of services (Lovelock and Wirtz, 2011).

D. Customer satisfaction

According to Mittal and Kamakura (2001), customer satisfaction is a main factor in future purchase of customer desires and several authors has introduced other factors known as neutral factors (Cadotte and Turgeon, 1988). Recent practitioners had illustrated that satisfaction is an essential component of success (Siddiqi, 2011), which refers to the actual result of the performance after sales resulting from the purchase of products and services in relation to expected consequences (Verma, 2012; Anderson *et al.*, 1994). Farris *et al.* (2010) described satisfaction as a total percentage of customer experience that has exceeded specific satisfaction goals with the company products and services at a certain period of time. For example, satisfaction can be used to measure company performance of products and services towards customer needs. It might help the company to increase customer relationship and accomplish customer needs (Pairot, 2008). Previous studies found that satisfaction affects the ability to make decisions based on the earlier experience (Parasuraman *et al.*, 1991). High customer satisfaction leads to repetitive customer behavior for product purchase and promotion (Anderson *et al.*, 1994); and low customer satisfaction leads to irritable behavior (Zeithaml *et al.*, 1996).

E. Customer trust

There is no single definition of customer trust. Recent authors have described that trust as customer willingness to rely on expressing their feeling in relation to what has been promised and to meet their expectation around their knowledge (Osman and Sentosa, 2013). For example, a trusted customer attraction has a strong ability as compared to other customer attraction in making a customer decision. Trust is a core element in developing the relationship between the organization and its customer and a circumstance that exists while one party has confidence in an exchange reliability and integrity (Dithan, 2011). It is fundamental to build a mutual beneficiary relationship with customers to enhance competitiveness (Barney and Hansen, 1994). According to Morgan and Hunt (1994), trust is a vital component and circumstance that should be satisfied between an organization and its customer in order to create long-term relationships. This is because trust might affect the quality of services and the level of customer satisfaction for low-cost

apartments. Negative relationship between owners and the tenants of low-cost apartments might lead to poor quality of maintenance services. As described by Baharum *et al.* (2009), negative relations between owner and tenants in making a payment for maintenance fee might lead to reduced property returns and quality of services. If the residents have a low expectation towards the management companies, it might lead to a negative relationship on quality of services. This statement has been adapted from previous authors, where people at a low level of trust might lead to negative events (Bal *et al.*, 2011).

Hypotheses Relationship and Conceptual Development

A. Relationship between service quality and customer satisfaction

Over the past decades, there was a strong emphasis on service quality and customer satisfaction in academia and business sector. According to Akbar and Parvez (2009), service quality has a significant influence and positive relationship to customer satisfaction with a private telecommunication company in Bangladesh. From the study in the Qatar banking industry, service quality has a greater antecedent and significant relationship to customer satisfaction (Hossain and Leo, 2008). Thereafter, the study was extended by various researchers in Malaysian banking industry by looking at assurance which has significant relationship but has no positive effect on customer satisfaction. With this, tangibility has a strong relationship and a positive impact on customer satisfaction. Reliability has a negative relationship and has no positive effect on customer satisfaction. Responsiveness has a strong relationship but have no significant impact on customer satisfaction. Empathy has a strong relationship, but has no significant impact on customer satisfaction. From the study of service quality and customer satisfaction of 200 customers in the Greek banking industry, items of tangibility, reliability and empathy have a significant relationship to customer satisfaction. On the other hand, Chen and Lee (2008) clarified that service quality has a strong influence on customer satisfaction with Taiwan International Logistic providers. From the study of 240 online shoppers, service quality has a strong relationship and positive impact on customer satisfaction in the Greece retailing industry (Gounaris *et al.*, 2003). Therefore, the study hypothesis is as follows:

Hypothesis 1: Service quality will positively affect customer satisfaction.

B. Relationship between service quality and trust

Earlier studies had mentioned that the elements of service quality were affected by trust. For example, quality of service in the banking systems slightly apparent to trust. According to Gefen and Straub (2004), different factors might affect trust and reveal that service quality has a significant impact on customer trust. Numerous authors had found that service quality has a positive effect on trust when they used integrity, quality of services and ability as elements of service quality in seller business operation (Al-Dwairi *et al.*, 2009). From a study on China e-commerce industry, Zha *et al.* (2006) described that service quality dimensions have a significant impact on trust. Several authors have claimed that service quality plays an important role and has a positive effect on trust from their studies in China rural tourism (Su and Fan, 2011). In the study on patient healthcare industry, Alrubaie and Al'kaidaa (2011) had stressed that service quality provided by the Jordan Hospital has a strong influence on patients' trust. Finally, according to Yeh and Li (2009), service quality of the m-commerce business has a strong correlation and positive relationship with developing customer trust in China m-commerce industry. Therefore, the study hypothesis is as follows:

Hypothesis 2: Service quality will positively affect customer trust.

C. Relationship between customer satisfaction and trust

In conducting the study on trust, many researchers have described that customer satisfaction is an important factor in developing trust. This is because trust refers to future attitude and state of mind that will go beyond the previous experience. According to Kantsperger and Kunz, (2010) customer satisfaction is the key antecedent to build customer trust and strongly and positively correlated in their study on both Malaysia and Qatar e-commerce. In a study focused on Taiwan m-commerce, customer satisfaction has a significant impact and is positively correlated to trust (Yeh and Li, 2009). Ribbink *et al.* (2005) presented that customer satisfaction has a strong influence and is positively correlated to trust based on 350 online customers in European e-commerce industry. Several practitioners in their studies on 184 university students' online customers found that customer satisfaction has a significant influence and is strongly correlated to trust in India e-commerce (Sahadev and Purani, 2008). In a study of B2B financial services in South Africa, various researchers have clarified that customer satisfaction has a significant relationship and positively influence customer trust (Edwin *et al.*, 2011). Furthermore, according to Jose (2011), customer satisfaction has a positive and significant effect on trust of the internet users in Spain internet industry. In a study done on the financial service customers by Edwin *et al.* (2011), customer satisfaction was found to have a strong relationship and is positively correlated to customer trust in the South African financial service industry. Therefore, the study hypothesis is as follows:

Hypothesis 3: Customer satisfaction will positively affect customer trust.

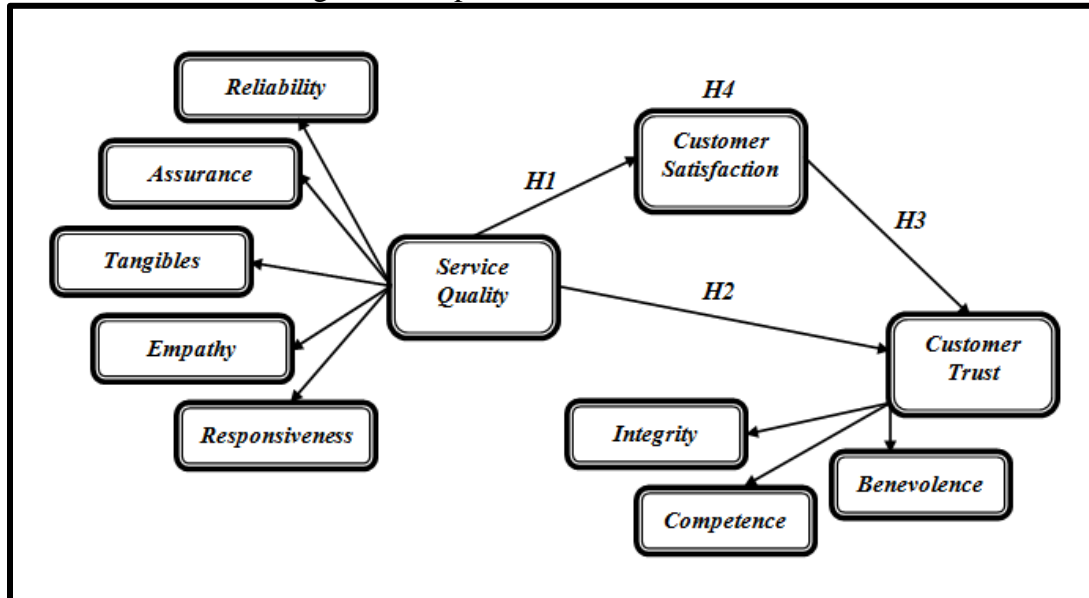
D. Mediating effects of customer satisfaction on the relationship between service quality and trust

According to Osman *et al.* (2016), there is an indirect relationship between service quality, customer satisfaction and trust in the Malaysian commercial banking industry. They also have described that customer satisfaction mediates service quality and trust. Previous studies have expressed that service quality is an antecedent for customer satisfaction (Lee *et al.*, 2000; Zeithaml and Bitner, 1996; Buttle, 1996; Gottlieb *et al.*, 1994). The nature of service quality and customer satisfaction has a linear correlation, where greater service quality might lead to greater customer satisfaction (Pollack, 2008). Vinagre and Neves (2008) have illustrated the effect of service quality on customer satisfaction based on empirical evidence. From the study by Eisingerich and Bell (2007), trust has a significant correlation on repurchase intentions and perceived service quality, which has a strong relationship with trust and customer loyalty. The study had found that perceived service quality has a positive effect on trust. However, the causality correlation between customer satisfaction and trust is not very clear in the empirical literature. Zanzo *et al.* (2003) in Osman (2014) stressed that trust is an antecedent to affective commitment and satisfaction is an antecedent to trust. Several authors have found that customer satisfaction partially mediates service quality and trust in the United States tourism industry (Liang, 2008). This is because tourists were satisfied with service quality and put their trust in the service providers. Lastly, Yeh and Li (2009) have explained that customer satisfaction has a strong mediating effect on service quality and trust in Taiwan m-commerce industry. Therefore, the study hypothesis is as follows:

Hypothesis 4: Customer satisfaction mediates the relationship between service quality and customer trust.

Figure 1 shows the present proposed theoretical framework.

Figure 1. Proposed theoretical framework



Source: Adapted from Osman et al. (2016)

3. Research Methodology

A. Research design

The research was designed into a descriptive quantitative method by reviewing empirical literatures in order to perform reliability and validity of the study. The residents, consisting of owners and tenants, were selected as the research participants for private and public low-cost apartments in Kuala Lumpur. A questionnaire survey (SERVQUAL) was used as the instrument. The rationale for using this design is to offer a foundation for decision making and to help the researchers to measure quantitative data using computerized systems. This is because one of the characteristics of descriptive research design is to compare two groups or cases in order to seek the similarities and differences of the case studies.

B. Population and sampling

The sample size of 400 respondents consisting of owners and tenants of private (TP1M) and public low-cost apartments (PPP) in Kuala Lumpur was used for the main study. As recommended by Siddiqui (2013), an appropriate sample size of 200 respondents for each group is essential in a case of comparative study. The survey form was distributed randomly to the selected respondents during business hours. However, there is no issue regarding response rate as the survey was carried out by hand. This study will use non-probability sampling in order to conduct quantitative approach using questionnaire survey (SERVQUAL) model. This technique is more dependable and being able to offer a useful information about the population of the study. The advantage of this technique is a lower cost as compared to probability sampling. The data was collected within 3 months starting from 1st January, 2018 to 31st March, 2018.

C. Measures

Figure 2 shows the sources for the measurement constructs used in the research. The residents of private and public low-cost apartments were asked to evaluate the SERVQUAL approach using a five-point Likert scale ranged from (1) strongly disagree to (5) strongly agree on service quality, customer satisfaction and trust. Thus, the main items of the questionnaire survey form are shown as follows.

Figure 2. Main Items of Questionnaire Survey Form

Constructs	Items	References
Service Quality	TA1-4: Appearance of the facilities services including employees, equipment and materials used.	Parasuraman <i>et al.</i> , (1991)
	RL5-9: Promised output delivered at the stated point.	
	RS10-13: A prompt service given to customers.	
	AS14-17: Ability of the management companies to offer trust and confidence.	
Customer Satisfaction	EM18-22: Willingness and capability to give personal attention to customers.	Reichheld, (2006)
	CS23: Overall, I am satisfied with service provided by this management company.	
	CS24: I am satisfied with the management fee that has been charged by this management company.	
Customer Trust	CS25: I am satisfied with the service of handling customer complaints in this management company.	McKnight <i>et al.</i> (2002)
	IN26-29: The degree to which one perceives a community to behave with high integrity.	
	CO30-33: The trusting belief in the competence of the community.	
	BE34-36: The degree to which one perceives a community to be highly benevolent.	

D. Analysis techniques

All the data were analyzed using two statistical packages of computerized systems. Statistical Packages of Social Science (SPSS version 16) was used to identify the existing level of maintenance services for low-cost apartments and to compare the perceptions of quality of service between private (TP1M) and public low-cost apartments (PPP). Partial Least Squares regression (SmartPLS version 3.2.7) was used to test the hypotheses relationships that exist in the study.

4. Data Analysis and Findings

A. Analysis and report of findings

After conducting the main study, independent sample t-test in the SPSS software was used to analyze the findings. It was found that 34 out of 36 items of the questionnaire survey (SERVQUAL) constructs of private low-cost apartments (TP1M) have greater mean scores as compared to public low-cost apartments (PPP). For example, the highest tangible score of private low-cost apartments (TP1M) was the neat appearance of management office employees with mean score of (3.46); reliability was when I have a problem, management office shows a sincere interest in solving it (3.53); responsiveness was employees in management office are always prepared to help me (3.455); assurance was employees in management office are consistently courteous with me (3.80); empathy was management office’s operating hours are convenient to all its customers (3.655); satisfaction was I am satisfied with the management fee that has

been charged by this management office (3.565); integrity was the management office staff are genuine and sincere (3.685); competence was that, in general, the management office staff are very knowledgeable (3.625); and benevolence was the management office staff are interested in my well-being, not just their own (3.615).

Meanwhile, the highest tangible score of public low-cost apartments (PPP) was the neat appearance of management office employees with mean score of (3.435); reliability was management office provides the right service for the first time (3.265); responsiveness was employees in management office inform me the exact time maintenance services are to be performed (3.385); assurance was employees in management office are consistently courteous with me (3.74); empathy was management office’s operating hours are convenient to all its customers (3.49); satisfaction was I am satisfied with the management fee that has been charged by this management office (3.590); integrity was the management office is genuine and sincere (3.57); competence was in general, the management office is very knowledgeable (3.43); and benevolence was the management office is interested in my well-being, not just its own (3.51). Therefore, it can be said that private low-cost apartments with attached TP1M have greater mean scores on service quality, customer satisfaction and trust as compared to public low-cost apartments with attached PPP.

On the other hand, the highest mean difference of tangible was management office has modern-looking equipment (0.145); reliability was when I have a problem, management office shows a sincere interest in solving it (0.290); responsiveness was employees in management office are never too busy responding to my requests (0.225); assurance was the behavior of employees in management office instills confidence in me (0.165); empathy was management office has employees who give me personal attention (0.235); satisfaction was I am satisfied with the service of handling customer complaints in this management office (0.160); integrity was the management office would keep its commitments (0.12); competence was overall, the management office is a capable and proficient source of expertise and knowledge (0.235); and benevolence was I believe that the competency of management staff would act in my best interest (0.125). Therefore, two (2) items with negative mean differences i.e. empathy was management office pays me an individual attention (-0.03); and satisfaction was I am satisfied with the management fee that has been charged by this management office (-0.025).

Figure 3 shows the mean scores and differences of private (TP1M) and public low-cost apartments (PPP).

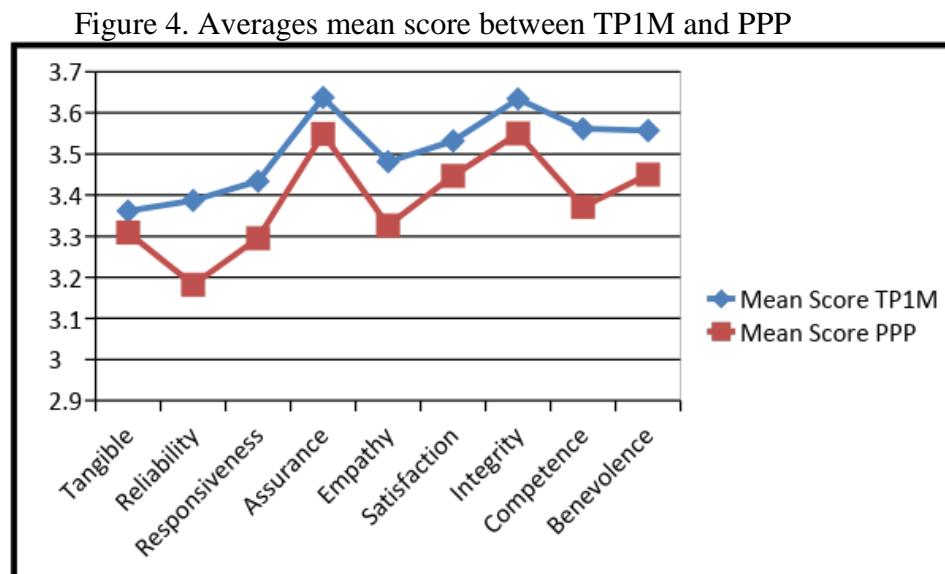
Figure 3. Mean scores and differences of private (TP1M) and public (PPP)

Variables and Constructs	Mean Score		Mean Differ
	Private (TP1M)	Public (PPP)	
Tangible (TA1-TA4)			
Management office has modern-looking equipment	3.3700	3.2250	0.1450
Management office physical facilities are visually appealing	3.2900	3.2650	0.0250
Management office employees are neat-appearing	3.4600	3.4350	0.0250
Materials associated with service will be comprehensively presented at management office	3.3250	3.3100	0.0150
Reliability (RL5-RL9)			
When management office is committed to do something by a certain dateline, it definitely will proceed to accomplished it	3.4000	3.1900	0.2100
When I have a problem, management office shows a sincere interest in solving it	3.5300	3.2400	0.2900
Management office provides the service right for the first time	3.3800	3.2650	0.1150
Management office provides its services on time	3.3450	3.1550	0.1900
Management office has an error-free record	3.2800	3.0600	0.2200

Responsiveness (RS10-RS13)	Private	Public	Differ
Employees in management office inform me the exact time maintenance services are to be performed	3.4200	3.3850	0.0350
Employees in management office provide me prompt services	3.4250	3.2450	0.1800
Employees in management office are always prepared to help me	3.4550	3.3400	0.1150
Employees in management office are never too busy responding to my requests	3.4350	3.2100	0.2250
Assurance (AS14-AS17)	Private	Public	Differ
The behavior of employees in management office instills confidence in me	3.4350	3.2700	0.1650
I feel safe in my transactions with management office	3.7400	3.6450	0.0950
Employees in management office are consistently courteous with me	3.8000	3.7400	0.0600
Employees in management office have the skill and knowledge to answer my questions	3.5750	3.5400	0.0350
Empathy (EM18-EM22)	Private	Public	Differ
Management office pays me an individual attention	3.3700	3.4000	-0.0300
Management office's operating hours are convenient to all its customers	3.6550	3.4900	0.1650
Management office has employees who give me personal attention	3.4200	3.1850	0.2350
Management office has the best interest in my heart	3.4800	3.2600	0.2200
Employees of management office understand my specific needs	3.4800	3.2950	0.1850
Satisfaction (CS23-CS25)	Private	Public	Differ
For overall, I am satisfied with service provided by this management office	3.5300	3.4100	0.1200
I am satisfied with the management fee that has been charged by this management office	3.5650	3.5900	-0.0250
I am satisfied with the service of handling customer complaints in this management office	3.5000	3.3400	0.1600
Integrity (IN26-IN29)	Private	Public	Differ
The management office is truthful in its dealings with me	3.5850	3.5450	0.0400
I would characterize the management office as honest	3.6200	3.5600	0.0600
The management office would keep its commitments	3.6450	3.5250	0.1200
The management office is genuine and sincere	3.6850	3.5700	0.1150
Competence (CO30-CO33)	Private	Public	Differ
The management office is a competent and effective source of expertise	3.4900	3.3250	0.1650
The management office performs its role of sharing knowledge very well	3.5250	3.3600	0.1650
Overall, the management office is a capable and proficient source of expertise and knowledge	3.6050	3.3700	0.2350
In general, the management office is very knowledgeable	3.6250	3.4300	0.1950
Benevolence (BE34-BE36)	Private	Public	Differ
I believe that the competency of management staff would act in my best interest	3.5200	3.3950	0.1250
If I required help, the management office would do its best to help me	3.5350	3.4450	0.0900
The management office is interested in my well-being, not just its own	3.6150	3.5100	0.1050

For demographic results, 192 or 48.0 percent of respondents were male and 208 or 52.0 percent respondents were female. The highest age of respondents was between 20 to 39 years old, and the lowest was below 20 years old. The highest respondent race was Malay; and the lowest was Chinese. The highest respondent occupation was non-employed, and the lowest was student. Finally, the highest types of customer were owners as compared to tenants at 4 or 1.0 percent.

Figure 4 shows the averages mean score between private (TP1M) and public (PPP).



The findings revealed that quality of maintenance services for private low-cost apartments (TP1M) were affected by trust more than public low-cost apartments (PPP). The biggest gap of dimensions of trust between private (TP1M) and public low-cost apartments (PPP) was competence. For instance, competence of private (TP1M) and public low-cost apartments (PPP) was stated at 3.5613 and 3.3713. From the result, the residents believed that the management office of private low-cost apartments (TP1M) were more competent in managing their properties and sharing their knowledge as compared to public low-cost apartments (PPP). This finding was consistent with the empirical literature, where high level of trust might lead to better knowledge sharing (Cohen and Prusak, 2001). In addition, the residents also believed that the management office of private low-cost apartments (TP1M) has more knowledge in conducting maintenance work and very knowledgeable in maintaining their properties as compared to public low-cost apartments (PPP). This finding was consistent with earlier studies, where patients' placed greater trust in knowledgeable doctors in Turkey private hospital (Taner and Antony, 2006).

B. Relationship among service quality, customer satisfaction and trust

After analyzing data collection, the PLS-MGA, PLS-algorithm, bootstrapping and blindfolding techniques in SmartPLS were used to confirm whether the hypotheses relationship was supported or rejected. This tool is a very powerful technique and commonly used in conducting a comparative study. In this paper, factor loadings for private low-cost apartments (TP1M) are greater than public low-cost apartments (PPP). All constructs also have Cronbach alpha values above 0.80. There is no need to refine the items to increase reliability because all constructs have good internal consistency. Thus, all constructs for both case studies have AVE values more than 0.5 and CR values more than 0.90, which means the convergent validity of the construct was sufficient (Fornell and Larcker, 1981). The results between two scales have discriminant validity values less than 0.85, which means two constructs was not highly correlated (Campbell and Fiske, 1959).

As recommended by Hair et al. (2013), the R-square adjusted for endogenous latent variables might be described as substantial (0.75), moderate (0.50) and weak (0.25), respectively. Thus, the R-square adjusted for private (TP1M) led with five (5) substantial and four (4) moderate conditions; and public (PPP) with

seven (7) substantial and two (2) moderate conditions. Path coefficients of service quality to customer satisfaction for private (TP1M) was less than public (PPP) at 0.768 and 0.846, respectively; customer satisfaction to customer trust for private (TP1M) was less than public (PPP) at 0.321 and 0.513, respectively; service quality to customer trust for private (TP1M) was greater than public (PPP) at 0.593 and 0.446, respectively; and customer satisfaction as a mediator between service quality and customer trust for private (TP1M) was less than public (PPP) at 0.246 and 0.434, respectively. Thus, the relationships among the variables have no multicollinearity issue because a good result for path coefficient should be less than 1 or more than -1.

T-statistics for both case studies have ranged from 4.581 to 83.023 and 7.265 to 113.341. Then, p-values were indicated at 0.000. In case of normal distribution, the variable is not significant if t-statistics are less than 1.96 or p-values are greater than 0.05. Therefore, t-statistics for both case studies indicated that no critical path exists in the model, and the variables fall in the acceptance region at >1.96 (with 5 percent significance level) and p-values<0.05. Lastly, cross-validated redundancy and communality for private (TP1M) are ranged from 0.000 to 0.622 and 0.407 to 0.540. Meanwhile, the cross-validated redundancy and communality for public (PPP) are ranged from 0.000 to 0.720 and 0.484 to 0.665. Thus, total average of the cross-validated redundancy and communality for private low-cost apartments (TP1M) are less than public low-cost apartments (PPP). The measurement model for both case studies with average H^2 at 0.475 and 0.573 present a better quality as compared to the structural model with average F^2 at 0.458 and 0.549, and the average results of $F^2 > 0$.

Figure 5 shows the proposed theoretical framework of service quality, customer satisfaction and trust.

Figure 5. Proposed theoretical framework of service quality, customer satisfaction and trust

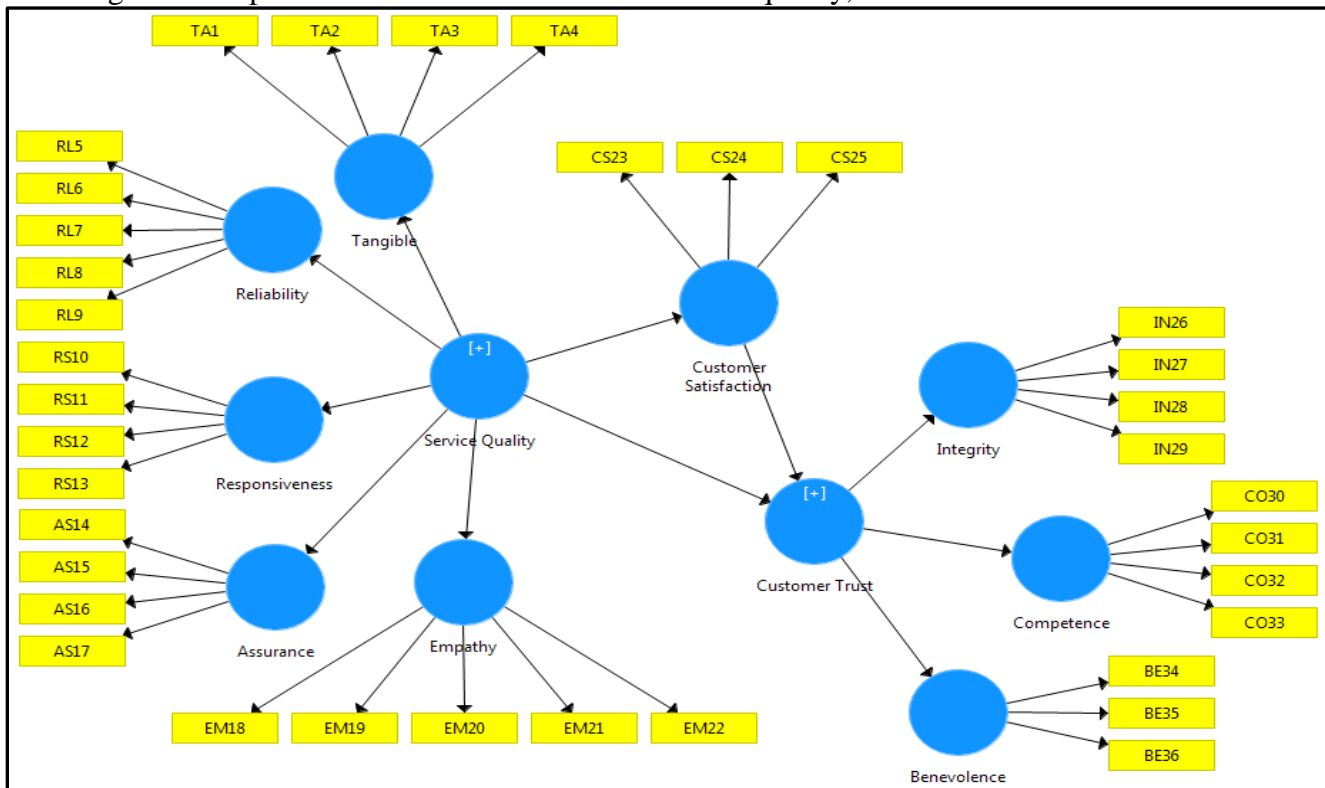


Figure 6 shows the loadings and cross-loadings of private (TP1M) and public (PPP).

Figure 6. Loadings and cross-loadings of TP1M and PPP

Items	Private (TP1M)			Public (PPP)		
	SQ	CS	CT	SQ	CS	CT
Tangible (TA1)	0.691	0.451	0.595	0.730	0.594	0.596
Tangible (TA2)	0.736	0.555	0.634	0.685	0.535	0.576
Tangible (TA3)	0.588	0.450	0.459	0.687	0.540	0.545
Tangible (TA4)	0.706	0.613	0.558	0.710	0.574	0.577
Reliability (RL5)	0.714	0.576	0.538	0.716	0.601	0.634
Reliability (RL6)	0.748	0.527	0.627	0.828	0.709	0.728
Reliability (RL7)	0.725	0.510	0.564	0.782	0.623	0.635
Reliability (RL8)	0.732	0.502	0.582	0.780	0.621	0.650
Reliability (RL9)	0.637	0.407	0.525	0.777	0.614	0.647
Responsiveness (RS10)	0.699	0.473	0.510	0.807	0.620	0.670
Responsiveness (RS11)	0.786	0.585	0.595	0.808	0.700	0.718
Responsiveness (RS12)	0.773	0.612	0.640	0.793	0.686	0.711
Responsiveness (RS13)	0.681	0.448	0.530	0.685	0.524	0.570
Assurance (AS14)	0.743	0.583	0.572	0.818	0.675	0.685
Assurance (AS15)	0.745	0.542	0.620	0.779	0.630	0.702
Assurance (AS16)	0.665	0.537	0.533	0.757	0.687	0.682
Assurance (AS17)	0.656	0.565	0.526	0.813	0.728	0.795
Empathy (EM18)	0.682	0.598	0.556	0.814	0.722	0.757
Empathy (EM19)	0.700	0.615	0.714	0.796	0.729	0.738
Empathy (EM20)	0.674	0.530	0.676	0.797	0.738	0.745
Empathy (EM21)	0.709	0.629	0.706	0.824	0.738	0.781
Empathy (EM22)	0.772	0.624	0.786	0.825	0.763	0.788
Satisfaction (CS23)	0.656	0.867	0.650	0.825	0.926	0.859
Satisfaction (CS24)	0.609	0.879	0.655	0.660	0.859	0.713
Satisfaction (CS25)	0.756	0.902	0.743	0.789	0.915	0.823
Integrity (IN26)	0.625	0.559	0.782	0.688	0.698	0.812
Integrity (IN27)	0.670	0.606	0.797	0.727	0.698	0.824
Integrity (IN28)	0.720	0.618	0.822	0.756	0.789	0.881
Integrity (IN29)	0.672	0.631	0.795	0.707	0.771	0.874
Competence (CO30)	0.656	0.625	0.816	0.776	0.768	0.870
Competence (CO31)	0.687	0.661	0.784	0.781	0.758	0.862
Competence (CO32)	0.626	0.606	0.781	0.759	0.782	0.870
Competence (CO33)	0.695	0.686	0.798	0.789	0.807	0.880
Benevolence (BE34)	0.659	0.606	0.781	0.809	0.819	0.903
Benevolence (BE35)	0.684	0.631	0.815	0.788	0.751	0.849
Benevolence (BE36)	0.698	0.608	0.834	0.772	0.805	0.868

Figure 7 and 8 show convergent validity of private (TP1M) and public low-cost apartments (PPP).

Figure 7. Convergent validity of private low-cost apartments (TP1M)

Construct	Variable	Fact or Loading	Cronbach's Alpha	Composite Reliability	AVE
Service Quality	Tangible	0.588-0.736	0.953	0.957	0.503
	Reliability	0.637-0.748			
	Responsiveness	0.681-0.786			
	Assurance	0.656-0.745			

	Empathy	0.674-0.772			
Customer Satisfaction	Satisfaction	0.867-0.902	0.859	0.914	0.779
Customer Trust	Integrity	0.782-0.822	0.944	0.952	0.641
	Competence	0.781-0.816			
	Benevolence	0.781-0.834			

Figure 8. Convergent validity of public low-cost apartments (PPP)

Construct	Item	Loading	Cronbach's Alpha	Composite Reliability	AVE
Service Quality	Tangible	0.685-0.730	0.968	0.971	0.600
	Reliability	0.716-0.828			
	Responsiveness	0.685-0.808			
	Assurance	0.757-0.818			
	Empathy	0.796-0.825			
Customer Satisfaction	Satisfaction	0.859-0.926	0.884	0.928	0.811
Customer Trust	Integrity	0.812-0.881	0.966	0.970	0.745
	Competence	0.862-0.880			
	Benevolence	0.849-0.903			

Figure 9 and 10 show discriminant validity of private (TP1M) and public low-cost apartments (PPP).

Figure 9. Discriminant validity of private low-cost apartments (TP1M)

	Service Quality	Customer Satisfaction	Customer Trust
Service Quality	0.709		
Customer Satisfaction	0.768	0.883	
Customer trust	0.840	0.776	0.801

Figure 10. Discriminant validity of public low-cost apartments (PPP)

	Service Quality	Customer Satisfaction	Customer Trust
Service Quality	0.775		
Customer Satisfaction	0.846	0.901	
Customer trust	0.880	0.890	0.863

Figure 11 shows R square adjusted of private (TP1M) and public low-cost apartments (PPP).

Figure 11. R square adjusted of private and public low-cost apartments

Construct	Private (TP1M)		Public (PPP)	
	R-square Adjusted	Endogenous Latent Variables	R-square Adjusted	Endogenous Latent Variables
Tangible	0.720	Moderate	0.693	Moderate
Reliability	0.828	Substantial	0.838	Substantial
Responsiveness	0.794	Substantial	0.850	Substantial
Assurance	0.746	Moderate	0.847	Substantial
Empathy	0.742	Moderate	0.869	Substantial
Customer Satisfaction	0.587	Moderate	0.714	Moderate
Integrity	0.853	Substantial	0.881	Substantial
Competence	0.858	Substantial	0.902	Substantial

Benevolence	0.825	Substantial	0.888	Substantial
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Figure 12 shows R path coefficients, specific indirect effects and f square.

Figure 12. Path coefficients, specific indirect effects and f square

Relationship Among Variables	Private (TP1M)		Public (PPP)	
	Path Co.	f Square	Path Co.	f Square
Quality -> Customer Satisfaction	.768	.436	.846	.516
er Satisfaction -> Customer Trust	.321	.167	.513	.496
Quality -> Customer Trust	.593	.572	.446	.376
Quality -> Customer Sat. -> Customer Trust	.246	n/a	.434	n/a

Figure 13 shows collinearity statistics of inner VIF values.

Figure 13. Collinearity statistics of inner VIF values

	Private (TP1M)		Public (PPP)	
	VIF	Collinearity	VIF	Collinearity
Service Quality->Tangible	1.000	Not correlated	1.000	Not correlated
Service Quality->Reliability	1.000	Not correlated	1.000	Not correlated
Service Quality->Responsiveness	1.000	Not correlated	1.000	Not correlated
Service Quality->Assurance	1.000	Not correlated	1.000	Not correlated
Service Quality->Empathy	1.000	Not correlated	1.000	Not correlated
Service Quality->Customer Sat.	1.000	Not correlated	1.000	Not correlated
Service Quality->Customer Trust	2.436	Moderately correlated (some)	3.516	Moderately correlated (caveat)
Customer Sat.->Customer Trust	2.436	Moderately correlated (some)	3.516	Moderately correlated (caveat)
Customer Trust->Integrity	1.000	Not correlated	1.000	Not correlated
Customer Trust->Competence	1.000	Not correlated	1.000	Not correlated
Customer Trust->Benevolence	1.000	Not correlated	1.000	Not correlated

5. Discussion and Conclusion

A. Discussion

The aims of this study are to identify the effectiveness of 1Malaysia Maintenance Fund (TP1M) on maintenance service for low-cost apartments and to propose a theoretical framework on service quality, customer satisfaction and trust. The findings revealed that service quality has positively affected customer satisfaction for private (TP1M) and public low-cost apartments (PPP) with a t-statistic > 1.96 and p-value < 0.05, respectively. Consequently, customer satisfaction might be increased by improving quality of maintenance services to its customers. This result was consistent with prior researchers, who established that service quality has a significant effect and positive relationship on customer satisfaction with the Bangladesh private telecommunication company, Qatar banking industry, Taiwan International Logistic providers and Greece retailing industry (Akbar and Parvez, 2009; Hossain and Leo, 2008; Chen and Lee, 2008; and Gounaris *et al.*, 2003). Meanwhile, service quality has positively affected customer trust for both case studies with a t-statistic > 1.96 and p-value < 0.05, respectively. Hence, customer trust might be achieved by enhancing quality of maintenance services to its customers through 1Malaysia Maintenance Fund rather

than Housing Maintenance Programme. This fund obtained a higher level of trust from the residents of low-cost apartments in Kuala Lumpur. Thus, this result was consistent with the previous authors, who established that service quality has a significant impact and positive effect on customer trust in Jordan patient healthcare, China rural tourism, seller business operation, China m-commerce, United States e-services and China e-commerce industry (Alrubaie and Al'kaidaa, 2011; Su and Fan, 2011; Al-Dwairi *et al.*, 2009; Yeh and Li, 2009; Gefen and Straub, 2006; and Zha *et al.*, 2006).

Figure 14 shows comparable results of hypotheses relationships for both case studies.

Figure 14. Comparable results of hypotheses relationships

Hypothesis for Private (TP1M)	T-Stat	P-Value	Result
Service quality will positively affect customer satisfaction	23.664	0.000	Supported
Service quality will positively affect customer trust	9.256	0.000	Supported
Customer satisfaction will positively affect customer trust	4.679	0.000	Supported
Customer satisfaction mediates the relationship between service quality and customer trust	4.581	0.000	Supported
Hypothesis for Public (PPP)	T-Stat	P-Value	Result
Service quality will positively affect customer satisfaction	41.007	0.000	Supported
Service quality will positively affect customer trust	7.265	0.000	Supported
Customer satisfaction will positively affect customer trust	8.659	0.000	Supported
Customer satisfaction mediates the relationship between service quality and customer trust	8.808	0.000	Supported

Customer satisfaction has positively affected customer trust for both case studies with a t-statistic > 1.96 and p-value < 0.05, respectively. Accordingly, customer trust might be accomplished by increasing satisfaction to its customers. This result was consistent with earlier practitioners, who established that customer satisfaction has a strong correlation and significant effect on customer trust in South Africa financial services, Spain internet industry, South African financial services, Malaysia and Qatar e-commerce, Taiwan m-commerce, India e-commerce and European e-commerce industry (Edwin *et al.*, 2011; Jose, 2011; Kantsperger and Kunz, 2010; Yeh and Li, 2009; Sahadev and Purani, 2008; and Ribbink *et al.*, 2005). Lastly, customer satisfaction mediates the relationship between service quality and customer trust for both case studies with a t-statistic > 1.96 and p-value < 0.05, respectively. Thus, customer satisfaction might be influenced by improving quality of maintenance services and trust to its customers. This result was consistent with recent authors, who established that customer satisfaction has a strong mediating effect on service quality and customer trust in Malaysia rural tourism, Malaysian banking, Taiwan m-commerce and United States tourism industry (Osman *et al.*, 2016; 2013; Yeh and Li, 2009; and Liang, 2008). Therefore, four (4) hypotheses testing results were supported for private (TP1M) and public low-cost apartments (PPP) with t-statistics > 1.96 (at 5 percent significance level) and p-values < 0.05 at the significance level.

B. Conclusion

In conclusion, the 1Malaysia Maintenance Fund (TP1M) is more effective as compared to the Housing Maintenance Program (PPP) because it might offer better quality of maintenance services for low-cost apartments. The element of trust such as sharing knowledge between the property managers and the residents of low-cost apartment might increase the level of trust towards maintenance services for low-cost apartments. The recently elected government should continue this fund due to good feedback received from the residents through survey. The success of this fund could increase the level of trust between the residents

and management companies in Malaysia. The fund could not be successful without any support from the state governance officers. A good relationship between the residents and the management companies is the most important aspect that should be kept up and improved. For practical contribution, this study discovers that increasing the quality of maintenance services will improve the level of customer trust and the management companies will be able to maintain their properties at an acceptable standard of living. The research findings might be used as a guideline for the property management companies to improve quality of maintenance services for low-cost apartments. Quality of services might be improved if the property managers act upon the suggestions. For instance, the management staff should be well trained to increase their skills and knowledge through property management seminars. From the training, the staff might have a new skill and knowledge as well as good moral values in enhancing career developments.

Then, the management staff that committed to perform well and received acknowledgment from the customers should get a better reward from the management company. Finally, the employment procedure of hiring a fresh graduate from property management background should be fully revised. As a result, it might lead to enhanced customer service and the consideration of any suggestions that may lead to higher customer trust. For theoretical contribution, this study reveals that quality of maintenance services was affected by trust (integrity, competence and benevolence) for both case studies. The research findings might be used as a yardstick for a future academic research in order to explore the relationship between service quality and customer trust in the different scopes or contexts to acquire more knowledge on service quality, customer satisfaction and trust. This study only focused on the effectiveness of 1Malaysia Maintenance Fund on maintenance services for low-cost apartments. The research was carried out to test the level of trust between the residents and the management companies by improving quality of maintenance services for low-cost apartments to a better proper functioning in order to gain an acceptable standard of living. Study of this topic in other areas of Malaysia may be conducted with different findings. Several studies should be given greater consideration. For instance, what do you know about 1Malaysia Maintenance Fund (TP1M) and how could you rate this fund. These questions could be done if the qualitative method was used. Different research method might produce different research findings.

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