

The Influence of Product Quality and Service Quality on House Buyer's Satisfaction in Prima Home

Aziam Mustafa*, Nasriyah Adnan and Siti Salwana Mohd Nawayai

Politeknik Sultan Salahuddin Abdul Aziz Shah, Persiaran Usahawan, Seksyen U1, 40150 Shah Alam, Selangor, Malaysia

ABSTRACT

Owning a home is the dream of many Malaysians. The establishment of Perbadanan PR1MA Malaysia which is dedicated to designing and building affordable quality homes is aimed at making this dream come true. This study seeks to examine the relationship between product and service quality among house buyers' for PR1MA Home. A survey was conducted among private developers in residential areas implementing PR1MA Home concept and results showed that service quality has a major influence on house buyer's satisfaction.

Keywords: PR1MA home, product quality, service quality, satisfaction, structural equation modelling

INTRODUCTION

Housing is one of the biggest sectors that contribute to the nation's economy. Fundamentally, a house is a shelter which bestows the various attributes encompassing safety, love, peace and freedom (Marcussen,

1990). Its existence is supported by some basic peripherals which include service and infrastructure or facilities (Johal, 1997; Kemeny, 1992). Moreover, housing development has been cited as an impetus that improves the quality of life. Thus, the Housing and Local Government Ministry of Malaysia (MHLG, 2008) reiterated the importance of providing safety, security, comfort, health, privacy and other related services to buyers. The *Perumahan Rakyat 1Malaysia* (PR1MA) was launched in 2011 to provide affordable homes for middle-income households in urban areas, i.e. those with monthly income

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E-mail addresses:

aziam@psa.edu.my (Aziam Mustafa),

nasriyah@psa.edu.my (Nasriyah Adnan),

wana_9199@yahoo.com (Siti Salwana Mohd Nawayai)

*Corresponding author

RM2,500 to RM4,000 and houses priced at the RM100,000 to RM400,000 range in key urban areas. The PR1MA Home goes beyond brick and mortar. They are not just serving the national agenda of building affordable quality homes for middle income Malaysians, but they are also serious in promoting greater home ownership amongst those who are facing challenges in buying a property.

LITERATURE REVIEW

This section provides a synthesis and analysis of previous published research related to the main theoretical concepts of this study such as satisfaction, product quality and service quality.

Customer Satisfaction

Customer satisfaction can promote a business, hence fulfilling customers' wants and needs should be a company's main orientation. Customer satisfaction has become an important indicator for the service and housing industry and is a key element in modern marketing thought and practice. Essentially, customer satisfaction is used as a means to enhance performance in the housing industry where competitive advantage is vital.

In evaluating satisfaction in the housing industry, two approaches are suggested for measuring buyers' satisfaction (Adriaanse, 2007; Amerigo & Aragonés, 1997). The first approach predicts the buyers' behaviour when moving into or making renovations to the present house (Mohit, et al., 2010; Adriaanse, 2007) and the second is valued by

house quality factors that affect satisfaction levels (Adriaanse, 2007). Besides the choice of moving to another house or doing renovation, satisfaction can be assessed by conceptualization (Hallowell, 1996; Paris & Kangari, 2005), and displaying loyalty behaviour. According to Torbica (2001), customer satisfaction is seen as an important factor in the continuing growth and economic success of the housing industry. Thus, developers need to periodically measure the level of satisfaction among its customers (Torbica & Stroh, 2000).

Product Quality

Product quality is one of the most important constructs in marketing. The term "quality" has no global definition. The American Society for Quality Control defines quality as the totality of features and characteristics of a product that bear on its ability to satisfy stated or implied needs (Miller, 1993). Product quality is viewed as significant for customers. Therefore, firms should be concerned about their own perception or customers' perception of a products' quality (Watson, 1998). Similarly, Fornell et al. (1996) claimed that customer satisfaction is more quality driven than value or price. Product quality is also found to be one of the antecedents to customer satisfaction (example, Anderson & Sullivan, 1993; Churchill & Suprenant, 1982; Cronin & Taylor, 1992; Fornell, 1992). On the other hand, Bearden and Teel (1983) found that perceptions of product quality are considered as determinants of attitudes towards purchase and use. This study focuses

on buyers who perceive their houses as a physical product which is well designed according to the details and specifications supplied by the developer. Buyers receive what is in the project location after all the work has been completed.

Product Quality and Satisfaction

Generally, almost all research on service marketing emphasise the construct and dimension of service quality in relation to consumer satisfaction and loyalty. Shostack's (1977) study classified salt and soft drinks as tangible products, while consulting companies and teaching institutions as intangible services. The tangible quality of service products should be part of the satisfaction model which is identified as an important factor for consumer decision making relating to product quality (Cronin, Brady, & Hult, 2000). As a result of these ongoing studies, the perceived quality construct of consumers' durable goods and perceived product quality had a major effect on purchasing choices (Brucks, Zeithaml, & Naylor's, 2000). This statement suggests product quality has as much an effect on consumer satisfaction as service quality (Parasuraman, Zeithaml & Berry, 1994). Such discussions show that product quality is found to be an independent factor and therefore, this study aims to investigate its influence on consumer satisfaction. To conclude, while product quality and service quality are the main factors that contribute to customer satisfaction in the housing market, issues such as residential environments and neighbourhoods can also contribute

to customer dissatisfaction. As such, it is extremely difficult to predict customer satisfaction as product and service quality in themselves may be insufficient criteria.

Service Quality

Service quality is a primary concern for most Malaysian companies today. In order to gain competitive advantage, companies need to gather information on market demands and process the details of customer satisfaction. In the last few decades that service quality has turned out to be the most important area of focus among practitioners, managers and researchers owing to its strong impact on business performance, lower costs, customer satisfaction, customer loyalty, and profitability (Leonard & Sasser, 1982; Cronin & Taylor, 1992; Gammie, 1992; Hallowell, 1996; Chang & Chen, 1998; Gummesson, 1998; Lasser et al., 2000; Silvestro & Cross, 2000; Newman, 2001; Sureshchander et al., 2002; Guru, 2003).

Service Quality and Customer Satisfaction

It is apparent and fairly well established that customer satisfaction and service quality are closely related but conceptually different. This argument has been signified by Shemwell et al. (1998) where they ponder that service quality is a cognitive, left-brained, evaluative and objective concept whereas satisfaction is a mixture of an effective, right-brained, feeling based, and subjective component. The link between the two though has been well recognized

and empirically evidenced (Jones & Sasser, 1995; Oh & Park, 1997; Sasser et al., 1978; Zeithaml et al., 1993). Empirical studies conducted by several researchers have provided proof that perceived service quality in fact leads to customer satisfaction (Cronin & Taylor, 1992; Parasuraman et al., 1985, 1988). The success of the housing development project relies heavily on the quality of the house and quality of services. As highlighted their study by Parasuraman, Zeithaml and Berry (1985), marketers must concern themselves with the quality of their goods and services to remain technologically competitive in the eyes of customers. The issue of dissatisfaction among the home buyers is commonly resulted from housing abandonment,

product quality and service quality (Aziam & Maznah, 2012). The measurement of buyer satisfaction is the main interest of this paper. It covers determinants in relation to buyer's satisfaction on product quality and service quality, building safety and developer responsibilities. The function of service quality has been acknowledged as being a vital determinant for the success of service providers in today's competitive housing industry. Based on the literature review, the hypothesis and measurement model is formulated for the exogenous variable and the endogenous variables to explain the relationships among product quality, service quality and satisfaction in Figure 1.

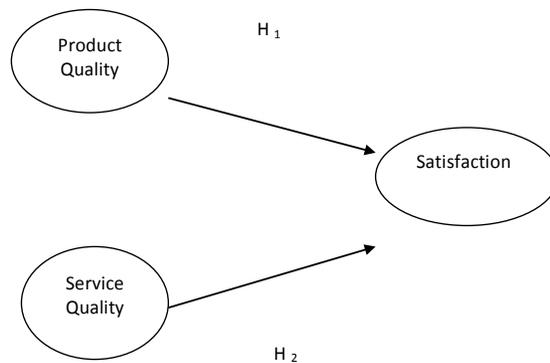


Figure 1. Theoretical Model for the influence of product quality and service quality on buyer's satisfaction in PR1MA Home

RESEARCH METHOD

This study employed the survey research method. The quantitative data collection technique that consists of closed ended questions was used to gather data on satisfaction. The constructed affordable

housing projects in Malaysia were determined by referring to PR1MA. In order to measure the effect of product quality and service quality on buyer's satisfaction in PR1MA Home, two criteria were observed: (1) the residential areas are built according

to PR1MA Home; (2) PR1MA Home for the residential areas have been occupied within two years. Since PR1MA Home is still new, most of the projects are still in the planning and construction phase. Only one PR1MA Home project was completed, that is in Putrajaya consisting of 560 housing units.

Questionnaire Design

A structured questionnaire was used to collect data. Based on the extensive research done by Parasuraman, the five dimensions of SERVQUAL demonstrated reliability coefficients ranging from 0.53 to 0.93 (Parasuraman et al., 1991). Customer satisfaction was measured using 3 items adopted from Cronin, Brady and Hult (2000) and Wang et al. (2004), and the reported reliability of this scale is above .886. To measure product quality five item scale developed by Torbica and Stroh (2001) was used, and the reported reliability of this scale is .824. The survey sought to determine the direct effect of product quality and service quality on satisfaction for PR1MA Home. House buyers were asked to indicate their perceptions on product quality, service quality. A seven-point Likert-type response scale, which ranged from 1-strongly disagree to 7-strongly agree, was used due to its appropriateness for evaluating product quality and service quality and its effectiveness in measuring respondents' satisfaction (Torbica & Stroh, 2001). The selected measures were also chosen for their high reliability and validity (Parasuraman et al., 1985).

Data Collection Procedures

The questionnaires were used to gain information on the extent of dissatisfaction with PR1MA Home. 250 questionnaires were administered directly to the occupants during door-to-door visits and requiring their immediate completion (Newman, 2000). Hence, after the respondents had completed the questionnaires, taking advantage from the face-to-face survey where the researcher has asked an open-ended question to the respondents. It was done as an expansion to the questionnaire.

Data Analysis Procedures

To assess direct and indirect (mediated) relationships among the studied variables, the researchers performed confirmatory factor analysis and structural equation modelling (Anderson & Gerbing, 1988). SPSS and AMOS had been used to perform these analyses. These analyses should help us to understand which model fits the data best while presenting a credible assessment on the relationship between product quality, service quality and customer satisfaction.

RESULTS AND DISCUSSION

Confirmatory factor analysis (CFA) was performed using AMOS to measure the unidimensionality, convergent and discriminant validity. Table 1 show the summary result from CFA for product quality, service quality and satisfaction models.

Table 1
Summary from confirmatory factor analysis

Model	Dimensions	No. of Items	CR (>0.7)	AVE (>0.5)	Reliability Cronbach Alpha (>0.7)
Product Quality	Design	3	0.854	0.662	0.851
	Material	4	0.790	0.488	0.806
	Tangible	3	0.776	0.536	0.778
	Reliability	4	0.877	0.641	0.879
Service Quality Satisfaction	Responsiveness	3	0.837	0.633	0.831
	Empathy	3	0.861	0.675	0.856
	Assurance	2	0.711	0.509	0.705
		3	0.925	0.806	0.778

The impact of product quality and service quality on house buyer's satisfaction were investigated using structural equation modelling (SEM). A structural model can be viewed simultaneous linkages that allow a researcher to determine the relative strength of relationship between variables. The relationship between product and service quality and house buyer's satisfaction were displayed in Figure 1. The overall fit of the model can be assessed using a number of fit indices. The indices used include chi-square, Goodness of Fit (GFI), Non-Normed Fit Index (NNFI), Comparative Fit Index (CFI), Root Mean squared Residual (RMSR) and Root Mean Square Error of Approximation (RMSEA). Exhibit shows

major fit measures and guidelines for their acceptable values. The goodness of fit indices for the final structural model, as shown in the bottom part of Figure 2 suggest a good fit to the data: small ratio of chi-square to degree of freedom (< 2), great values of GFI, AGFI, CFI, NFI (> 0.9) and RMSEA values (< 0.05). A structural model is fit to the product quality, service quality and customer data according to the model structure given in Figure 2. Two paths (product quality to satisfaction and service quality to satisfaction) are found to have significant positive standardized path coefficients and not dropped sequentially based on Wald tests.

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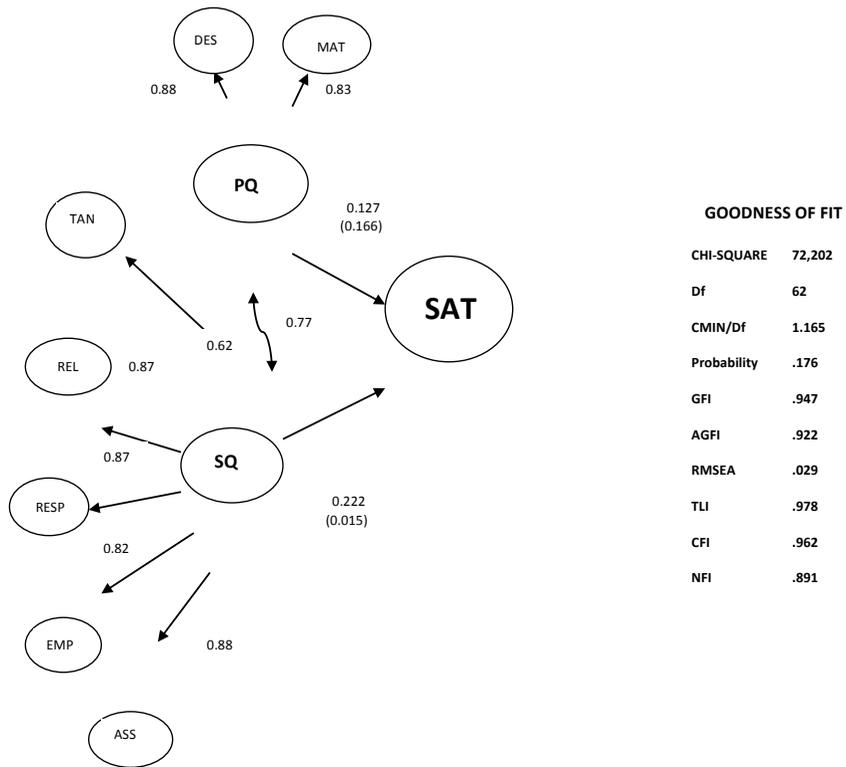


Figure 2. Results of Structural Model – Path Analysis

In accordance with the parameter estimates shown in Figure 2, service quality yield positively and significantly related to satisfaction (coefficient=0.222 $p(=0.015)<0.10$), this finding as proposed in H_1 . In the same way, as proposed

in H_2 , product quality has not positive and significantly effect on satisfaction (coefficient=0.127, $p(=0.166)>0.10$). Table 2 shows the regression weight of product quality and service quality to satisfaction.

Table 2
Summary of hypotheses testing results

Path	Estimate(β)	S. E	C.R.	P	Result
Product Quality → SAT	0.127	0.087	1.379	0.166	Unsupported
Service quality → SAT	0.222	0.153	2.402	0.015	Supported

Standardised beta coefficients; S.E. = standard error; C.R. = critical ratio; * $p<0.10$

The research question of this study is related to the effect of product and service quality on buyers' satisfaction. At the 10% level of significance, the relationship between product quality (β : 0.127) with satisfaction were not significant, and thus, H_1 was not supported. On the other hand, there were positive relationship between service quality (β : 0.222) and satisfaction, thus H_2 were supported.

DISCUSSION

H_1 states that there is a significant effect of buyers' perceived product quality (PQ) on their satisfaction (SAT). H_1 was rejected. The findings reveal that there was no significant effect of product quality on satisfaction and failed to support such a relationship. It is further evidence that results from empirical testing on the perceived product quality show that there was no impact on the level of satisfaction in PRIMA Home. Surprisingly, the results contradict with the hypothesized outcome and the findings from previous research such as Cronin et al. (2000) and Parasuraman et al. (1994). Even though the relationship between product quality and satisfaction was not significant, there is evidence that some association exists between product quality and service quality. This suggests that the higher the product quality, the higher the service quality, which leads to higher satisfaction. Therefore, product quality might have an indirect relationship with satisfaction through service quality (Refer Figure 2).

H_2 states that there is a significant effect of buyers' perceived service (SQ) on their satisfaction (SAT). The hypothesis was supported. Customer satisfaction and service quality are two important aspects that are closely related but conceptually different from each other (Jones & Sasser, 1995; Oh & Park, 1997; Zeithaml et al., 1993). Researchers of service quality suggest that high service quality results in high customer satisfaction (Parasuraman et al., 1985, 1988). Moreover, good service quality and perceived service lead to customer satisfaction which resulted in an increase in evaluation of service quality (Bitner, 1990). Similarly, perceived service quality is the accretion of consumer satisfaction (Teas, 1993). The findings of this study provide further support to the numerous arguments in the literature that service quality is a major factor for customer satisfaction.

CONCLUSION

This study adds to the knowledge of existing buyers' satisfaction with PRIMA Home and shows the complex interactions between service quality and buyers' satisfaction. The findings hold strong implications for governing bodies, industry practitioners and funding agencies as they magnify the need for new and holistic strategies to address buyers' expectations and service providers' reluctance in developing innovative housing solutions.

PRIMA is a smart-partnership between the Government and the private sector

whereby the government provides the land and a reputable private sector developers construct affordable houses. Through PR1MA Home more Malaysians will be able to own a house and have a better future.

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