

Dimensional Analysis of Service Quality: Small Construction Business and Australian Household

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Abstract

The survival rate of small businesses operating in the Australian building maintenance industry (SBBM) has been decreasing due to high competition. Some researchers identify the delivery of high levels of service quality as a differential strategy that can improve small business chances of survival. The objective of this study is to examine the nature of the relationships between the quality of service delivered by SBBM and the satisfaction and repurchase intention of Australian households. Additionally, provide a dimension-specific analysis of the relationship between the quality of service delivered by SBBM and the satisfaction and repurchase intention of Australian households. In order to achieve the objectives of the study, a self-completion questionnaire measuring instrument is mailed to 667 potential participants selected using simple random sampling. The measuring instrument consists of 26 questions based on the SERVPERF model. A total of 200 complete and accurate questionnaires are returned. The relationships among the main constructs of the study are tested using correlational research design. The study concludes that customer satisfaction mediates the relationship between service quality and repurchase intention. It also concludes that SBBM can achieve high levels of service quality and repurchase intention by focusing and investing in the reliability, assurance and empathy factors of service quality. The results of this study are only applicable to the Australian residential market and may not be universally applicable, which is considered a limitation.

Keywords: construction, customer satisfaction, repurchase intention, service quality, small business

1. Introduction

1.1 Research Problem

Small businesses that specialises in building maintenance (SBBM) are key contributors to the Australian economy. As of June 2012, there were 168,724 SBBM that accounted for 97.7% of all construction businesses (ABS, 2013). They employed 42% (or 394,956) of the total construction work force, generated 43% (or \$132b) of the total construction income, and 70% (or \$21b) of the total construction profit.

However, SBBM survival rate has been decreasing reaching 67% in June 2013 compared to 90% in June 2010 (ABS, 2015), which can have negative economical, financial and social impacts on individuals and society (Kuratco, 2009). Some researchers have identified market competition as a major cause for this trend (Gill & Bigger, 2012; Mahamid, 2012; Moy & Luk, 2003). Researchers (Maclaran & McGowan, 1999; Rapert & Wren, 1998) concluded that a small business very survival depends on adopting differential strategies that lead to a competitive advantage. Developing a unique and sustainable approach to high service quality based on understanding customer expectations is recognised as a key differential in an increasingly competitive building maintenance industry (Fraser, 2014).

High service quality places organisations at a competitive advantage because they have a better chance of achieving customer satisfaction (Oliver, 1997), and retaining customers (Brady, Cronin, & Brand, 2002). In order for SBBM to achieve a competitive advantage and improve their chances of survival they have to establish a better understanding of how their customers perceive service quality and the dynamics of its relationships with consumer satisfaction and behaviour intentions (repurchase intention) (Rust & Oliver, 1994).

The objective of this study is to examine the nature of the relationships between the quality of service delivered by SBBM and the satisfaction and repurchase intention of Australian households. Additionally, provide a

dimension-specific analysis of the relationship between the quality of service delivered by SBBM and the satisfaction and repurchase intention of Australian households.

1.2 Research Questions

In order to achieve the objectives of this study, the following four research questions are adopted:

- 1) Is there a relationship between the quality of service delivered by SBBM, and customer satisfaction as perceived by Australian households?
 - 1a. What influence do the five factors of service quality have on customer satisfaction as perceived by Australian households?
- 2) Is there a relationship between the quality of service delivered by SBBM and repurchase intention as perceived by Australian households?
 - 2a. What influence do the five factors of service quality have on repurchase intention as perceived by Australian households?
- 3) What is the relationship between customer satisfaction and repurchase intention as perceived by Australian households?
- 4) Does customer satisfaction as perceived by Australian households mediate the relationship between the quality of service delivered by SBBM and the repurchase intentions of Australian households?

1.3 Contribution

This study has practical and theoretical contributions. Practically, it provides managers of SBBM with recommendations on how to deliver high levels of service quality. A dimension-specific analysis of the relationship between service quality and customer satisfaction provide SBBM managers with a greater understanding of customers' preferences to high levels of service quality and customer satisfaction, therefore improve their business chance of survival. Theoretically, this study contributes to the body of knowledge by examining the nature of the relationship among the constructs of service quality, customer satisfaction and repurchase intention in the context of residential building maintenance in Australia.

1.4 The Context: Small Business in the Construction Industry

This study measure the service quality performance of small businesses that specialises in reactive maintenance. According to ABS (2009), small business is defined as an actively trading business that employs between 0 and 19 employees. Reactive maintenance is maintenance work that is usually conducted after a breakdown of a building component (Lai & Pang, 2010). The customers for this study are drawn from Australian households. Forsythe (2007) characterises Australian households to be predominantly owner-occupiers, who purchase for personal needs and are occasional users of maintenance services which strengthen their contextual need for service quality.

2. Literature Review

2.1 Service Quality

Parasuraman, Zeithaml, and Berry (1985) define service quality as the difference between customer expectations and actual service performance on the basis of evaluating both the outcome of the service and service delivery process. The marketing interest in service quality is obvious because low service quality places organisations at a competitive disadvantage potentially driving away customers that might otherwise be loyal and then have to spend a greater amount of money to attract new customers who may ultimately leave after experiencing the service (Lovelock, Patterson, & Wirtz, 2011). In contrast, high service quality places organisations at a competitive advantage because they have a better chance of achieving customer satisfaction (Oliver, 1997), and customer retention (Brady et al., 2002).

Service is a construct characterised by four unique features: intangibility, heterogeneity, inseparability of production and consumption (Parasuraman et al., 1985) as well as perishability (Hope & Muhlemann, 1997). Services are intangible because they are based on personal performance and can't be mechanically manufactured in advance (Lovelock et al., 2011). Therefore, services can't be measured, counted, inventoried, or examined before sale to ensure quality. This characteristic poses great problems to service providers in communicating what they exactly offer to their customers, resulting in the customer's inability to assess the service until it has been consumed (Redman & Mathews, 1998). Services are inseparable because they involve simultaneous production and consumption. This means that the quality of the service is assessed during the delivery process rather than upon receipt of the final product (Forsythe, 2007). In contrast, physical goods are produced first, sold

and finally consumed. Due to the inseparability of production and consumption, services can't be produced in advance, stored, and later sold (Zeithaml, 1988). The heterogeneity of services, especially those with a high or medium labour content such as building maintenance, stems from the personal involvement of both service providers and customers resulting in variances in performance from provider-to-provider, from customer-to-customer, and from day-to-day making services difficult to standardize (Parasuraman et al., 1985). Perishability means that services can't be produced, stored and later made available for sale. Frequently, it is difficult to adequately match up demand and supply items like building maintenance works (Siu, Bridge, & Skitmore, 2001).

Maloney (2002) conceptualises construction as a hybrid process that produces both physical product and service components. Kagioglou, Cooper, and Aouad (2001) emphasized that the traditional measures of the performance of construction projects based on time, cost and quality are not sufficient to assess their actual performance. They stress that performance measurement must take into consideration both the quality of the final product as well as the product delivery process.

2.1.1 Dimensions and Measurement of Service Quality in Construction

Examining service quality and its relationship with relevant constructs requires the identification of service quality dimensions that are important to customers in measuring overall satisfaction. This help service providers better understand which dimensions comprise service quality and yield insight towards more effective ways of improving service quality. Parasuraman et al. (1988) developed a multi-dimensional service quality measurement tool, SERVQUAL, which comprises of five dimensions: tangible, reliability, responsiveness, assurance, and empathy.

Tangibility deals with the appearance of elements, such as facilities, equipment, and service personnel. Reliability is the service provider's ability to execute the promised service accurately and dependably. Responsiveness is the service provider's promptness and helpfulness in providing the service. In the event of a service failure, the ability to recover promptly with professionalism can create very positive perceptions of quality. Assurance is the service provider's staff competency, courtesy, credibility, and effective communication with the customer. Finally empathy is easy access through convenient working hours, good communications, customer understanding, and individualised attention. This measurement tool consists of 22 item pairs that form the expectations and performance scales. The Parasuraman et al. (1988) model suggests that customers' assessment of service quality is based on the gap between their expectations and the performance delivered by a service provider.

2.2 Customer Satisfaction

Rai (2013) defines satisfaction as the buyer's subjective comparison of pre-purchase expectation and the actual performance following the consumption of the service or product. This definition implies that what could make one buyer pleased does not necessarily make another pleased (Forsythe, 2007). Kotler (2000) defines customer satisfaction in the construction industry as meeting or exceeding customer expectations.

The concept of customer satisfaction has attracted much attention among academics in various contexts like insurance (Srivastava & Rai, 2013), banking (Caruana, 2002), healthcare (Boshoff & Gray, 2004), aged care (Leventhal, 2008), and construction (Forsythe, 2007). There is significant evidence in the literature that supports the relationship between the level of satisfaction reported by the customers of a business and its financial performance (Okoroh, Jones, & Ilozor, 2003). Evidence shows that high satisfaction generally leads to higher loyalty (Caruana, 2002), repurchase intentions (Taylor & Baker, 1994), increases word-of-mouth recommendation (Vandermerwe, 1994), insulates customers from competition, and lowers the costs of acquiring new customers (Lovelock et al., 2011), which in turn has a positive impact on profitability. Accordingly, customer satisfaction is important for businesses that want to achieve a competitive advantage (Cronin & Taylor, 1992). It is frequently argued that customer satisfaction must be the main goal for all types and sizes of businesses (Morgan, Anderson, & Mittal, 2005).

2.3 Repurchase Intention

Repurchase intention is defined as the individual's judgment about purchasing a service again (Taylor & Baker, 1994). Competing businesses are becoming more appreciative to the importance of service quality and customer satisfaction and their contribution to business success. In general business research, service quality and customer satisfaction are well known for having key impacts on the formation of customers' purchase intentions (Taylor & Baker, 1994). In this regard, less satisfied customers are less likely to repurchase a product or service while satisfied customers are more likely to make repeat purchases and become, or remain loyal (Lovelock et al., 2011).

Repeat purchasing plays a key role in business profitability and success (Oliver, 1997). This fact has attracted the attention of practitioners and academic researchers who are interested in exploring and explaining the concept of repurchase intention.

2.4 Previous Research

Research looking into the relationship among the constructs of service quality, customer satisfaction and behavioural intentions have been conducted by several authors in various settings, such as airlines (An & Noh, 2009), life insurance (Srivastava & Rai, 2013), telecommunication (Srivastava & Sharma, 2013), service factory (Olorunniwo, Hsu, & Udo, 2006), freight services (Molinari, Abratt, & Dion, 2008), information systems (Chumpitaz & Paparoidamis, 2004), travel golfers (Hutchinson, Lai, & Wang, 2009), and technology (Ansari, Farooque, & Gattoufi, 2016).

In the field of construction, the SERVQUAL model has been used in empirical research to measure service quality in various contexts, such as, consulting Engineers (Samson & Parker, 1994), UK construction professional (Hoxley, 2000), mechanical and engineering maintenance services (Siu et al., 2001), public projects in Singapore (Linga & Chong, 2005), residential housing in Netherlands (Straub, 2010), Public housing in Hong Kong (Lai & Lai, 2013; Lai & Pang, 2010), building maintenance contractors in Zambia (Zulua & Chilesheb, 2010), and construction projects in Thailand (Sunindijo, Hadikusumo, & Phangchunun, 2014). The results of these studies varied in terms of the ranking of service quality factors' importance, which confirms (An & Noh, 2009) finding that the result of assessing service quality depends on the service context and where the service is provided. This implies that the findings from previous studies assessing service quality in the construction industry can't be applied to the context of this study, thus a clear understanding of Australian households' needs and wants is important for SBBM to effectively manage service quality, achieve customer satisfaction, encourage repurchasing, and increase their chances of survival.

2.5 Conceptual Framework

In this study, a conceptual framework is proposed that describes the nature of the relationship among the constructs of service quality, customer satisfaction and repurchase intention. The proposed model implies that delivering high quality service will result in high customer satisfaction, which in turn leads to high repurchase intention (Figure 1). The conceptual model will also test the direct effect of service quality and its factors on repurchase intention (Figure 2).

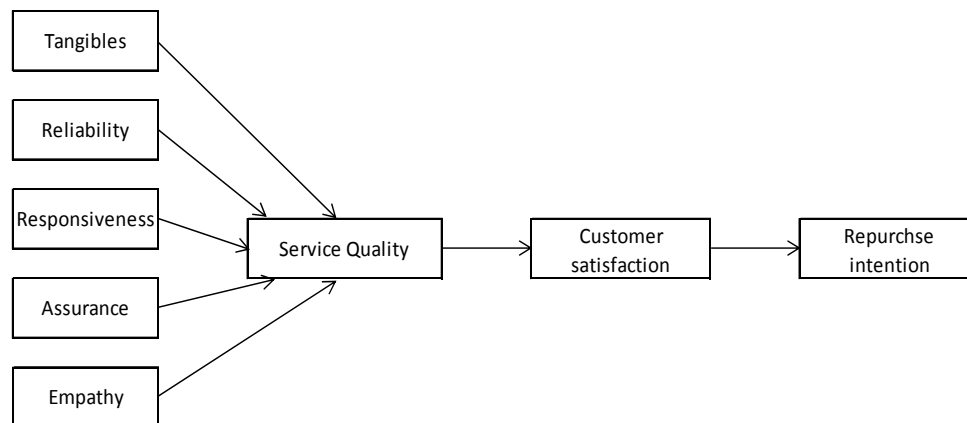


Figure 1. Conceptual model (indirect relationship between service quality and repurchase intention)

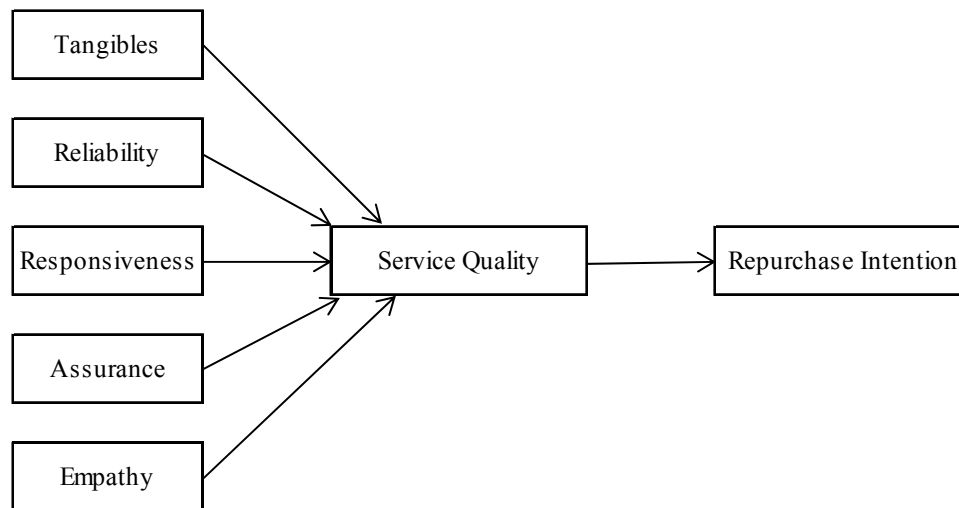


Figure 2. Conceptual model (direct relationship between service quality and repurchase intention)

2.5.1 Hypothesis

H1: Service quality is positively associated with customer satisfaction.

H1a: The five factors of service quality are positively associated with customer satisfaction.

H2: Service quality is positively associated with repurchase intention.

H2a. The five factors of service quality are positively associated with repurchase intention.

H3: Customer satisfaction is positively associated with repurchase intention.

H4: Customer satisfaction mediates the relationship between service quality and repurchase intention.

3. Research Methodology

This study uses correlational research design. A self-completion questionnaire measuring instrument is used to examine the relationships between service quality of SBBM and the satisfaction and repurchase intention of Australian households. The measuring instrument consists of 26 questions divided into three sections: 1) Service Quality (20 questions), 2) Customer Satisfaction (3 questions), and 3) Repurchase Intention (3 questions). The service quality, customer satisfaction and repurchase intention measures are adopted from Sunindijo et al. (2014), who used these measures to investigate the relationship among the same variables in the construction industry in Thailand. The formation of the questionnaire in this study is slightly modified to efficiently measure the perceived service quality, customer satisfaction and repurchase intentions of Australian households. A Likert-type scale is used in order to obtain responses to each of the survey questions. The scales contained six possible responses: from 1 (strongly disagree) to 6 (strongly agree). A 6-points Likert scale is used because it reduces skewness, follow normal distributions from Kolmogorov-Smirnov and Shapiro-Wilk statistics (Leung, 2011), and has higher reliability compared to a 5-points Likert's scale (Chomeya, 2010).

The SERVPERF model is used to measure service quality. Cronin and Taylor (1992), who investigated the nature of the relationship between service quality, customer satisfaction and repurchase intention in four industries suggested that SERVPERF, a performance-only instrument, had a greater efficiency, reliability and validity than SERVQUAL. In terms of efficiency SERVPERF uses the same five dimensions of service quality proposed by Parasuraman et al. (1985): (1) tangibles, (2) reliability, (3) responsiveness, (4) assurance, and (5) Empathy, but uses only 22 items on the performance scale compared to SERVQUAL's 44 items on the performance and expectation scales. In terms of reliability and validity, the Cronbach's Alpha coefficients for service quality, customer satisfaction, and repurchase intention are 0.900, 0.948, and 0.943 respectively. According to Nunnally and Berstein (1994), a Cronbach's Alpha coefficient greater than 0.70 is considered reasonably reliable.

The self-completion questionnaire is mailed to 667 potential participants, who are selected using simple random sampling because it provides the least bias and offer the most generalizability sampling design. Follow up letters are sent out to non-respondents two weeks after the initial mailing. The researcher's fax and email address are supplied to facilitate the process of responding to the questionnaires.

The target population is made up of all owner occupiers in the Inner Western suburbs of New South Wales (NSW), Australia. This area is selected because more than 60% of households own their properties (ABS, 2013). Rented households have been excluded from this study because their building maintenance activities are usually organised by the Real Estate Agent managing the property on behalf of the owner. The sampling frame size is 97,161 households retrieved from ABS (2014) as of June 2011. A total of 200 complete and accurate questionnaires are returned constituting a 30% final response rate. A final response rate of 30% is considered acceptable when using self-completion questionnaire (Sekaran & Bougie, 2013).

4. Results

4.1 Reliability of the Survey Instrument

To empirically examine the reliability of the survey instruments used in this study, Cronbach's alpha coefficients are calculated for each of the five dimensions of service quality and two outcome variables for customer satisfaction and repurchase intention using statistical software SPSS v.18.0. The calculated Cronbach's alpha coefficients (Table 1) are all greater than 0.70 and considered acceptable. SPSS v.18.0 is also used to answer the four research questions.

Table 1. Reliability of each of the measurements for this study

Measurement	Factor	Number of items	Alpha
Service Quality	Tangibles (TA)	3	0.74
	Reliability (RL)	5	0.73
	Responsiveness (RS)	4	0.84
	Assurance (AS)	4	0.77
	Empathy (EM)	4	0.82
Customer Satisfaction		3	0.93
Repurchase Intention		3	0.90

4.2 Testing of Research Questions

In order to test research question #1, a simple regression analysis is performed to examine the relationship between service quality and customer satisfaction. In addition, a multiple regression analysis is performed to examine the influence of the five factors of service quality on customer satisfaction (research question #1a). The results for research question #1 are shown in (Tables 2 & 3). The results for research question #1a are shown in (Table 4).

Table 2. Model summary for the effect of service quality (SQ) on customer satisfaction (CS)

Model	R Square	Adjusted R Square	F	Df	Sig.
1	.395	.392	129.041	1	.000

Table 3. The influence of SQ on CS

Model	Unstandardized Coefficients	Standardized Coefficients	T	Sig.		
					B	Std. Error
1	AVERAGE SQ	1.048	.092	.628	11.360	.000

a) Predictor: SQ.

b) Dependent Variable: CS.

The results in (Table 2) show that the regression model is statistically significant ($F(1,198) = 129.04, p = .00$), and that 39.5% of the overall customer satisfaction is explained by service quality. The results in (Table 3) show that the B coefficient is 62.8% (statistically significant). This finding is consistent with previous studies (Cronin & Taylor, 1992; Parasuraman et al., 1988; Srivastava & Rai, 2013; Taylor & Baker, 1994; Zuluza & Chilesheb, 2010).

A multiple regression model is performed to examine the influence of the five factors of service quality on customer satisfaction. The results of the multiple regression analysis find that the factor of reliability exerts the

strongest influence on customer satisfaction followed by assurance, responsiveness, empathy and tangibles (Table 4). These findings are consistent with previous studies (Berry & Parasuraman, 1991; Parasuraman et al., 1988; Rust & Oliver, 1994; Sunindijo et al., 2014). However, it is important to note that the Tangibles factor shows a non-significant relationship with customer satisfaction.

Table 4. The influence of the five factors of SQ on CS

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
TA	0.018	0.072	0.014	0.249	0.803
RE	0.574	0.093	0.375	6.19	0.000
RS	0.154	0.056	0.17	2.73	0.007
AS	0.235	0.068	0.222	3.464	0.001
EM	0.128	0.058	0.134	2.217	0.028

a) Predictors: TA, RE, RS, AS, EM.

b) Dependent Variable: CS.

In order to test research question #2, a simple regression analysis is executed to examine the relationship between service quality and repurchase intention. In addition, a multiple regression analysis is executed to examine the influence of the five factors of service quality on repurchase intention (research question #2a). The results for research question #2 are shown in (Tables 5 & 6). The results for research question #2a are shown in (Table 7).

Table 5. Model summary for the effect of SQ on RI

Model	R Square	Adjusted R Square	F	Df	Sig.
1	.424	.421	145.671	1	.000

Table 6. The influence of SQ on RI

Model 1	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
SQ	1.149	0.095	0.651	12.069	.000

a) Predictor: SQ.

b) Dependent Variable: RI.

The results in (Table 5) show that the regression model is statistically significant ($F(1,198) = 145.671, p = .00$), and 42.4% of the repurchase intention is explained by service quality. The results in (Table 6) show that the B coefficient is 65.1% (statistically significant). This finding is consistent with previous studies (Boulding, Kalra,, Staelin, & Zeithaml, 1993; Parasuraman et al., 1988).

Table 7. The influence of the five factors of SQ on RI

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	TA	.034	.073	.024	.463	.644
	RE	.628	.094	.388	6.691	.000
	RS	.075	.057	.078	1.306	.193
	AS	.335	.069	.299	4.880	.000
	EM	.166	.058	.164	2.836	.005

a) Predictors: TA, RE, RS, AS, EM.

b) Dependent Variable: RI.

Table 7 shows the regression coefficient for each of the five factors of service quality. The regression coefficients indicate the influence of each of the five factors of service quality on repurchase intention. The coefficients indicate that the factors of reliability and assurance exert the strongest influence on the repurchase intention, followed by the factors of empathy, responsiveness and tangibles. It is important to indicate that the factors of responsiveness and tangibles not only exert the weakest influence on the repurchase intention, but also show a non-significant relationship with repurchase intention.

In order to test research question #3, the relationship between customer satisfaction and repurchase intention Australian households is examined using a simple regression method. The results for research question #3 are shown in (Table 8 & 9). The results in (Table 8) show that the simple regression model is statistically significant ($F(1,198) = 638.34, p = .00$), and 76.3% of the repurchase intention is explained by customer satisfaction. The results in (Table 9) show that the B coefficient is 87.4% (statistically significant) which is the percentage by which customer satisfaction predicts repurchase intention. This result is consistent with a previous study by Taylor and Baker (1994).

Table 8. Model summary for the effect of CS on RI

Model	R Square	Adjusted R Square	F	Df	Sig.
1	0.763	0.762	638.34	1	0.000

Table 9. The influence of CS on RI

Model 1	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
CS	0.924	0.037	0.874	25.271	0

a) Dependent Variable: RI.

In order to test research question #4, a multiple regression analysis is executed to examine the relationship between service quality, customer satisfaction and repurchase intention. The results for research question #4 are shown in (Table 10 & 11). The results in (Table 10) show that the multiple regression model is statistically significant ($F(2,197) = 350.462, p = .00$) and 77.8% of the repurchase intention is explained by service quality and customer satisfaction. The results in (Table 11) show that the B coefficient for customer satisfaction is 76.8% (statistically significant) which is the percentage by which customer satisfaction predicts repurchase intention. The B coefficient for service quality is 16.9% (statistically significant) which is the percentage by which customer satisfaction predicts repurchase intention.

Table 10. Model summary for the effect of CS as a mediator

Model	R	R Square	Adjusted R Square	F	df	Sig.
	1	.884	.781	.778	350.462	2

a) Predictors: CS, CS.

b) Dependent Variable: RI.

Table 11. The influence of SQ and CS on RI

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	CS	.812	.045	.768	17.898	.000
	SQ	.298	.076	.169	3.937	.000

In order to examine if customer satisfaction mediated the relationship between service quality and repurchase

intention, a multiple regression model is performed where service quality and customer satisfaction acted as independent variables and repurchase intention as the dependent variable. The model is found to be statistically significant. Customer satisfaction predicts repurchase intention by 76.8%, while service quality predicts repurchase intention by only 16.9%. When the direct relationship between service quality and repurchase intention was examined in research question #2 without considering customer satisfaction in the model, service quality predicted repurchase intention by 65.1%. This substantial drop in the percentage of service quality prediction of repurchase intention is due to the insertion of customer satisfaction in the model as an independent variable. This means that customer satisfaction does mediate the relationship between service quality and repurchase intention (Figure 2). This finding is consistent with previous studies (An & Noh, 2009; Choia, Chob, Leec, Leed, & Kim, 2004).

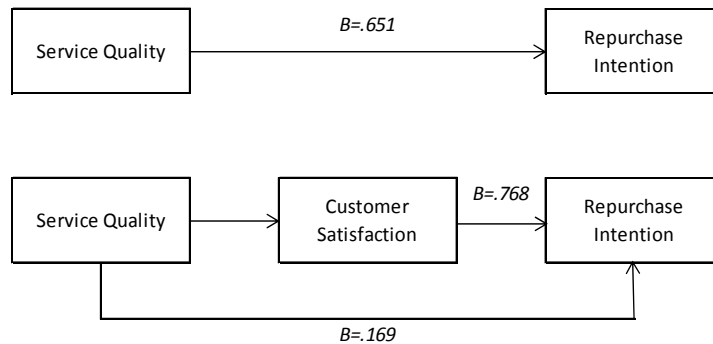


Figure 3. The effect of customer satisfaction as a mediator between service quality and repurchase intention

4.3 Testing of Hypothesis

Table 12 shows a summary of whether the formulated hypothesis have been accepted or rejected.

Table 12. Hypothesis testing

Hypothesis No.	Accepted/Rejected
H1: Service quality is positively associated with customer satisfaction	Accepted
H1a: The five factors of service quality are positively associated with customer satisfaction.	Tangibles is the only factor that show a non-significant relationship with CS
H2: Service quality is positively associated with repurchase intention.	Accepted
H2a. The five factors of service quality are positively associated with repurchase intention.	Responsiveness and tangibles are the only factors that show a non-significant relationship with RI
H3: Customer satisfaction is positively associated with repurchase intention.	Accepted
H4: Customer satisfaction mediates the relationship between service quality and repurchase intention.	Accepted

5. Discussion

In this study, the factor of reliability exerted the strongest influence on both customer satisfaction and repurchase intention. Therefore, in order for SBBM to improve their chances of building a competitive advantage they must: first, provide its services at the time it promises to do so. Second, show sincere interest in solving customer problem. Third, produces error free records. Fourth, ensure that when they promise to do something by a certain time, they do so. Fifth, performs the service right the first time.

Also, the dimensions of assurance and empathy were significantly correlated with customer satisfaction. The factor of assurance refers to the knowledge and politeness of employees and their ability to gain trust and confidence of customers. The factor of empathy refers to the individualized attention the business provides its customers in order to ensure they understand their needs. Accordingly, it can be said that the factors of assurance

and empathy are significantly associated with human performance. Frontline personnel in building maintenance are a key part of the delivered service because they are the most visible element of the service. They represent the service provider and contribute significantly to the quality of the service during the service delivery process. They, also, play a key role in understanding customer needs, customising the service delivery and building personalised relationships with customers. Therefore, the level of service that frontline personnel deliver can play a key role in role in achieving differentiation and advantage over competition.

Therefore, managers of SBBM should:

- 1) Ensure that they hire employees who enjoy dealing with people in a service role;
- 2) Motivate employees by building a friendly service environment and a fair reward system that celebrate achievement rather than punish poor performance;
- 3) Invest in training to improve employees' interpersonal and technical skills, and service knowledge, and;
- 4) Develop systems to monitor employee performance and take actions to correct any deficiencies.

The study found a significant relationship between customer satisfaction and repurchase intention which makes customer satisfaction one of the most influential constructs that drive repurchase intention. This implies that satisfied Australian households are more likely to reuse a SBBM than dissatisfied households. Service providers can deliver customer satisfaction by developing and implementing programs, such as customer relationship management and complaint systems (Cronin & Taylor, 1992), and by delivering error free reliable service through training and empowering their staff (Botten & McManus, 1999).

6. Conclusion

Repeat purchasing plays a key role in the profitability and success of business. Managers of SBBM can achieve high levels of repurchase intention by focusing and investing in the reliability, assurance and empathy factors of service quality. Although the tangibles factor did not show a statistical significant relationship with customer satisfaction and repurchase intention, the managers of SBBM need to be aware that the five factors of service quality are interrelated. In other words, if a breakdown occurs in one factor of service quality, it may lead to negative perceptions in the other factors of service quality.

The sample used in this study was randomly selected from 24,172 households, who live in the inner western suburbs of Sydney, Australia. Hence, the results and conclusions of this study may not be generalizable to other contexts and may only apply to the Australian residential market.

Nevertheless, the findings of this research provide various potential targets for future research. Therefore, the following recommendations for future research are made.

- 1) Examine the relationship among the constructs of service quality, customer satisfaction, repurchase intention and demographic information such as, gender, education, age, and income. A relationship between the main constructs of this study and demographic information was found in a sporting (Kelly & Turley, 2001) and airline (An & Noh, 2009) contexts.
- 2) Examine the relationships between the service quality of SBBM, customer satisfaction and repurchase intention in other cultural settings.

References

- ABS. (2009). *Small Business in Australia, 2001*. Retrieved from <http://www.abs.gov.au/ausstats/absa.nsf/mf/1321.0>
- ABS. (2013). *Perspectives on Regional Australia: Housing Arrangements-Home Ownership in Local Government Areas*. Retrieved from <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/1380.0.55.010main+features22011>
- ABS. (2014). *National Regional Profile: Sydney-Inner West (Statistical Area Level 4)*. Retrieved from <http://www.abs.gov.au/AUSSTATS/abs@nrp.nsf/Previousproducts/120Population/People12007-2011?open=document&tabname=Summary&prodno=120&issue=2007-2011&num=&view=>
- An, M., & Noh, Y. (2009). Airline customer satisfaction and loyalty: Impact of in-flight service quality. *Service Business*, 3, 293-307. <http://link.springer.com/article/10.1007/s11628-009-0068-4>
- Berry, L. L., & Parasuraman, A. (1991). *Marketing services: Competing through quality*. New York: The Free Press.
- Boshoff, C., & Gray, B. (2004). The relationships between service quality, customer satisfaction and buying

- intentions in the private hospital industry. *South African Journal Business Management*, 35(4), 27-37. <http://connection.ebscohost.com/c/articles/16101828/relationships-between-service-quality-customer-satisfaction-buying-intentions-private-hospital-industry>
- Botten, N., & McManus, J. (1999). *Competitive Strategies for Service Organisations*. UK: Macmillan Press.
- Boulding, W., Kalra, A., Staelin, R., & Zeithaml, V. A. (1993). A dynamic process model of service quality: From expectations to behavioural intentions. *Journal of Marketing Research*, 30, 7-27. <http://www.jstor.org/stable/3172510>
- Brady, M., Cronin, J., & Brand, R. R. (2002). Performance-only measurement of service quality: A replication and extension. *Journal of Business Research*, 55(1), 17-31. [http://dx.doi.org/10.1016/S0148-2963\(00\)00171-5](http://dx.doi.org/10.1016/S0148-2963(00)00171-5)
- Caruana, A. (2002). Service loyalty: The effects of service quality and the mediating role of customer satisfaction. *European Journal of Marketing*, 36(7/8), 811-828. <http://dx.doi.org/10.1108/03090560210430818>
- Choia, k., S., Chob, W., H., Leec, S., Leed, H., & Kim, C. (2004). The relationships among quality, value, satisfaction and behavioural intention in health care provider choice: A South Korean study. *Journal of Business Research*, 57, 913-921. [http://dx.doi.org/10.1016/S0148-2963\(02\)00293-X](http://dx.doi.org/10.1016/S0148-2963(02)00293-X)
- Chomeya, R. (2010). Quality of Psychology Test between Likert Scale 5 and 6 Points. *Journal of Social Sciences* 6(3), 399-403. <http://connection.ebscohost.com/c/articles/55432457/quality-psychology-test-between-likert-scale-5-6-points>
- Chumpitaz, R., & Paparoidamis, N. G. (2004). Service quality and marketing performance in business to business markets: exploring the mediating role of client satisfaction. *Managing Service Quality: An International Journal*, 14(2/3), 235-248. <http://dx.doi.org/10.1108/09604520410528653>
- Cronin, J. J., & Taylor, S. A. (1992). Measuring service quality: A reexamination and extension. *Journal of Marketing*, 56, 55-68. <http://www.jstor.org/stable/1252296>
- Forsythe, P. J. (2007). A conceptual framework for studying customer satisfaction in residential construction. *Construction Management and Economics*, 25, 171-182. <http://dx.doi.org/10.1080/01446190600771439>
- Fraser, K. (2014). Facilities management: The strategic selection of a maintenance system. *Journal of Facilities Management*, 12(1), 18-37. <http://dx.doi.org/10.1108/JFM-02-2013-0010>
- Gill, A., & Biger, N. (2012). Barriers to small business growth in Canada. *Journal of Small Business and Enterprise Development*, 19(4), 656-668. <http://dx.doi.org/10.1108/14626001211277451>
- Hope, C. A., & Mühlemann, A. P. (1997). *Service Operations Management: Strategy, Design and Delivery*. Hertfordshire: Prentice Hall.
- Hoxley, M. (2000). Measuring UK construction professional service quality: The what, how, when and who. *International Journal of Quality & Reliability Management*, 17(4/5), 511-526. <http://dx.doi.org/10.1108/02656710010298553>
- Hutchinson, J., Lai, F., & Wang, Y. (2009). Understanding the relationships of quality, value, equity, satisfaction, and behavioural intentions among golf travellers. *Tourism Management* 30, 298-308. <http://dx.doi.org/10.1016/j.tourman.2008.07.010>
- Kagioglou, M., Cooper, R., & Aouad, G. (2001). Performance Management in Construction: A Conceptual Framework. *Construction Management and Economics*, 19, 85-95. <http://dx.doi.org/10.1080/01446190010003425>
- Kelly, S. W., & Turley, L. W. (2001). Consumer perceptions of service quality attributes at sporting events. *Journal of Business Research*, 54, 161-166. [http://dx.doi.org/10.1016/S0148-2963\(99\)00084-3](http://dx.doi.org/10.1016/S0148-2963(99)00084-3)
- Kotler, P. (2000). *Marketing Management* (10th ed.). New Jersey, Prentice-Hall.
- Kuratko, D. (2009). *Entrepreneurship: Theory, Process, and Practice*. Manson, Ohio: South-Western Cengage Learning.
- Lai, A. W., & Lai, W. M. (2013). Users' Satisfaction Survey on Building Maintenance in public housing. *Engineering, Construction and Architectural Management*, 20(4), 420-440. <http://dx.doi.org/10.1108/ECAM-06-2011-0057>

- Lai, W. Y., & Pang, S. M. (2010). Measuring performance for building maintenance providers. *Journal of Construction Engineering and Management*, 136(8), 864-876. [http://dx.doi.org/10.1061/\(ASCE\)CO.1943-7862.0000191](http://dx.doi.org/10.1061/(ASCE)CO.1943-7862.0000191)
- Leung, S. (2011). A Comparison of Psychometric Properties and Normality in 4-, 5-, 6-, and 11-Point Likert Scales. *Journal of Social Service Research*, 37(4), 412-421. <http://dx.doi.org/10.1080/01488376.2011.580697>
- Leventhal, V. (2008). The role of understanding customer expectations in agedcare. *International Journal of Health Care Quality Assurance*, 21(1), 50-59. <http://dx.doi.org/10.1108/09526860810841156>
- Linga, F., Y., & Chong, C. L. (2005). Design-and-build contractors' service quality in public projects in Singapore. *Building and Environment* 40, 815-823. <http://dx.doi.org/10.1016/j.buildenv.2004.07.017>
- Lovelock, C., Patterson, P., & Wirtz, J. (2011). *Services Marketing—An Asia-Pacific and Australian Perspective* (5th ed.). Sydney Australia: Pearson Education.
- Maclaran, P., & McGowan, P. (1999). Managing service quality for competitive advantage in small engineering firms. *International Journal of Entrepreneurial Behaviour Research*, 5(2), 35-47. <http://dx.doi.org/10.1108/13552559910274480>
- Mahamid, I. (2012). Factors affecting contractor's business failure: contractors' perspective. *Engineering, Construction and Architectural Management*, 19(3), 269-285. <http://dx.doi.org/10.1108/09699981211219607>
- Maloney, W. F. (2002). Construction Product/Service and Customer Satisfaction. *Journal of Construction Management*, 128, 522-529. [http://dx.doi.org/10.1061/\(ASCE\)0733-9364\(2002\)128:6\(522\)](http://dx.doi.org/10.1061/(ASCE)0733-9364(2002)128:6(522))
- Molinari, L., K., Abratt, R., & Dion, P. (2008). Satisfaction, quality and value and effects on repurchase and positive word of mouth behavioural intentions in a B2B services context. *Journal of Services Marketing*, 22(5), 363-373. <http://dx.doi.org/10.1108/08876040810889139>
- Morgan, N., A., Anderson, E., W., & Mittal, V. (2005). Understanding Firms' Customer Satisfaction Information Usage. *Journal of Marketing*, 69, 131-151. <http://dx.doi.org/10.1509/jmkg.69.3.131.66359>
- Moy, J. W., & Luk, V. W. (2003). The life cycle model as a framework for understanding barriers to SME growth in Hong Kong. *Asia Pacific Business Review*, 10(2), 199-220. <http://dx.doi.org/10.1080/13602380410001677218>
- Nunnally, J. C., & Bernstein, I. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill.
- Okoroh, M. I., Jones, C. M., & Ilozor, B. D. (2003). Adding Value to Constructed Facilities: Facilities Management Hospitality Case Study. *Journal of Performance of constructed Facilities*, 17, 24-33. [http://dx.doi.org/10.1061/\(ASCE\)0887-3828\(2003\)17:1\(24\)](http://dx.doi.org/10.1061/(ASCE)0887-3828(2003)17:1(24))
- Oliver, R. (1980). A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions. *Journal of Marketing Research*, 17(4), 460-469. Retrieved from <http://www.jstor.org/stable/3150499>
- Oliver, R. L. (1997). *Satisfaction: A behavioural perspective on the consumer*. New York: McGraw-Hill.
- Olorunniwo, F., Hsu, M., & Udo, G. (2006). Service quality, customer satisfaction, and behavioural intentions in the service factory. *Journal of Services Marketing*, 20(1), 59-72. <http://dx.doi.org/10.1108/08876040610646581>
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A Conceptual Model of Service Quality and its Implications for Future Research. *Journal of Marketing*, 49, 41-50. <http://dx.doi.org/10.2307/1251430>
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12-40.
- Rai, A. K. (2013). *Customer Relationship Management: Concepts & Cases*. New Delhi: PHI Learning.
- Rapert, M. I., & Wren, B. M. (1998). Service quality as a competitive opportunity. *Journal of Services Marketing*, 12(3), 223-235. <http://dx.doi.org/10.1108/08876049810219539>
- Redman, T., & Mathews, B. R. (1998). Service quality and human resource management: A review and research agenda. *Personnel Review*, 27(1), 57-77. <http://dx.doi.org/10.1108/00483489810368558>
- Rust, R., & Oliver, R. L. (1994). Insights and managerial implications from the frontier. In R. T. Rust & R. L. Oliver (Eds.), *Service quality* (pp. 241-268). Thousand Oaks, Sage Publication.

- Samson, D., & Parker, R. (1994). Service quality: The gap in the Australian consulting engineering industry. *Asia Pacific Journal of Quality Management*, 3(1), 43-59. <http://dx.doi.org/10.1108/02656719410738993>
- Sekaran, U., & Bougie, R. (2013). *Research Methods for Business* (6th ed.). United Kingdom: John Wiley & Sons.
- Siu, G., K., Bridge, A., & Skitmore, M. (2001). Assessing the service quality of building maintenance providers: Mechanical and engineering services. *Construction Management and Economics*, 19, 719-726. <http://dx.doi.org/10.1080/01446190110062104>
- Srivastava, K., & Sharma, N. (2013). Service Quality, Corporate Brand Image, and Switching Behavior: The Mediating Role of Customer Satisfaction and Repurchase Intention. *Services Marketing Quarterly*, 34(4), 274-291. <http://dx.doi.org/10.1080/15332969.2013.827020>
- Srivastava, M., & Rai, K. (2013). Investigating the mediating effect of customer satisfaction in the service quality-customer loyalty relationship. *Journal of Consumer Satisfaction, Dissatisfaction & Complaining*, 26, 95-109. <http://connection.ebscohost.com/c/articles/93628074/investigating-mediating-effect-customer-satisfaction-service-quality-customer-loyalty-relationship>
- Straub, A. (2010). Competences of maintenance service suppliers servicing end-customers. *Construction Management and Economics*, 28, 1187-1195. <http://dx.doi.org/10.1080/01446193.2010.500672>
- Sunindijo, R., Y., Hadikusumo, B., H., & Phangchunun, T. (2014). Modelling service quality in the construction industry. *International Journal of Business Performance Management*, 15(3), 262-276. <http://dx.doi.org/10.1504/IJBPM.2014.063026>
- Taylor, S. A., & Baker, T. L. (1994). An assessment of the relationship between service quality and customer satisfaction in the formation of consumers' purchase intentions. *Journal of Retailing*, 70(2), 163-178. [http://dx.doi.org/10.1016/0022-4359\(94\)90013-2](http://dx.doi.org/10.1016/0022-4359(94)90013-2)
- Vandermerwe, S. (1994). *From Tin Soldiers to Russian Dolls-Creating Added Value through Services*. Oxford: Butterworth-Heinemann
- Zeithaml, V. A. (1988). Customer perceptions of price, quality and value: A means-end model and synthesis of evidence. *Journal of Marketing*, 52(3), 2-22. <http://www.jstor.org/stable/1251446>
- Zulua, S., & Chileshe, N. (2010). Service Quality of Building Maintenance Contractors in Zambia: A Pilot Study. *The International Journal of Construction Management*, 10(3) 63-81. <http://dx.doi.org/10.1080/15623599.2010.10773150>

Appendix (Questionnaire)

Section I. Service Quality

1. XYZ Building Maintenance has up-to-date equipment.
2. XYZ Building Maintenance's employees are well dressed and appear neat.
3. XYZ Building Maintenance employees use relevant tools and equipment.
4. When XYZ Building Maintenance promises to do something by a certain time, It does so.
5. XYZ Building Maintenance show sincere interest in solving customer problem.
6. XYZ Building Maintenance performs the service right the first time.
7. XYZ Building Maintenance provides its services at the time it promises to do so.
8. XYZ Building Maintenance produces error free records such as invoices, service reports.
9. Employees of XYZ Building Maintenance tell its customers exactly when services will be performed.
10. Employees of XYZ Building Maintenance give prompt service to customers.
11. Employees of XYZ Building Maintenance are always willing to help customers.
12. Employees of XYZ Building Maintenance are never too busy to respond to customer requests.
13. You can trust employees of XYZ.
14. You can feel safe in your transactions with XYZ Building Maintenance.

15. Employees of XYZ Building Maintenance are polite.
16. Employees of XYZ Building Maintenance are knowledgeable.
17. XYZ Building Maintenance give customers individual attention.
18. XYZ Building Maintenance have operating hours convenient to their customers.
19. XYZ Building Maintenance have employees who give customers personal attention.
20. The employees of XYZ Building Maintenance understand the specific needs of their customers.

Section II. Customer Satisfaction

1. I am satisfied with XYZ Building Maintenance work.
2. I feel that my experience with XYZ Building Maintenance was a comfortable one.
3. My choice in using this XYZ Building Maintenance was a wise one.

Section III. Repurchase Intention

1. I will keep using XYZ Building Maintenance.
2. I am willing to pay premium price to hire XYZ Building Maintenance.
3. I would definitely recommend XYZ Building Maintenance to my friends and co-workers.

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