

# **The impact of product quality on relationship quality: empirical evidence from automotive industry**

**Jalal Hanaysha\***

DRB-HICOM University of Automotive Malaysia

[jalal.hanayshi@yahoo.com](mailto:jalal.hanayshi@yahoo.com)

\*corresponding author

**Noor Hasmini Abdul-Ghani**

School of Business Management, College of Business,

Universiti Utara Malaysia

[hasmini@uum.edu.my](mailto:hasmini@uum.edu.my)

## **Abstract**

Building and maintaining successful relationship with customers has become the prime focus for many organizations. The ability of a brand to successfully manage customer relationships provides it with better opportunities for improving its competitive advantage. Past research paid less attention to examine the effect of product quality on relationship quality and its dimensions; brand trust, brand commitment, and brand satisfaction. Therefore, this paper intends to fill this gap and examine the effect of product quality on creating relationship quality in Malaysian automotive market. Several shopping centres in Northern region of Malaysia were utilized to conduct this study, whereby a survey using systematic sampling technique was administered to 384 passenger car users. The empirical results, using structural equation modeling (SEM), supported all the hypotheses. Particularly, the results revealed that product quality has significant positive effect on brand trust, brand commitment, and brand satisfaction. The results also indicated that product quality plays an important role in affecting overall relationship quality. The study is limited to individual customers in Northern region of Malaysia. Future studies may apply this work to organizational level, and expand it to other industry and country contexts in order to grasp better insights on role of product quality in influencing customer brand relationship.

**Keywords:** Product quality; brand trust; brand commitment; brand satisfaction; relationship quality

## **INTRODUCTION**

Relationship marketing is an important research area which has received noticeable attention from several scholars. The main objective of relationship marketing activities focus on acquiring better customer values by establishing and sustaining valuable relationships with prospective customers (Morgan & Hunt, 1994). Past studies emphasized the important role of enhancing customer relationships for business success as many organizations nowadays strive to create and develop profitable relationships with their customers to enhance their performance (Dwyer, Schurr, & Oh, 1987; Hilman, Abd-Ghani, & Hanaysha, 2013). Apart from relationship marketing is the concept of relationship quality which reflects customers' overall assessment toward the

strength of their relationship attachment with a brand. In highly competitive markets, it has become vital to understand the drivers of customer relationships which would affect the success of a brand.

For this reason, this study aims to examine the effect of product quality as an important antecedent of relationship quality in the context of the automotive industry in Malaysia. This is because the automotive brands in the country appear to have a steadily challenging competitive environment. Product quality has been considered as an important aspect for developing business relationships and improving organizational competitive advantage. Product quality, as defined by Walter Mueller, and Helfert (2002) is based on the personal experience of potential customers with the brand, i.e. it reflects their evaluation of products they purchased with respect to quality characteristics, such as durability, functionality, and reliability.

Past literature shows there are limited studies that have come across the relationship between product quality and relationship quality. Therefore, this study aims to contribute to the body of literature by examining the relationship between the said variables. Particularly, the main contribution of this study comes from examining the effect of product quality on three dimensions of relationship quality; brand trust, brand commitment, and brand satisfaction in one research framework. The outcomes of this research would also contribute to practitioners to understand the important role of product quality in enhancing customer relationships. The following sections provide a brief review of literature on product quality and relationship quality constructs, followed by the methodology employed to conduct this study. Finally, analysis of results and discussion are shown in this paper, in addition to future research directions and conclusion.

## **LITERATURE REVIEW**

### **Relationship Quality**

Brand relationship quality has built its roots in the theory and literature of relationship marketing (Crosby, Evans, & Cowles 1990; Dwyer, Schurr, & Oh 1987). Although relationship marketing has been defined differently by many scholars, most of the definitions reveal that relationship marketing is directed towards attracting, developing, and sustaining customer relationships (Berry & Parasuraman, 1991). Relationship quality can be defined as customer's perceptions of how well his/her relationship with a brand could fulfill and meet his/her expectations, goals, and desires (Jarvelin & Lehtinen, 2006). In other words, relationship quality reflects the strength of the relationship between a brand and its customers.

Building and sustaining a long-term customer-brand relationship is very crucial to develop firm's competitive advantage (Hilman, Abd-Ghani, & Hanaysha, 2013; Kim, Lee, & Lee, 2005). Brand relationship quality is usually used to evaluate the relationship strength and depth between a brand and its customers (Xie & Heung, 2009). The advantage of studying brand relationship lies in the ability to provide insights on the influence of brands on customers and how well they meet their needs (Breivik & Thorbjornsen, 2008; Monga, 2002). Bendapudi and Berry (1997) indicated that a company's relationship with its customers determines the future success.

Therefore, customer relationships are very important and bring many advantages for organizations.

Several studies were previously conducted in various research disciplines in order to identify the critical dimensions of relationship quality. For instance, certain scholars (Crosby, Evans, & Crowles, 1990; Shamdasani & Balakrishnan, 2000; Wray, Palmer, & Bejou, 1994) integrated two dimensions for relationship quality; brand trust and brand satisfaction. On the other hand, Moorman, Zaltman, and Deshpande (1992) proposed three dimensions to measure relationship quality. The dimensions include perceived quality, brand commitment, and involvement. They further considered trust as an important antecedent to relationship quality. Similarly, Roberts, Varki, and Brodie (2003) described relationship quality as a high-order construct which is composed of brand trust, brand commitment, brand satisfaction, and affective conflict. Hennig-Thurau (2001) further considered service quality, brand trust, and affective commitment as the key elements of relationship quality. However, this study focuses on trust, commitment, and satisfaction as they key dimensions of relationship quality. This is because these are the most cited dimensions of relationship quality (Hilman et al., 2013; Rauyrueen & Miller, 2007).

Brand Trust has been considered as an essential concept in building customer relationships (Fukuyama, 1995; Moorman, Zaltman, & Deshpande, 1992). Brand trust is often defined as the consumer's willingness to depend on the capability of a brand (Chaudhuri & Holbrook, 2001). Chaudhuri and Holbrook (2001) reported that brand trust plays a significant role in the brand domain in which it can lead to customer loyalty, and thus influencing brand performance. Viewing brand trust as part of brand domain will as a result creates improved brand value by managing some aspects of product attributes that increase consumer's satisfaction (Aaker, 1996; Rauyrueen & Miller, 2007).

Moreover, brand commitment is considered to be an important component of successful relationships (Morgan & Hunt, 1994). Moorman, Zaltman and Deshpande (1992) described brand commitment as 'an enduring desire to maintain a valued customer brand relationship. In addition, Morgan and Hunt (1994) thought about relationship commitment as the belief that a consistent relationship with a partner is worthwhile and warrants efforts to maintain that relationship. In short, brand commitment reflects the consumer's voluntary willingness to remain in and make efforts towards maintaining his/her relationship. It encourages both parties to sacrifice short-term benefits for the sake of the expected long-term benefits that may arise from enhancing the relationship (Morgan & Hunt, 1994).

Similarly, the role of satisfaction in predicting customers' behavioural intentions is well documented in the Past literature (Anderson, Fornell, & Lehmann, 1994; Cronin & Taylor, 1992), with most of studies indicating that previous experience of customer relationships is a main determinant of repeated buying behaviour.

Customer satisfaction is an idea of fulfilling consumer's needs and desires and it has been considered as a key to business success (Spreng, MacKenzie, & Olshavsky, 1996). Brand satisfaction measures the extent by which customer's expectations are met and describes how these expectations been perceived as a result of all purchasing and consumption activities (Oliver, 1997). In fact, some researchers suggest that customer satisfaction is an overall

evaluation based on the total experience with a good or service over time. Oliver (1981) defined customer satisfaction as “the summary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with the consumer’s prior feeling about the consumption experience” (p. 29).

## Product Quality

Smith and Wright (2004) described product quality as extent to which products provided by a brand meet the expectations of customers. They added that that product quality improvement should lead to higher levels of customer satisfaction and increased the sales. Product quality can be evaluated according to the judgment of customers on the accumulative product benefits and a subjective feeling on quality offerings (Zeithaml, 1988; Dodds et al., 1991). Moreover, Ndukwe (2011) thought about product quality as those characteristics of a product that satisfy customers’ wants and needs in exchange for monetary considerations. He added that if a consumer is satisfied with the product, then the quality is deemed to be acceptable. The attributes of product quality include functional and psychological benefits attached with a product (Ackaradejruangsri, 2012; Steenkamp, 1990). In short, product quality associated with brand name influences customers’ evaluation toward the strength of that brand (Hilgenkamp & Shanteau, 2010).

The concept of quality is emphasized in Islam both in Qur’an and Sunnah (Hadith) in different contexts of literature that urged human to adhere to quality practices as a way of life in dealing with others to create comfort, justice, and conscience relief. The firms those who keep their profit motives uncompromised at the thought that this is the only reason for their existence and survival in market endeavors is undeniably based upon producing good quality products that can help them be in the race of business. As cited in the Holy Qur’an: “and do good; for Allah loves those who do good” [Quran, 2: 195], goodness here may be interpreted in terms of coming up with good quality products free of defections and errors. It is because, “Allah ever watches over you” [Quran, 4: 1]. The producers while being good to the others means of being good to themselves. It is something that is never attained unless there is an element of mastery in the field of production. As narrated by the Prophet Muhammad (PBUH) that, “Allah loves that if one of you is doing something to do it masterfully”. These texts urge on producing products masterfully with perfections and without any sort of defects that can enable them to be called as honest and trustworthy in the works they do.

Quality has been typically regarded as a key strategic component of competitive advantage, and therefore, improving product quality has been a matter of prime concern for firms (Flynn, Schroeder, & Sakakibara, 1995; Foster & Sjoblom, 1996; Yuen & Chan, 2010). Dunk (2007) indicated that product quality contributes to a firm’s competitive advantage. Similarly, Flynn, Schroeder, and Sakakibara (1994) argued that quality is a critical component in the design and manufacturing of products which are considered to be superior to those of competitors. In fact, organizations continuously focus on improving product quality assuming that it will strengthen their competitive positions, enhance business success, and differentiate their products from rivals (Belohlav 1993; Carr 1995). Daniel and Reitsperger (1991) indicated that a strategic focus of organizations on product quality has been widely considered as a fundamental aspect of their

manufacturing strategies, and is expected to result in facilitating the creation and improvement of competitive positions.

Fornell (1992) also suggested that many organizations have recently developed defence strategies in order to maintain their customers through quality products, both in consumer and business markets. Specifically, if a product succeeds in fulfilling customers' expectations, then they will be pleased and consider that product as of acceptable or even high quality (Jahanshahi, Gasthi, Midarmadi, Nawaser, & Khaksar, 2011). Moreover, if a company knows that their consumers are brand loyal and perceive their products as of high quality, then it becomes less risky to introduce new products.

Hilgenkamp and Shanteau (2010) added that customers link product quality to variables, such as brand name and price. This is because the product brand establishes an image in the minds of customers in terms of the quality, and as a result it becomes the basic motive for their choice of a particular product from the same brand (Vranešević & Stancec, 2003).

Product quality is comprised of the features and the characteristics that make up that product besides its ability to satisfy customers' needs (Ndukwe, 2011). Garvin (1987) proposed the most comprehensive definition of product quality, with the following eight attributes: Performance, Features, Conformance, Reliability, Durability, Serviceability, Aesthetics, and Customer-perceived Quality. If the consumer is satisfied with a product, then the quality of that product is deemed acceptable (Ndukwe, 2011). Aaker (1991) argued that perceived quality can show the salient differentiation of a product and becomes a selective brand criterion in consumer's mind.

### Linking Product Quality to Relationship Quality

Past studies indicated that product quality is significantly correlated with the elements of relationship quality (Yuen & Chan, 2010). For instance, certain scholars demonstrated that product quality is necessary to improve brand trust and it had significant effect on its creation process (Kennedy, Ferrellb, & LeClair, 2001; Gregg & Walczak, 2010; McKnight et al., 1998; Pavlou & Gefen, 2004; Walter et al., 2002). Furthermore, perceived product quality is one of the most important factors that could influence brand trust (McKnight, Kacmar, & Choudhury, 2004). The higher the perception of product quality cannot only increase the level of customer trust (Garbarino & Johnson, 1999), but also enhances customer satisfaction (Parasuraman, Zeithaml, & Berry, 1988). Moreover, poor perception of product quality can become a reason for the loss of customers trust (Yeh & Li, 2009). Specifically, if customers perceive that a product or brand is of high quality, then they are likely to develop high trusting belief for that product or brand (McKnight et al., 2004; Chang & Chen, 2008).

Past research also reported that perceived product quality had significant positive relationship with customer satisfaction toward the brand; this because product quality can deliver physical evidence of brand's competence and improve consumers' repurchases confidence (Sweeney, Soutar, & Johnson, 1999; Tsiotsou, 2006). Product quality can be a good starting point to achieve satisfaction and generate brand loyalty (Eduardo, Arturo, & Forge, 2008). Moreover, Ndubisi (2004) proposed that organizations which manage to obtain privileged information about customer needs through brand relationships would provide more satisfactory quality offerings

than their competitors. Jahanshahi et al. (2011) found out that product quality had significant relationship with customer satisfaction toward a brand in automotive industry.

Halim, Swasto, Hamid, and Firdaus (2014) examined the influence of product quality on brand trust in consumer electronic product in Indonesia. Their results revealed that product quality is significantly related to brand trust. Similarly, Anuwichanont and Mechinda (2011) examined the influence of perceived value measured through product quality on consumer trust and satisfaction in Thai spa industry. They found out that product quality has significant impact on brand trust. They further reported that product quality is the most powerful predictor of customer satisfaction. Their findings indicate that product quality could influence customer-brand relationship by creating a sense of trust toward the manufacturing brand which ultimately results in better brand satisfaction.

Certain scholars (Walter et al., 2002; Seng, 2010) also demonstrated that brand commitment is an important element of relationship quality which can be influenced by the perception of product quality. Products which are characterized by high quality not only influence consumers' purchase decision, but also improve their retention and willingness to recommend that brand to others (Walter et al., 2002). Moreover, maintaining product quality could help firms to engender better customer-brand relationships (Chumpitaz & Paparoidamis, 2004). Based on the above discussion, the following hypothesis is presented:

H1: Product quality has significant relationship with brand trust.

H2: Product quality has significant relationship with brand commitment.

H3: Product quality has significant relationship with brand satisfaction.

H4: Product quality has significant relationship with overall relationship quality.

## **METHODOLOGY**

The main purpose of this study is to examine the relationship between product quality and the dependent variable which is relationship quality. This study focuses on automotive industry in Malaysian market. Particularly, a survey instrument was employed for data collection using questionnaire from passenger car users in Northern region of Malaysia (Penang, Kedah, and Perlis). Passenger car users were selected to participate in this study, because they are the right informants who possess the experience and knowledge about automotive brands. Based on the information obtained from automotive department, Northern Malaysia accounts for more than 1 million of passenger car users. Therefore, following Krejcie and Morgan (1970) table for sample size determination, a sample of 384 is best suited for this study.

The instrument employed to measure the variables is based on previous research works. Particularly, relationship quality was measured according to three main elements; brand trust, brand commitment, and brand satisfaction. Brand trust is measured using five items adapted from Ok, Choi, and Hyun (2011). The items were selected because they had an acceptable

reliability with Cronbach's alpha of more than 0.8. Moreover, brand commitment was measured using four items adapted from Ok et al. (2011); Breivik and Thorbjornsen (2008). The items also had acceptable Cronbach's alpha of more than 0.7. Brand satisfaction on other hand was measured using five items adapted from Oliver's (1997), Zboja and Voorhees (2006). The items reported at high Cronbach's alpha ranging from 0.94 to 0.96. Finally, product quality was measured using five items adapted from Kennedy et al. (2001) to fit the context of this study. The items also had an acceptable reliability.

The collected data is analyzed using SPSS 19 and structural equation modeling using AMOS 18. Specifically, Cronbach's alpha and composite reliability are used to ensure the reliability of constructs. Moreover, construct validity and convergent validity are used conduct validity test. Discriminant validity is also tested through average variance extracted. Confirmatory factor analysis also conducted using measurement model on AMOS according to the factor loadings of items for each construct. Finally, the results are tested after achieving good fit for structural model using the regression table. The proceeding sections discuss each of the results that in sequel will approach to the worthwhile policy recommendation based on the conclusion done on empirical analyses.

## **ANALYSIS OF RESULTS**

To comply with the requirements of data collection, 384 questionnaires were distributed to passenger car users in Northern area of Malaysia. However, only 287 questionnaires were returned back representing 74.7 % of response rate. The demographic profile reveal that out of 287 respondents, 136 (47.4%) are male while 151 (52.6%) are female. On age, 12% of the respondents are less than 25 years old, whereas the majority (48.8%) belong the agate category between 25 and 35 years. Moreover, 16% are between 35 and 45 years, but only 22.6% are 45 years and above. With regard to religion, the majority represented by 75.3% are Muslims, 14.6% are Buddhists, 4.9% Christians, 4.5% Hindu, and only 0.7% belongs to other religions. Finally, most of the respondents (43.2%) have high school certificate, 21.6% obtained their diploma, 25.4% acquire bachelor degree, 8% have postgraduate degree, and only 1.7% have other certificate.

In order to fulfil the assumptions of reliability, Cronbach's alpha and composite reliability were calculated. The results showed all constructs exceeded the recommended value as suggested by Hair, Black, Babin, Anderson, and Tatham (2010). Specifically, the results indicated that the independent variable; product quality has an acceptable reliability with Cronbach's alpha of 0.926. Also the dependent variable; relationship quality which was measured through its dimensions has high Cronbach's alpha reliability with values more than the cut-off value stated above. Brand trust has an acceptable Cronbach's alpha of 0.920, whereas brand commitment and brand satisfaction were reported at 0.918 and 0.967 respectively. Similarly, the calculations of composite reliability revealed that all constructs achieved the assumptions of reliability.

In order to conduct confirmatory factor analysis (CFA), first the measurement model was drawn with some indicators to ensure the goodness of model fit for the data. The findings shown the Chi-square was significant at 251.196. Other fit indices also used to ensure the goodness-of-fit for the measurement model (GFI= 0.892, AGFI= 0.850, CFI= 0.971, TLI= 0.964, RMSEA=

0.078). This indicates that the measurement reasonably fit the data. Then factor loading for each item of constructs were generated through standardized regression weight. Only items with values of 0.50 and above were maintained. The results indicated that the factor loading for remaining items ranged between 0.72 and 0.96 and this indicates that construct validity and convergent validity were achieved. Moreover, discriminant validity test was conducted through the calculation of average variance extracted (AVE).

The results indicated that AVE values for the constructs were more than 0.50 and at the same time is more than correlation squared and this provides an evidence of existing discriminant validity (Fornell & Larcker, 1981).

To arrive to hypothesis testing, the assumptions of goodness-of-fit for the structural model were achieved according to several criteria, such as Chi-square which was reported to be significant at 179.891. Moreover, the degree of freedom which is equal to 71, and other fit indices were used to support the chi-square (GFI= 0.911, AGFI= 0.868, CFI= 0.974, TLI= 0.967, RMSEA= 0.77). From these results it can be concluded the model has adequately achieved good fit for the data. Therefore, hypotheses were tested using the regression table from the outputs of structural model.

The results indicated that product quality has significant positive relationship with brand trust ( $\beta= 1.112$ , CR= 14.535,  $p= <0.05$ ), therefore, H1 is supported. The results also indicated that product quality has significant relationship with brand commitment ( $\beta= 0.873$ , CR= 10.815,  $p= <0.05$ ), thus, H2 is also supported. The relationship between product quality and brand satisfaction was also significant ( $\beta= 1.187$ , CR= 14.618,  $p= <0.05$ ), hence, H3 is accepted. Overall, product quality has a significant positive relationship with overall relationship quality ( $\beta= 0.670$ , CR= 9.651,  $p= <0.05$ ), which means that H4 is also supported. Meanwhile, that the results indicated that product quality explained 85.7% of total variance in brand trust and 58.7% of variance in brand commitment. Similarly, product quality explains 84.3% of variance in brand satisfaction and 73.6% of total variance in overall relationship quality.

Table 1 Research findings

<b>Path</b>	<b>Std Estimate</b>	<b>SE</b>	<b>t-value</b>
Product quality to brand trust	1.112	0.040	14.535**
Product quality to brand commitment	0.873	0.034	10.815**
Product quality to brand satisfaction	1.187	0.043	14.618**
Product quality to relationship quality	0.670	0.069	9.651**

\*\* $p < 0.01$ , \* $p < 0.05$

## DISCUSSION AND CONCLUSION

This study examined the relationship between product quality and relationship quality dimensions and relationship quality itself in Malaysian automotive market. Overall, the results indicate that product quality has significant positive relationship with brand trust. This finding is in line with previous research works of certain scholars (Walter et al. 2002; Kennedy et al., 2001) who found out that product quality is significantly related to brand trust. They further indicated that once a firm strives to improve the quality base of a product, it is indeed one of the major determinants of developing brand trust in customers. This study also provides a significance evidence of the significant relationship between product quality and brand satisfaction. This result was supported by several previous studies (Eskildsen, Kristensen, Juhl, & Ostergaard, 2004; Anderson, Fornell, & Lehmann, 1994; Atilgan, Aksoy, & Akinci, 2005), indicating that product quality is one of the key determinants of brand satisfaction.

Moreover, the results indicated that product quality has significant positive relationship with brand commitment. The result was supported by certain past studies (Walter et al., 2002; Seng, 2010), which reported that high quality not only influence the decisions of consumers decision to select a brand, but also enhance their commitment and intention to recommend that brand to others (Walter et al., 2002). Overall, the result indicated that product quality has significant relationship with overall relationship quality. This result acknowledges the conclusion of a previous study done by Jakpar, Na, Johari, and Myint (2012) who reported that product quality was significantly related to improved relationship quality.

In line with resource-based view (RBV) theory, product quality is an important organizational resource that strengthens customer relationships (Aaker & Jacobson 2001; Angulo, 2007; Frieder & Subrahmanyam, 2005).

Based on the above results, several conclusions should be highlighted. For example, in the current business scenario which is highly characterized by intense competition, it requires firms to increase their focus on ensuring product quality due to its significance in influencing the perception of customers and overall brand evaluation. In fact, quality doesn't only exist inside organisations; but from Islamic point of view, it includes all terms of ethics, values, excellence, and highstandards of workmanship in an organisation, home, and in all aspects of life. As a result, following of quality production practices would generate outcomes that have favourable reflections on both the organization and its customers.

This study also indicates that customer relationships worth of research attention due its significance in strengthening brand success. Since there are several factors that influence the process of building relationship quality, this study has focused only on product quality. It concludes that product quality is one of the important facets that organizations cannot overlook while striving to build and maintain long-lasting relationships with their customers. Hence, this study provides recommendations for automotive manufacturers to focus on product quality for the consistent increase in their profit margin that result in response to the increase in their market share which is never possible unless product quality is improved.

## REFERENCES

- Aaker, D. A. (1991). *Managing brand equity: Capitalizing on the value of a brand name*. New York: Free Press.
- Aaker, D. A. (1996). *Building strong brands*. New York: Free Press.
- Aaker, D.A., & Jacobson, R. (2001). The Value Relevance of Brand Attitude in High Technology Markets. *Journal of Marketing Research*, 38(November), 485-493.
- Ackaradejruangsri, P. (2012). The effect of Product Quality Attributes on Thai consumers' buying decisions. *Ritsumeikan Journal of Asia Pacific Studies*, 14-24.
- Anderson, E.W., Fornell, C., & Lehmann, D. R. (1994). *Customer satisfaction, market share, and profitability*. *Journal of Marketing*, 58 (3), 53-66.
- Angulo, L. F. (2007). *The Interplay between Cumulative Customer Satisfaction and Brand Value: Its Effect on Cash Flow, ROI and TOBIN'S Q*. Unpublished PhD Thesis, Universitat Autònoma de Barcelona, Barcelona.
- Anuwichanont, J., & Mechinda, P. (2011). The impact of perceived value on spa loyalty and its moderating effect of destination equity. *Journal of Business & Economics Research (JBER)*, 7 (12).
- Atilgan, E., Aksoy, S., & Akinci, S. (2005). Determinants of the brand equity: a verification approach in the beverage industry in Turkey. *Marketing Intelligence & Planning Year*, 23 (2/3), 237-248.
- Belohlav, J. A. (1993). Quality, Strategy, and Competitiveness. *California Management Review*, 35(3), 55-67.
- Bendapudi, N., & Berry, L. (1997). Customers' motivations for maintaining relationship with service providers. *Journal of Retailing*, 73(1), 15-37.
- Breivik, E., & Thorbjornsen, H. (2008). Consumer brand relationships: An investigation of two alternative models. *Journal of the Academy of Marketing Science*, 3(4), 443-72.
- Brucks, M., Zeithaml, V. A., & Naylor, G. (2000). Price and brand name as indicators of quality dimensions for consumer durables. *Journal of the Academy of Marketing Science*, 28(3), 359-374.
- Carr, L. P. (1995). Cost of Quality – Making it Work. *Journal of Cost Management*, 9 (1), 61-65.
- Chang, H. H., & Chen, S. W. (2008). The impact of online store environment cues on purchase intention: Trust and perceived risk as a mediator. *Online Information Review*, 32(6), 818-841.

- Chaudhuri, A., & Holbrook, M. B. (2001). The chain of effects from brand trust and brand affect to brand performance: The role of brand loyalty. *Journal of Marketing*, 65(2), 81-93.
- Chumpitaz, R., & Papatoidamis, N.G. (2004). Service quality and marketing performance in business-to-business markets: exploring the mediating role of client satisfaction. *Managing Service Quality*, 14 (2/3), 235-248.
- Cronin, J. J. Jr., & Taylor, S. A. (1992). Measuring service quality: a reexamination and extension. *Journal of Marketing*, 56(3), 55-68.
- Crosby, L. A., Evans, K. R., & Cowles, D. (1990). Relationship Quality in Services Selling: An Interpersonal Influence Perspective. *Journal of Marketing*, 54 (3), 68-81.
- Daniel, S. J., & Reitsperger, W.D. (1991). Linking Quality Strategy with Management Control Systems: Empirical Evidence from Japanese Industry. *Accounting, Organizations and Society*, 16 (7), 601-618.
- Dodds, W.B., Monroe, K.B., & Grewal, D. (1991). Effects of price, brand, and store information on buyers' product evaluations. *Journal of Marketing Research*, 28 (3), 307-319.
- Dunk, A. S. (2007). Assessing the effects of product quality and environmental management accounting on the competitive advantage of firms. *Australasian Accounting Business and Finance Journal*, 1 (1), 3.
- Dwyer, F.R., Schurr, P. H., & Oh, S. (1987). Developing Buyer-Seller Relationships. *Journal of Marketing*, 51, 11-27.
- Eduardo, T. M., Arturo, Z. V. P., & Forge, Z. G. (2008). Customer satisfaction and loyalty: Start with the product, culminate with the brand. *Journal of Consumer Marketing*, 25 (5), 302-313.
- Eid, M. I. (2011). Determinants of e-commerce customer satisfaction, trust, and loyalty in Saudi Arabia. *Journal of Electronic Commerce Research*, 12(1), 78-93.
- Eskildsen, J.K., Kristensen, K., Juhl, H.J., & Ostergaard, P. (2004). The drivers of customer satisfaction and loyalty. *Total Quality Management and Business Excellence*, 15(5/6), 859-868.
- Flynn, B.B., R.G. Schroeder and S. Sakakibara (1994). A Framework for Quality Management Research and an Associated Measurement Instrument. *Journal of Operations Management*, 11 (4), 339-366.
- Flynn, B. B., Schroeder, R. G., & Sakakibara, S. (1995). The impact of quality management practices on performance and competitive advantage. *Decision Sciences*, 26 (5), 659-692.
- Fornell, C. (1992). A national customer satisfaction barometer: The Swedish experience. *Journal of Marketing*, 56 (1), 6-21.

- Foster, G., & Sjoblom, L. (1996). Quality improvement drivers in the electronic industry. *Journal of Management Accounting Research*, 8, 55-86.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, 18 (1), 39-50.
- Frieder, L., & Subrahmanyam, A. (2005). Brand Perceptions and the Market for Common Stock. *Journal of Financial and Quantitative Analysis*, 40 (1), 57-85.
- Fukuyama, F. (1995). *The social virtues and the creation of prosperity*. New York, NY: The Free Press.
- Garbarino, E., & Johnson, M. S. (1999). The different roles of satisfaction, trust, and commitment in customer relationships. *The Journal of Marketing*, 70-87.
- Garvin, D. A. (1987). Competing on the eight dimensions of quality. *Harvard Business Review*, November–December: 101-109.
- Gregg, D. G., & Walczak, S. (2010). The relationship between website quality, trust and price premiums at online auctions. *Electronic Commerce Research*, 10 (1), 1-25.
- Hair, J. F., Jr., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2010). *Multivariate Data Analysis* (7th ed.) Upper Saddle River, N.J: Pearson Prentice Hall.
- Halim, P., Swasto, B., Hamid, D., & Firdaus, M. R. (2014). The Influence of Product Quality, Brand Image, and Quality of Service to Customer Trust and Implication on Customer Loyalty (Survey on Customer Brand Sharp Electronics Product at the South Kalimantan Province). *European Journal of Business and Management*, 6 (29), 159-166.
- Hennig-Thurau, T. (2001). *A Relationship Marketing Perspective of Complaint Satisfaction in Services Settings: Empirical Findings, in Enhancing Knowledge Development in Marketing*. Summer Marketing Educators' Conference, Chicago, IL: American Marketing Association, 12, 206-213.
- Hilgenkamp, H., & Shanteau, J. (2010). Functional Measurement Analysis of Brand Equity: Does Brand Name Affect Perceptions of Quality?. *Psicologica: International Journal of Methodology and Experimental Psychology*, 31(3), 561-575.
- Hilman, H., Abd-Ghani, N. H., & Hanaysha, J. (2013). Relationship Quality as a Strategic Tool in Today's Turbulent Business. *Australian Journal of Basic and Applied Sciences*, 7(14), 478-787.
- Jahanshahi, A. A., Gasthi, M. A. H., Midarmadi, S. A., Nawaser, K., & Khaksar, S. M. S. (2011). Study the effects of customer service and product quality on customer satisfaction and loyalty. *International Journal of Humanities and Social Science*, 1 (7), 253-260.

- Jakpar, S., Na, A. G. S., Johari, A., & Myint, K. T. (2012). Examining the Product Quality Attributes That Influences Customer Satisfaction Most When the Price Was Discounted: A Case Study in Kuching Sarawak. *International Journal of Business and Social Science*, 3 (23), 221-236.
- Kennedy, M. S., Ferrellb, L. K., & LeClair, D. T. (2001). Consumers' trust of salesperson and manufacturer: an empirical study. *Journal of Business Research*, 5, 73-86.
- Kim, H. K., Lee, M., & Lee, Y. W. (2005). Developing a scale for measuring brand relationship quality. *Asia Pacific advances in consumer research*, 6 (1), 118-126.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.
- McKnight, D. H., Cummings, L. L., & Chervany, N. L. (1998). Initial trust formation in new organizational relationships. *Academy of management review*, 23 (3), 473-490.
- McKnight, D. H., Kacmar, C. J., & Choudhury, V. (2004). Dispositional trust and distrust distinctions in predicting high-and low-risk internet expert advice site perceptions. *E-Service*, 3 (2), 35-58.
- Moorman, C., Zaltman, G., & Deshpande, R. (1992). Relationship Between Providers and Users of Market Research: The Dynamics of Trust Within and Between Organizations. *Journal of Marketing Research*, 29 (3), 314-328.
- Monga A. B. (2002). Brand as a relationship partner: Gender differences in perspective. *Advances in Consumer Research*, 29, 36-41.
- Morgan, R. M., & Hunt, S. D. (1994). The Commitment-Trust Theory of Relationship Marketing. *Journal of Marketing*, 58 (3), 20-38.
- Ndubisi, N. O. (2004). Understanding the salience of cultural dimensions on relationship marketing, its underpinnings and aftermaths. *Cross Cultural Management*, 11 (3), 70-89.
- Ndukwe, G. I. (2011). The Effect of Product Quality on Brand Loyalty. A Study of MTN. Accessed on 1 November, 2014 from: [http://www.academia.edu/1766154/The\\_Effect\\_of\\_Product\\_Quality\\_on\\_Brand\\_Loyalty\\_A\\_Study\\_of\\_MTN](http://www.academia.edu/1766154/The_Effect_of_Product_Quality_on_Brand_Loyalty_A_Study_of_MTN)
- Ok, C., Choi, Y. G., & Hyun, S. S. (2011). Roles of Brand Value Perception in the Development of Brand Credibility and Brand Prestige. Paper presented at *the International CHRIE Conference-Refereed Track*, Event, United States.
- Oliver, R. L. (1997). *Satisfaction: A behavioral perspective on the consumer*. New York: Irwin/McGraw-Hill.

- Oliver, R. L. (1981). Measurement and evaluation of satisfaction processes in retail settings. *Journal of Retailing*, 57 (3), 25-48.
- Parasuraman, A., Zeithaml, V., & Berry, L. (2002). SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality. *Retailing: critical concepts*, 64 (1), 140.
- Pavlou, P. A., & Gefen, D. (2004). Building effective online marketplaces with institution-based trust. *Information Systems Research*, 15(1), 37-59.
- Rauyruen, P., & Miller, K. E. (2007). Relationship quality as a predictor of B2B customer loyalty. *Journal of business research*, 60 (1), 21-31.
- Roberts, K., Varki, S., & Brodie, R. (2003). Measuring the Quality of Relationships in Consumer Services: An Empirical Study. *European Journal of Marketing*, 37 (1/2), 169-196.
- Seng, (2010). Examining perceived value for money, relationship commitment and re-buying intention in a business-to-business context - a suggested model. Retrieved on 15 September, 2012 from: [https://repository.uwa.edu.au/R/-?func=dbin-jump-full&object\\_id=29956&local\\_base=GEN01INS01](https://repository.uwa.edu.au/R/-?func=dbin-jump-full&object_id=29956&local_base=GEN01INS01)
- Shamdasani, P. N., & Balakrishnan, A. A. (2000). Determinants of Relationship Quality and Loyalty in Personalized Services. *Asia Pacific Journal of Management*, 17 (3), 399-422.
- Smith, R. E., & Wright, W.F. (2004). Determinants of Customer Loyalty and Financial Performance. *Journal of Management Accounting Research*, 16, 183-205.
- Snoj, B., Korda, A. P., & Mumel, D. (2004). The relationships among perceived quality, perceived risk and perceived product value. *Journal of Product & Brand Management*, 13 (3), 156-167.
- Spreng, R.A., MacKenzie, S.B., & Olshavsky, R.W. (1996). A reexamination of the determinants of consumer satisfaction. *Journal of Marketing*, 60 (3), 15-32.
- Steenkamp, J. B. E. M. (1990). Conceptual Model of the Quality Perception Process. *Journal of Business Research* 21, 309-333.
- Sweeney, J. C., Soutar, G. N., & Johnson, L. W. (1999). The role of perceived risk in the quality-value relationship: a study in a retail environment. *Journal of retailing*, 75(1), 77-105.
- Tsiotsou, R. (2006). The role of perceived product quality and overall satisfaction on purchase intentions. *International Journal of Consumer Studies*, 30 (2), 207-217.
- Vranešević, T., & Stancec, R. (2003). The effect of the brand on perceived quality of food products. *British Food Journal*, 105 (11), 811-825.

Walter, A., Mueller, T. A., & Helfert, G. (2002). The Impact of Satisfaction, Trust, and Relationship Value on Commitment: Theoretical Considerations and Empirical Results.

Wray, B., Palmer, A., & Bejou, D. (1994). Using Neural Network Analysis to Evaluate Buyer-Seller Relationships. *European Journal of Marketing*, 8 (10), 32-48.

Yeh, Y. S., & Li, Y. M. (2009). Building trust in m-commerce: contributions from quality and satisfaction. *Online Information Review*, 33 (6), 1066-1086.

Yuen, E. F. T., & Chan, S. S. L. (2010). The effect of retail service quality and product quality on customer loyalty. *Journal of Database Marketing & Customer Strategy Management*, 17, 222-240.

Zboja, J. J., Voorhees, C. M. (2006). The impact of brand trust and satisfaction on retailer repurchase intentions, *Journal of Services Marketing*, 20 (6), 381-390.

Zeithaml, V. (1988). Consumer perception of price, quality, and value: A means-end model and synthesis of evidence. *Journal of Marketing*, 52 (July), 2-22.