# PERCEIVED PRODUCT QUALITY, PERCEIVED VALUE, CUSTOMER SATISFACTION AND THEIR RELATION TO BRAND LOYALTY

# ABDUL WAHID MOHD KASSIM<sup>1</sup>, OSWALD A. IGAU<sup>2</sup>, AMRAN BIN HARUN<sup>3</sup>

# ABDUL SHUKOR BIN SHAMSUDIN<sup>4</sup>, ABDULLAH KAID AL-SWIDI<sup>5</sup>

<sup>1,2,3</sup>School of Business and Economics, Universiti Malaysia Sabah, 88400, Kota Kinabalu, Sabah <sup>4,5</sup>College of Business, Universiti Utara Malaysia, 06000 UUM Sintok, Kedah Darul Aman

# ABSTRACT

The study is to investigate the relationship between perceived value, perceived quality and customer satisfaction on brand loyalty. The analysis results reveal that customer satisfaction and perceived product quality of a specific mobile phone were found to have a significant positive impact on brand loyalty. However, the current study did not find a significant relationship between perceived value and brand loyalty. Conclusion and implication are provided in this paper.

Keywords: Perceived product quality; perceived value; customer satisfaction; brand loyalty; mobile phone.

### I. INTRODUCTION

According to Petruzzellis (2010) mobile phone is now perceived as a social necessity and various factors have contributed its extraordinary industry growth rate such as technological change, market demand and the stiff competition. Enormous challenges face by marketers, particularly keeping consumer loyalty to their product (Luarn & Lin, 2003; Nasir, 2005). One effective strategy can be employed by businesses is maintaining their market share through loyalty. In fact, Darsono and Junaedi (2006) and Dick and Basu (1994) believe that the strategy for attaining a sustainable competitive advantage begins from customer loyalty. A loyal customer base is an invaluable asset to the business (Darsono & Junaedi, 2006) which helps a business managing switching behaviour and lessens the need to search for new customers (Rowley & Dawes, 2000; Ruyter & Bloemer, 1999). Furthermore, previous research has indicated the relationship between profitability and customer loyalty (Duncan & Elliot 2002; Kish, 2000); consecutively it leads to considerable competitive advantage (Yap, Ramayah, & Shahidan, 2012). Thus, the study on brand loyalty, customer satisfaction, perceived product quality and perceived value are crucial and valuable for businesses in designing their strategies for superior market share and customer retention. Hence, the current study is focusing on investigating the relationship between perceived product quality, perceived value, customers' satisfactions and brand loyalty in the context of mobile purchasing.

# 2. LITERATURE REVIEW

# 2.1 BRAND LOYALTY

The terms *product* and *brand* used interchangeably (Myers, 2003). Distinguishing between the terms, Farquhar (1989) and Cobb-Walgren, Ruble, & Donthu (1995) addresses product as something that tends to offer a functional benefit, whereas a brand is a name, symbol, design or mark that enhances the value of a particular product. Similarly, Bennett (1988) defined brand as a name, term, design, symbol or any other feature that identifies one seller's good or service as distinct from those of other sellers. Brand loyalty defined as a strong commitment to rebuy or repatronize a preferred product or repatronize a service consistently in the future, thereby causing repetitive same-brand or same-brand set purchasing (Oliver, 1999; Denison & Knox, 1995).

Emphasizing the importance of brand loyalty, Taylor, Geluch, & Goodwin (2004) point out that loyalty can be spread across more than one brand. Consumers can, in effect, be loyal to a portfolio of brands across product categories, selecting from this portfolio at each purchase occasion. Oliver (1999) further indicates that customer loyalty is a function of perceived product value superiority.

### 2.2 PERCEIVED PRODUCT QUALITY

Churchill and Surprenant (1982) defined quality as belief statements or attribute performance. Meanwhile, perceived quality is defined as the consumers' judgment about an entity's (service's) overall excellence or superiority (Rowley, 1998; Zeithaml, 1988). Perceived quality is basically the overall customer's perception about the quality of a product. Evidence from prior studies has indicated that there is a positive and direct relationship between perceived quality and customer satisfaction (Ha, John, Janda, & Muthaly, 2011, 2009; Parasuraman et al., 1994). Anderson, Fornell, & Lehmann (1994) noted that quality as a significant predictor of customer satisfaction and that this relationship, over the long term, was an important predictor of superior economic returns through repeat sales. The Perceived quality of a product or service is related to but not the same as satisfaction resulting from comparison of expectations with a perception of performance (Rowley, 1998). It also suggested that when the perceived quality of a particular product rises, customer satisfaction is expected to increase (Fornell, Johnson, Anderson, Cha, & Bryant, 1996) and ultimately can lead to brand loyalty (Ha et al., 2011). In short, satisfied customers are more loyal.

### 2.3 PERCEIVED VALUE

Customer delivered value can be defined as the total value offered to a customer less the total cost to the customer (Oliver, 1999; Day & Crask, 2000; Gronroos, 2000). The most cited definition offers by Zeithaml (1988) describe value as the consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given. Similarly, Holbrook (1999) defined value as a *trade-off* between benefits and sacrifices. Value is indeed a unique construct from satisfaction and quality (Oliver, 1999; Day & Crask, 2000). Marketers have to work hard creating added value that could satisfy customers tor earned loyalty (Taylor et al., 2004). In other noted, customer's perceived value can be viewed from the perspectives of money, quality, benefit, and social psychology (Ying, Chi, & Wei, 2009). Normally, from monetary aspect value is said to be generated when less is paid for goods (Bishop, 1984). Reichheld (1996) highlighted what keeps a customer loyal is the value they receive and one of the reasons so many businesses fail is that too much of their learning revolves around profit and too little around value creation. The relationship between perceived value and customer satisfaction being highlighted by Lin and Wang (2006) that customer satisfaction is the result of a customer's perception of value received. Perceived value is considered a construct that captures any benefit-sacrifice discrepancy in the same way that disconfirmation does for variations between expectations and perceived performance. The literatures suggested that perceived value contribute towards brand loyalty (Lin & Wang, 2006).

### 2.4 CUSTOMER SATISFACTION

Satisfaction is defined as an emotional post-consumption response that may occur as the result of comparing expected and actual performance (disconfirmation), or it can be an outcome that occurs without comparing expectations (Oliver, 1999). This definition is rooted in the disconfirmation paradigm, which suggests that satisfaction judgments are formed in a process of comparison of perceived performance with pre-experience expectations. Hence, satisfaction is said to result from positive disconfirmation such as product performances are greater than that initially expected. In the similar noted, Shukla (2004) proposed satisfaction is the results from positive disconfirmation, i.e. product performance is greater than that initial expectation. Lin and Wang (2006), revealed that customer satisfaction in the mobile context is a consumer's total response to the purchase experiences in a mobile context environment. On the relationship, literatures proposed direct influence of satisfaction on brand loyalty (Mittal & Lassar, 1998; Oliver, 1997; Mittal & Kamakura, 2001). The form of

relationship between customer satisfaction and loyalty could be nonlinear (Kumar, 2002; Aaker, 1991; Mittal & Kamakura., 2001). Further explained by Heskett, Sasser, & Schlesinger (1997), customer loyalty should increase rapidly after customer satisfaction passes a certain threshold that is, there are increasing returns to scale in the relationship between customer satisfaction and brand loyalty. A high level of customer satisfaction may have a positive impact on customer loyalty as suggested by Mittal, Ross, & Baldasare (1998). In other notes, customer satisfaction could produce totally mediation effect on the relationship between perceived value and customer loyalty (Lin & Wang, 2006).

# 3. The Research model and hypotheses

The following research model has been used in this study as shown in Figure 1.



Figure I: The research model

From the above mentioned model the following main hypotheses are developed:

- HI: There is a significant relationship between perceived product quality and brand loyalty
- H2: There is a significant relationship between perceived value and brand loyalty
- H3: There is a significant relationship between customer satisfaction and brand loyalty

# 4. RESEARCH METHODOLOGY

### 4.1 SAMPLE PROFILE

The subjects for this study were confined to the mobile users who are working in Kota Kinabalu area. To test the proposed relationships, data from mobile phone users were collected. Subjects for the study were randomly selected people who were employed in the private and public sector within Kota Kinabalu area. In total, 150 usable questionnaires were collected. Table I displays the characteristics of the sample. The sample is rather skewed towards females, below 40-year old and not highly educated users having below RM3001 gross monthly income. The majority of the respondents' currently used Nokia phone which is 56% of the total respondents of 150. This is followed by Sony Ericsson of 22.7%, others (iPhone, HTC) 15.3%, LG of 4% and Samsung of 2%.

# 5. ANALYSIS AND RESULTS

### 5.1 ASSESSMENT OF THE MEASUREMENT MODEL

The measurement model was tested for convergent validity. This was assessed through factor loadings, composite reliability (CR) and the average variance extracted (AVE) (Hair et al., 2010). This means that if all the items are significantly important in measuring their constructs, the loadings for all items should not lower than 0.5 (Hair, Anderson, Tatham, & Black, 2010). While, the CR values are at least 0.7 and the AVE are at least 0.5 then the convergent validity can be confidently confirmed (Bagozzi, Yi, & Phillips, 1991; Hair et al., 2010). While, the CR value of 0.5 (Hair et al., 2010). While, the CR value of 0.5 (Hair et al., 2010). While, the CR value of all the constructs exceeded the 0.7 threshold and all the values of AVEs are more than the 0.5 threshold. Therefore, we can conclude that convergent validity has been established.

The good discriminant validity is achieved when the items share more variance with their constructs than the constructs share with other constructs more (Compeau, Higgins, & Huff, 1999). The correlation matrix shown that the diagonal elements are higher than other off-diagonal elements in their rows and columns, thus the discriminant validity is confirmed.

# 5.2 Assessment of the structural model

### 5.2.1 PREDICTIVE POWER OF THE MODEL

The quality of the structural model can be assessed by  $R^2$  which shows the variance in the endogenous variable that is explained by the exogenous variables. The  $R^2$  of the Brand Loyalty was found to be 0.388 indicating that Perceive Product Quality, Perceived Value and Customer Satisfaction can account for 38.8 % of the variance in the Brand Loyalty. As such, the values of the  $R^2$  are considered substantial (Cohen, 1988).

# 5.2.2 GOODNESS OF FIT (GOF) OF THE MODEL

A global fit measure (GoF) assessment was conducted to investigate the global validation of PLS model. This measure is the geometric mean of the average variance extracted and the average  $R^2$  for the endogenous variables. The GoF value was 0.501 and it can be concluded that the model's GoF measure is large and adequate of global PLS model validity (Wetzels, Odekerken-Schröder, & Oppen, 2009).

#### 5.2.3 The hypothesis testing

Based on the results, two out of the three hypotheses were supported. The structural model comprises of the hypothesized relationship between the model's exogenous and endogenous variables. The bootstrapping procedure (500 resamples) was applied to generate the path coefficients and their corresponding t-values which then enabled inferences to be made by determining the statistical significance of each path coefficient.

The effects of product perceived quality and customer satisfaction on brand loyalty were found to be significant at the 0.05 levels of significance ( $\beta$ =0.336, p<0.05) ( $\beta$ =0.303, p<0.05) respectively. However, the effect of

perceived value on brand loyalty was found not to be significant ( $\beta$ =0.508, p>0.05). These results supported HI and H3 as hypothesized in the study. While H2 was not supported.

#### 6. DISCUSSION AND CONCLUSIONS

The finding is not supporting the previous assumptions (Lin & Wang, 2006; Gronroos, 2000) of direct relationship between perceived value and brand loyalty. The result implied insignificant relationship between perceived value and brand consciousness. It could be because of different market setting and product life cycles. In positive note, the current finding identifies a significant relationship between perceived value and customer satisfaction supporting the previous findings (Lin & Wang, 2006; Gronroos, 2000). In a positive note, the current finding identifies that significant relationship between perceived product quality and customer satisfaction on brand loyalty supporting the previous findings. Thus, perceived product quality and customer satisfaction can be used as predictors of brand royalty. The analysis results reveal that perceived product quality of a specific mobile phone was found to have a significant positive impact on customer satisfaction and loyalty. Successful businesses define their strategy around the pursuit of quality. Marketers have to recognize the central role of perceived product quality and customer satisfaction in order to be able to anticipate brand loyalty and consequently purchase behaviour. Businesses should employ strategies that put emphasis on product features and cues that will enhance customers' perceived product quality. Prior studies have found cues such as brand name, price, and objective quality information to be related to perceived product quality (Dodds, 2002; Tsiotsou, (2006). Businesses should utilize these cues to enhance customers' perceptions of product quality. Furthermore, the widely accepted theory that there is a link between satisfaction and loyalty was supported (Bontis, Booker, & Serenko, 2007). Thus, the ability to provide a high degree of customer satisfaction services is crucial to businesses in differentiating themselves from their competitors (Lin & Wang, 2006). In this study, loyalty was also a factor that may influence the choice of a mobile phone brand. The findings of this study show that perceived product quality is vital for developing brand loyalty. The statement about what drives loyalty should be understood whereby loyalty is not entirely divorced from satisfaction (Mittal & Lassar, 1998). Loyalty is built through a positive differentiation that is usually achieved by providing superior products and services. Although the current study did not find a significant role of perceived value in creating loyalty, as strongly suggested in the literatures (Lin & Wang, 2006; Gronroos, 2000), marketers should develop marketing programs enhancing perceived value. Marketing efforts creating perceived value on the other hand could influence customer satisfaction as recommended by the current findings.

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