

## **Relationship Between Customers' Perceived Values, Satisfaction and Loyalty of Mobile Phone Users**

Mohd Shoki. Bin Md.Ariff\*

Faculty of Management and Human Resource Development,  
Universiti Teknologi Malaysia, Malaysia

[m-shoki@utm.my](mailto:m-shoki@utm.my)

Hiew Sok Fen

Norhayati Zakuan

Nawawi Ishak

Faculty of Management and Human Resource Development,  
Universiti Teknologi Malaysia, Malaysia

Khalid Ismail

Universiti Pendidikan Sultan Idris, Malaysia

[lidkha\\_515@yahoo.com](mailto:lidkha_515@yahoo.com)

— *Review of* —  
**Integrative  
Business &  
Economics**  
— *Research* —

### **ABSTRACT**

The purpose of this research was to examine the relationship between customers' perceived values, satisfaction and loyalty amongst users of mobile phones. The measurement of customers' perceived economic, emotional and social values and the eight items of customer loyalty were based on the work of Lim, Widdows and Park. Customer satisfaction was measured using three modified items based on the Lee's study. A total of 270 sets of questionnaires were distributed randomly to users of a mobile phone service provider in Johor Bahru, Malaysia. The findings revealed that customers' perceived high emotional value towards the mobile phone. Economic and social values were in the moderate level. The high and moderate positive correlations were found between customers' perceived emotional value and economic value with customer satisfaction. Customers' perceived emotional value of the mobile phone had the strongest impact on customer satisfaction. A high correlation existed between customer satisfaction of the mobile phone and their loyalty towards the mobile phone service provider. This research had validated the construct of economic, emotional and social values to measure customers' perceived values of mobile phone services. The findings provide usable model for mobile phone service providers to enhance customers' perceived values of their services that contribute to high customer satisfaction and loyalty.

**Keywords:** Customers' Perceived Values, Customer Satisfaction, Customer Loyalty, Telecommunication Industry

## 1.0 INTRODUCTION

In Malaysia, mobile phone market is regarded as the leading growth driver to the telecommunications industry. It has evolved from a monopoly environment to a competitive market managed by three main telecommunications companies - Maxis, Digi and Celcom. Intense competition occurs among the companies over the years. This provides beneficial environment to mobile users in choosing the mobile phone service providers. Generally, users of mobile phone make their selection based on the service quality provide by the telecommunication companies and their perceived values - economic, emotional, and social values - towards the companies' services. Mobile phone service involves a long term commitment, so customers' perceived values of the service will affects their decision making. Hence, if the service matched or exceed the customers' perceived value, then they are satisfied. In addition, customer satisfaction is inextricably linked to customer loyalty and relationship commitment (Lovelock, 2001). Thus, the relationship between customers' perceived values, satisfaction and loyalty in mobile phone services should be continuously monitored and improved.

Therefore, this research was conducted to (i) determine customers' perceived economic, emotional and social values in mobile phone industry; (ii) examine the correlation between customers' perceived values with customer satisfaction and to determine the most significant value affecting the satisfaction; and (iii) examine the relationship between customer satisfaction and customer loyalty in the industry.

## 2.0 LITERATURE REVIEW

### 2.1 Customers' Perceived Values

Sweeney and Soutar (2001) used a multidimensional model of four dimensions to measure customers' perceived values of a product or a service. Originally, there are 19 items that revealed a stable structure of the four dimensions: emotional, social, functional (value-for-money), functional (performance/quality). Lim et al (2006) adopted the framework of measuring customers' perceived values of a product or a service suggested by Sweeney and Soutar (2001) in determining the customers' perceived value of mobile services. According to them, three value dimensions – economic, emotional, and social values - are treated as the most relevant to mobile service experience. Economic value is related to perceived economic benefits received by users of mobile phone services in comparison to the monetary cost of the services. Many researchers found a significant role of consumers' perceived monetary value in satisfaction and future decisions (McDougall and Levesque, 2000, Chen, 2003). Emotional value is the utility derived from the feelings or affective states that a product/service generates (Sweeney and Soutar, 2001). Social value is the utility derived from the product's or service's ability to enhance social self-concept (Sweeney and Soutar, 2001).

### 2.2 Customer Satisfaction

Customer satisfaction is an overall attitude towards a service provider (Levesque and McDougall, 1996) or an emotional reaction to the difference between what customers anticipate and what they receive (Zineldin, 2000). Anderson and Srinivasan (2003) defined customer satisfaction as the contentment of the customer with respect to his or her prior purchasing experience with a given service firm. It is a judgment that a product or service feature, or the product or service itself, provide a pleasurable level of consumption-related fulfillment.

Oliver (1997) defined satisfaction/dissatisfaction as “the consumer’s fulfilment response, the degree to which the level of fulfilment is pleasant or unpleasant”. It involves “an evaluative, affective, or emotional response”. Therefore, satisfaction is the customer’s overall judgment of the service provider (McDougall & Levesque, 2000).

According to Oliver (1997) customer satisfaction is the abilities to meet customers’ expectations. The customers will not satisfy if the products or services outcome is below their expectations. This is connected with their perceptions towards the service. Thus, service providers need to identify their customer expectations’ and perception towards their services in order to identify the extent to which customers are satisfied.

### **2.3 Customer Loyalty**

Customer loyalty is one of the key factors that will help a company sustains its long-term success (Andres Kuusik, 2007). Lim et al (2006) defined customer loyalty as consumers’ overall attachment or commitment to a mobile service provider. Jim Novo (2011) described customer loyalty as a tendency of a customer to choose a particular brand of business or product to fulfil their needs. We can describe this situation as ‘brand loyalty’ because customers tend to choose a certain brand more often than others. The choices and purchase action is a kind of evidence that show customer loyalty to a certain brand. Customer loyalty is a result of customer retention programs that always giving encouragement to remain active choosing their brand as exclusive brand.

Customer loyalty can be classified into proactive loyalty and situational loyalty (Oliver, 1999). Proactive loyalty occurs when a consumer is often bought the brand and settles for no other substitute while situational loyalty exists when the buyer purchases a brand for a special occasion. Some scholars classified customer loyalty into the behaviour loyalty and the attitude loyalty (Fournier and Yao, 1997, Wong and Sohal, 2003), Mattila, 2004). Behaviour loyalty focuses on the long-term choice probability for a brand, for example, repeat purchase probability. Attitudinal loyalty focuses on brand recommendations, resistance to superior products, repurchase intention, and so on.

Lim et al (2006) developed an eight items model to measure customer loyalty in mobile phone services. These eight items reflect consumers' cognitive, affective, conative and behavioral loyalty intention.

#### **2.4 Relationship between customers' perceived values, satisfaction and loyalty**

It has been well known that customers' perceived service quality, customer value and satisfaction have been the most important success factors of business competition for either manufacturers or service providers (eBuzzell and Gale, 1987; Zeithaml, 1996; Bolton and Drew, 1991; Parasuraman et al., 1988, 1991). Examining the issue of perceived value is important because, compared to perceived quality; perceived value is more directly linked to consumers' willingness-to-buy (Dodds and Monroe, 1985). In addition to that, a higher level of perceived service performance leads to a high level of perceived value (Lim et al, 2006). According to Schiffman and Kanuk (2004), the overall objective of providing value to customers continuously and more effectively than competitors is to have and to retain highly satisfied customers. Satisfaction has been widely studied as a predictor of customer loyalty (Cronin et al., 2000; Fornell et al., 1996; Yang and Peterson, 2004). This overall satisfaction has a strong positive effect on customer loyalty intentions across a wide range of product and service categories (Gustafsson, 2005). It is an important factor for a long-term relationship between a firm and a customer (Anderson and Srinivasan, 2003).

### **3.0 METHODOLOGY**

#### **3.1 Instrument Development and Sampling Procedure**

This study examines the relationship between customers' perceived value of a mobile phone service with customer satisfaction and loyalty. The questionnaire was used to measure customers' perceived values, satisfaction and loyalty towards a mobile phone service provider in a city of Johor, Malaysia. In section A of the questionnaire, based on the work of Lim, et.al (2006), respondents were asked to indicate their perceived values towards a mobile phone service provider covering three different values – economic, emotional, and social values. 16 items were constructed to measure customers' perceived value. Section B requested the respondents to indicate the extent to which they are satisfied with the service using three items based on the study of Lee et.al. (2000). In section C, eight items were used to determine customer loyalty towards the service provider as proposed by Lim, et.al (2006). Respondents were asked to indicate their demographic background in Section D of the questionnaire.

Questionnaires were distributed to the current subscribers of the mobile phone service provider in Johor Bahru, Johor. The total number of subscribers for this company is confidential and cannot be announced. Considering the total number of questions in the questionnaire (27), the number of samples should be 135 (for 10% margin of error) to 270 (for 5% margin of error) (Hair, et.al. 2003). In this research the authors

selected 5% margin of error. To ensure the target sample size is achieved, 300 set of questionnaires were distributed to the subscribers randomly for them to complete all sections of the questionnaire.

## **4.0 FINDINGS**

### **4.1 Validity and Reliability Tests**

Confirmatory Factor analysis (CFA) was conducted related to a principal component with varimax rotation in order to validate the underlying structure of customers' perceived values of mobile phone services, as the independent variable. Prior to the CFA, the KMO measurement of sampling adequacy value was 0.886, which was greater than 0.6, indicating that the proportion of variance in the independent variables was caused by underlying factors, allowing the current data to proceed with factor analysis. In addition, the Bartlett's test of Sphericity value of 0.000 that was less than 0.05, proving that the analysis was significant. The constructs of customers' perceived values of the mobile phone service was extracted using loading factor of 0.5. 15 factors loadings under the three variables - economic, emotional, and social values - were more than 0.5, and were loaded in the same dimensions of customers' perceived values. Therefore all items, except one item of social value, and dimensions of customers' perceived values of the mobile phone service were retained for further analysis.

The reliability was evaluated by assessing the internal consistency of the items representing each construct of customers' perceived values, customers' satisfaction and loyalty using Cronbach's alpha. The reliability of each construct of customers' perceived values was more than 0.8. For customer satisfaction, Cronbach's alpha was 0.922 and 0.935 for customer loyalty. Thus, the customers' perceived values, satisfaction and loyalty data in this research were reliable and valid for further analyses.

### **4.2 Profile of the Respondents**

A total of 290 sets of questionnaires were collected, 5 were incomplete, and 285 of them were well completed for further analysis. Profile of respondents of this study indicated that:

- 50.9% were male respondents and the rest 49.1% were female respondents.
- Most of the respondents (31.8%) are subscribers to the mobile phone service provider for more than 5 years. 28.9% respondents have been using the mobile phone services for the duration of 3 to 5 years; 26.8% between 2 to 3 years; 5% respondents between 1 to 2 years. 7.6% respondents subscribed the service in less than 1 year.
- 54.3% of the respondents use prepaid mobile services and 45.7% are postpaid subscribers.

### 4.3 Customers' perceived values of the mobile phone services

The result on how customers' perceived values of the mobile phone services is presented in Table 1. Based on the mean scores, it can be concluded that:

- Customers' perceived economic value of the mobile phone services was at the moderate level (mean score of 3.35, SD 0.774).
- Customers' perceived emotional value of the mobile phone services was at the high descriptive level (mean score of 3.43, SD 0.752).
- Customers' perceived social value of the mobile phone services was at the moderate level (mean score of 2.97, SD 0.885).
- Thus, subscribers' perceived emotional value of the service provider was higher than they perceived economic and social values.

**Table 1: Mean scores of Customers' Perceived Value of Mobile Phone Services**

Customers' Perceived Value of Mobile Phone Services	Mean scores	Standard Deviation (SD)	Descriptive level of customers' perceived values
Economic Value	3.35	0.744	Moderate
Emotional Value	3.43	0.752	High
Social Value	2.97	0.885	Moderate

### 4.4 The Correlation between Customers' Perceived Values of Mobile Phone Services with Customer Satisfaction

The relationship between customers' perceived values and customer satisfaction of the mobile phone services was examined using Pearson's Correlation and the result is presented in Table 2. Based on Table 2, it can be concluded that: (i) all the three values – economic, emotional and social values - were positively correlated with customers' satisfaction (at the significant level of .001); (ii) The high correlation or marked relationship existed between emotional value and customers' satisfaction (.779); (iii) the moderate correlation existed between economic value with customers' satisfaction (.594); and (vi) the weakest correlation is between social value and customers' satisfaction with correlation coefficient .271

**Table 2: The Correlation between Customers' Perceived Values and Customer Satisfaction of the Mobile Phone Services**

Customers' Perceived Values of Mobile Phone Services	Customer Satisfaction	
Economic Value	Pearson Correlation	0.594**
	Sig. (1-tailed)	0.000
Emotional Value	Pearson Correlation	0.779**
	Sig. (1-tailed)	0.000
Social Value	Pearson Correlation	0.271**

	Sig. (1-tailed)	0.000
<i>Correlation is significant at the 0.01 level (1-tailed)</i>		

The result of the multiple regression analysis, as presented in Table 3, indicated that the value of R<sup>2</sup> was 0.630, indicating that 63% of the variation in the customer satisfaction towards the mobile services was influenced by customers' perceived economic, emotional and social values. The results indicated that all the three values - economic, emotional and social - were statistically significant. Thus, emotional value ( $\beta = .760, p < 0.01$ ), economic value ( $\beta = .174, p < 0.01$ ), and social value ( $\beta = .085, p < 0.01$ ) were significantly associated with customers' satisfaction. Furthermore, all VIF values for the independent variables were less than 10 which indicated that the threat of multicollinearity problem was insignificant in this research.

**Table 3: Regression result between customers' perceived values and satisfaction**

Customers' perceived values	Customer Satisfaction (N = 285)			t	Sig.
	Beta	Std Error	$\beta$		
(Constant)	0.685	0.131		5.216	0.000**
Economic	0.174	0.042	0.168	4.156	0.000**
Emotional	0.760	0.046	0.713	16.509	0.000**
Social	0.085	0.032	0.094	2.685	0.008**
<b>R<sub>2</sub></b>	0.630				
<b>Adjusted R Square</b>	0.627				
<b>F-value</b>	58.327**				
<i>**Significant at the 0.01 level</i>					

Based on the Table 3, the multiple regression equation can be determined as follow:

$$Y = 0.174 X_1 + 0.760 X_2 + 0.085 X_3 + 0.685$$

Where, Y = Customer Satisfaction

X<sub>1</sub> = Economic Value

X<sub>2</sub> = Emotional Value

X<sub>3</sub> = Social Value

e = constant

#### 4.5 The Relationship between Customer Satisfaction and Customer Loyalty towards the Mobile Phone Services

The Pearson's correlation of coefficient analysis was performed to examine the relationship between customer satisfaction and customer loyalty towards the mobile phone service provider and the result is presented in Table 4. It was found that the customer satisfaction was highly correlated (0.883,  $p < 0.01$ ) with customer loyalty, indicating the marked relationship was existed between customer satisfaction and

customer loyalty. This meant that the customer loyalty towards the mobile phone service provider was highly influenced by their satisfaction with the mobile phone services.

**Table 4: Pearson Correlation Coefficient Result for the Correlation between Customer Satisfaction and Loyalty**

		<b>Customer Loyalty towards the Mobile Phone Services</b>
<b>Customer Satisfaction</b>	Pearson Correlation	0.833**
	Sig. (1-tailed)	0.000
<i>** Correlation is significant at the 0.01 level (1-tailed)</i>		

## 5.0 DISCUSSION

In this research, the most dominant factor affecting customer satisfaction of the mobile phone services was customers' perceived emotional value. Customers' perceived emotional value of the mobile phone services was highly associated with their satisfaction (correlation coefficient 0.779,  $p < .001$ ). This means that emotional value plays an important role in determining customer satisfaction. As discussed in the literature review, emotional value is generated from the feeling of using or purchasing a product or service. Thus, the mobile phone service provider should develop value-added services focusing on the emotional part of its subscribers.

The social value appeared to be the least affective factor to influence customer satisfaction towards the mobile phone services. However, social acceptance or social value plays a vital role in influencing teenagers to continuously use the mobile phone service and stay loyal to the company. The expanding of youth market brings a big wave to the mobile communications market. Hence, the mobile phone service provider should develop suitable strategies and marketing programs for this particular market by fulfilling the social values needs of the targeted customers.

The finding of this study also validated the formation of customers' perceived values, satisfaction and loyalty. In services marketing literature, it was found that customers' perceived values of a product or a service will influence their satisfaction. Customers, who are satisfied with a service, will continuously use the service and become loyal customers. Thus, any effort to enhance subscribers' perceived values of the mobile phone services will increase their level of satisfaction and loyalty towards the companies.

## REFERENCES

- [1] Anderson, R.E. and Srinivasan, S.S. (2003). "E-Satisfaction and e-Loyalty: A Contingency Framework." *Psychology & Marketing*. 20(2): 123-138.



- [2] Assael, H. (1992). "Consumer Behavior and Marketing Action." Boston, MA: PWSKent.
- [3] Bolton R and Drew JH (1991). "A Multistage Model of Customers' Assessment of Service Quality and Value." *Journal of Consumer Research*. 17: 375–384.
- [4] Buzzell, R.D. and Gale, B.T. (1987). "The PIMS (Profit Impact of Market Strategy) Principles." Linking Strategy to Performance. New York: The Free Press.
- [5] Chen, Z. (2003). "Consumers' Value Perception of An e-Store and Its Impact on e-Store Loyalty Intention." Unpublished. PhD dissertation. Purdue University, West Lafayette,
- [6] Cronin, J.J., Brady, M.K. and Hult, G.T.M. (2000). "Assessing the Effect of Quality, Value, and Customer Satisfaction on Consumer Behavioral Intentions in Service Environments." *Journal of Retailing*. 76(2): 193-218.
- [7] Dodds, W.B. and Monroe, K.B. (1985). "The Effects of Brand and Price Information on Subjective Product Evaluation." *Advance in Consumer Research*. 12: 85-90.
- [8] Fornell C, Johnson MD, Anderson, EW, Cha J and Bryant BE (1996). "The American Customer Satisfaction Index: Nature, Purpose, and Findings." *Journal of Marketing*. 60:7–18.
- [9] Grönroos, C. (1983). "Strategic Management and Marketing in the Service Sector."
- [10] Cambridge, Mass.: Marketing Science Institute (In U.K.: Bromley: Chartwell-Bratt and Student literature).
- [11] Grönroos, C. (1984). "A Service Quality Model and Its Marketing Implications." *European Journal of Marketing*. 18(4): 36-44.
- [12] Hair, Joseph, F., Jr., Babin, Barry, Money, Arthur H., and Samouel, Philip. (2003). *Essentials of Business Research Methods*. Wiley: Malloy Inc., USA.
- [13] Jacoby, J. (1971). "Brand Loyalty: A Conceptual Definition." *Proceedings of the 79<sup>th</sup> Annual Convention of American Psychological Association*. 6: 655–656.
- [14] Keller, K. L. (1993). "Conceptualizing, Measuring, and Managing Customer Based Brand Equity." *Journal of Marketing*. 57: 1–22.
- [15] Levesque, T. and McDougall, G.H.G. (1996). "Determinants of Customer Satisfaction in Retail Banking." *International Journal of Banking Marketing*. 14(7): 12-20.
- [16] Lee, H., Lee, Y and Yoo, D. 2000. The determinant of Perceived Service Quality and Its Relationship with Satisfaction. *Journal of Services Marketing*, 14, 217 – 231
- [17] Lim, H. J., Widdows, R. and Park, F. (2006). "M-loyalty: Winning Strategies for Mobile Carriers." *Journal of Consumer Marketing*. 23(4): 208-218.
- [18] Lovelock, C. (2001). "Service Marketing: People, Technology, Strategy." Fourth Edition, United States: Prentice Hall International.
- [19] McDougall, G.H. and Levesque, G.T. (2000). "Customer Satisfaction with Services: Putting Perceived Value into the Equation." *Journal of Services Marketing*. 14(5): 392-410.

- [21] Oliver, R. (1997). "Satisfaction, A Behavioral Perspective on the Consumer." New York: McGraw-Hill.
- [22] Parasuraman A, Zeithaml VA and Berry LL. (1988). "SERVQUAL: A Multiple Item Scale for Measuring Consumer Perceptions of Service." *Journal of Retailing*. 64: 12–40.
- [23] Parasuraman, A., Zeithaml, V. and Berry, L. (1991). "Refinement and Reassessment of the SERVQUAL Scale." *Journal of Retailing*. 64: 12-40.
- [24] Sweeney, J.C. and Soutar, G.N. (2001). "Consumer Perceived Value: The Development of a Multiple Item Scale." *Journal of Retailing*. 77(2): 203-220.
- [25] Yang, Z. and Peterson, R.T. (2004). "Customer Perceived Value, Satisfaction, and Loyalty: The Role of Switching Costs." *Psychology & Marketing*. 21: 799 - 822.
- [26] Zeithaml, V.A., Berry, L. and Parasuraman, A. (1996). "The Behavioral Consequences of Service Quality." *Journal of Marketing*. 60(2): 31-46.
- [27] Zineldin, M. (2000). "TRM Total Relationship Management." Student literature. Lund.