

Analysis of Customer Loyalty for Mobile Phone User in India

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ABSTRACT

India Mobile Phone market is the largest and one of the fastest growing markets in the world. It is characterized by a large subscriber base (752 million connections as on June 2013 expected to reach 987.9 million in 2015), low average revenue per user (INR 308 as on June 2012), and high churn rate (69.9% in 2012, and is expected to increase to 78.9% in 2015) (TRAI, 2012; KPMG, 2012; Gartner Report, 2012). Churn rates have escalated with increased competition and deregulation. Factors such as launching of mobile number portability scheme, introduction of 3G and 4G services and entry of new licenses are likely to further increase churn rates and reduce loyalty (TRAI, 2012). The high churn rates adversely affect mobile telecom operators because they stand to lose a great deal in price premium, decreasing profits levels and a possible loss of referrals from continuing service customers (Manero, 2011). In the context of such an intensifying competition in the telecom sector, there is renewed interest in customer retention, because obtaining new customer is costlier than serving the existing ones; therefore, it makes sense to retain the existing customers (Reichheld, 1996).

KEY WORDS: Customer Loyalty, Mobile Phone Market, Behavioural Loyalty, Attitudinal Loyalty, Corporate Image, Switching Cost.

INTRODUCTION

Give the high churn rate, immense competition, and high acquisition costs, the best core marketing strategy in the mobile phone industry now would be to try to retain existing customers by heightening customer loyalty and customer value. Companies recognize the relevance of maintaining a solid base of loyal customers for long-term survival, growth, and financial performance (Reichheld, 1996; Reinartz & Kumar, 2002). Given the importance of customer loyalty to service firm, it is important of marketers to fully understand the nature and dimensionality of loyalty construct (Jones & Taylor, 2007). Conceptual definition and measurement of loyalty has received many different definition and interpretation in the literature (Rundle-Thiele, 2005b). The contradictory views about loyalty are the result of a systematic lack of a rigorous study of the reliability and validity of the proposed measurement instruments (Odin, Odin & Valette-Florence, 2001). Loyalty has largely been defined and measured in behavioral and attitudinal terms. Russell Bennett, McColl-Kennedy & Coote (2007) argue that defining loyalty with reference to attitudinal or behavioral components is too simplistic, and that there are potential gains from advancing a holistic approach which incorporates both the components of loyalty. In recent years, there been a growing interest in determining the factors that influence the development of loyalty. Despite this, there is no consensus among researchers as to the factors that help a firm maintain and increase customer loyalty. Previous empirical research has focused primarily on satisfaction, trust, and commitment as the key ingredients for successful long-term relationships. Very little research has been done on corporation image and switching cost as the key antecedents of customer loyalty. An investigation of these issues is important because corporate image and switching cost significantly affect customer retention either directly or indirectly through their association with the customer relationship perceptions (like satisfaction, trust, or commitment) and customer loyalty.

OBJECTIVES OF THE STUDY

There is lack of research specifically on examining the antecedents of customer loyalty in the Indian context. The telecom market is highly competitive with 11-13 players operating in each telecom circle and the entry of new licensees is expected to further intensify the competition (KPMG, 2012). In the context of such an intensifying competition in the telecom sector, customer retention is crucial to increased profitability and margins. Thus, empirical investigation aimed at measuring and validating antecedents of customer loyalty is of utmost importance for telecom operators to develop strategies to increase margins.

The purpose of this study is to describe the development and refinement of a scale for measuring customer loyalty and its antecedents for mobile phone users. Specifically, the key objectives are: (A) to provide a conceptualization of customer loyalty and its antecedents (B) to develop a scale for measuring customer loyalty and its antecedents and (C) to assess reliability and validity of the measures.

ANTECEDENTS OF CUSTOMER LOYALTY

Customer Satisfaction

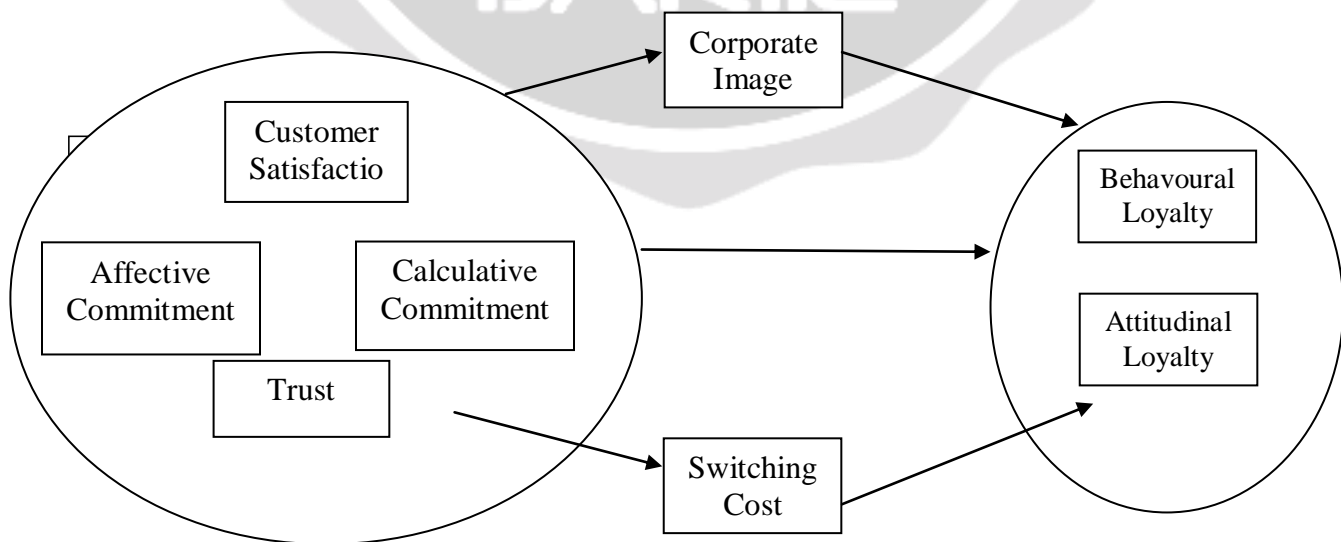
Marketing literature consistently identifies customer satisfaction as a key antecedent to loyalty and repurchases behavior. Customer satisfaction is understood as the customer’s emotional or empathic reaction to a perceived difference between performance appraisal and expectations (Henning- Thurau & Hansen, 2000). The lit erasure on customer satisfaction research recognizes two basic conceptualizations of satisfaction: transaction-specific and cumulative satisfaction. Transaction specific approach defines satisfaction as a customer’s evaluation of his or her experience with and reactions to a particular product transaction, episode, or service encounter.

Trust

Trust is a most critical element in the development of successful relationship between a service provider and its customer (Morgan & Hunt, 1994; Garbarino) asserts that trust is critical to the formation of service based relationship because of intangibility of services. In marketing, trust has been defined in various ways. Moorman, Deshpande & Zaltman (1993) define trust as “the willingness to rely on exchange partner in whom one has confidence”.

Figure 1

Proposed Conceptual Model of Antecedents of Customer Loyalty



Commitment

Commitment is recognized as an essential ingredient for successful long-term relationship (Dwyer, Schurr & Oh, 1987). Commitment is defined as “implicit or explicit pledge of relation continuity between exchange partners” (Dwyer, Schurr & Oh, 1987). Moorman, Zaltman & Deshpande (1992) see relationship commitment as an enduring desire to maintain a valued relationship. Prior research suggests two forms of commitment- affective commitment and calculative commitment. Affective commitment is the extent to which a customer likes to maintain relationship with a service provider on the basis of their affective attachment and identification with the service provider. It is based on a sense of liking and emotional attachment to the partnership.

Corporate Image

Marketing literature identifies corporate image as an important factor in evaluation of the service and the company. Nguyen (2006) defines corporate image as consumer’s response to total offerings and is related to business name, architecture, variety of product/ services, tradition, ideology, and to the impression of quality communicated by each person interacting with the organization. According to Ngobo (2004), image in service industries is conveyed by the service concept (i.e., benefits offered) delivery system (i.e., personnel and technology), and target markets (i.e., types of clients served).

Switching Cost

Research increasingly suggests that switching cost are important factors impacting a customer’s decision to remain with a service provider. Switching cost are the sacrifices or penalties consumers feel they may incur in moving from one provider to the next (Jones et al., 2007). Burnham, Frels, & Mahajan (2003) proposed a switching cost typology with three types of switching costs: procedural switching costs, financial switching costs, and relational switching costs. Procedural switching costs represent the consumer perceptions of the time and effort involved in seeking out information about available alternatives and evaluating their viability prior to switching. Financial costs consist of benefit-loss costs and monetary-loss costs and involve loss of financial quantifiable resources. Relational switching cost relate to the potential loss of a personal bond or friendship with a service provider if the customer switches (Jones et al., 2007).

RESEARCH METHODOLOGY

In order to develop, refine and validate measures for various constructs, scale development procedures were used. The methodology used to develop measures followed recommendations of Churchill (1979), Gerbing & Anderson (1988), and Saxe & Weitz (1982).

Item Generation

Prior to item generation, an extensive literature survey was carried out for conceptualizing constructs and specifying their domain. An exploratory study among cell phone mobile users was undertaken to better understand the key antecedents of customer loyalty. For this purpose, we conducted open-ended interviews with fifteen customers. The literature review and in-depth interviews with customers suggested a pool of 50 items to measure the various constructs. In order to avoid response set bias, approximately 30 per cent of the items in each sub-scale were stated negatively. A questionnaire was developed in which each item was measured on a 7 point Likert Scale ranging from “very strongly agree” to “very strongly disagree”.

Assessment of Content Validity

The assessment of content validity serves as a pretest, permitting the deletion of items that are deemed to be conceptually inconsistent. Content validity is ensured to the extent that expert judges agree that items are reflective of the overall construct and that these judges agree that the items are representative of the domain and facets of the construct. A panel of three marketing judges evaluated the items for content validity and suggested the removal of some items they considered to redundant, double-barreled, and ambiguous. This process resulted in the elimination of 8 items, leaving a pool of 42 items for further analysis.

Pre- Testing

The purpose of this stage was to purify the measures. It was used to further reduce the pool of items and to test internal consistency of the scale. Data was obtained through self-administered questionnaires from 250 post graduate business students of a major university in India. Convenience sampling was used to collect data. The sample consisted of 132 (52.8%) females and 118 (47.02%) males.

The measures were refined using item analysis at four stages. First, the correlation of each item with the total score for each construct was computed and items with low correlations with the total score were eliminated from the scale (Rucekert & Churchill, 1984). In the second stage, items in each construct were correlated with the total score of other constructs. Items that did not have statistically significant higher correlations with the dimension to which they were hypothesized to belong in comparison to item correlations with remaining dimension total scores were deleted from the analysis.

Cronbach alpha is concerned with the degree of interrelatedness among a set of items designed to measure a single construct. Table 1 depicts the reliability alphas for various constructs. As can be seen, the coefficient alphas for all the eight subscales are above 0.06 which is an acceptable limit for early stages of basic research.

Table 1
Reliability and Construct Validity of Measures

Construct	Item Label	Eigen Value	Factor Loading	Cronbach Alpha	Variance Explained
Satisfaction	SAT1	2.213	0.872	0.586	73.258
	SAT2		0.825		
	SAT3		0.893		
Trust	TR1	1.720	0.756	0.546	57.259
	TR2		0.781		
	TR3		0.749		
Affective Commitment	AC1	1.979	0.859	0.751	35.284
	AC2		0.847		
	AC3		0.842		
Calculative Commitment	CC1	1.425	0.645	0.542	45.198
	CC2		0.639		
Corporate Image	CI1	4.583	0.479	0.853	76.582
	CI2		0.471		
	CI3		0.492		
Switching Cost	SC1	5.265	0.628	0.764	75.583
	SC2		0.689		
	SC3		0.687		
Behavioral Loyalty	BL1	3.125	0.456	0.471	47.249
	BL2		0.457		
Attitudinal Loyalty	AL1	4.256	0.736	0.925	75.543
	AL2		0.756		
	AL3		0.713		

CONFIRMATORY FACTOR ANALYSIS

Confirmatory Factor Analysis (CFA) was employed to assess the latent factor structure. CFA involves the specification and estimation of one or more hypothesized models of factor structure, each of which proposes a set of latent variables (factors) to account for co-variances among a set of observed variables (Koufteros, 1999). Confirmatory factor analysis using AMOS 18.0 was carried out to test the measurement model presented in Figure 2. Data was collected through self-administered questionnaire from, 1000 mobile phone users. The survey was carried out in the south part of India. A total of 855 usable responses were obtained for an overall response rate of

58.5 per cent. The sample included 58.2 per cent of males and 41.8 per cent of females. The age profile of respondents ranged from 20 year to 45 years with almost 87 per cent of the respondents in the age group between 20 years and 24 years. Regarding current provider subscription, 38 per cent of the respondents were using Airtel (22%), BSNL (17%), Spice (15%), IDEA (3%), Reliance Communications (1.7%), and TATA Indicom (1.4%).

Item Reliability, Composite Reliability and Average Variance Extracted (AVE)

Item reliability indicates the amount of variance in an item due to the underlying constructs rather than to error. The item reliability of individual items can be assessed by squaring their respective standardized factor loadings. Indicator reliabilities should exceed 0.50, which provides evidence that items explain more variance than is explained by the error term. Table 3 reveals that

Table 2

Model Fit Indices of the Measurement Model

Index of Fit	Chi-Square (df)	CMIN/DF	GFI	AGFI	NFI	IFI	TLI	CFI	RMSEA
Value	645.9099181)	3.569	0.937	0.912	0.935	0.917	0.939	0.952	0.05

Table 3

Parameter Estimates, Critical Ratios, R^2 , Average Variance Extracted and Composite Reliability

Latent Variables	Item Label	Standardized Factor Loading	Critical Ratio ^b	R^2	AVE	Composite Reliability
Satisfaction	SAT1	0.456	-a	0.625	0.658	0.845
	SAT2	0.259		0.248		
	SAT3	0.874		0.247		
Trust	TR1	0.265	-a	0.982	0.873	0.759
	TR2	0.845		0.246		
	TR3	0.249		0.729		
Affective Commitment	AC1	0.478	-a	0.458	0.784	0.628
	AC2	0.659		0.426		
	AC3	0.539		0.876		
Calculative Commitment	CC1	0.258	-a	0.457	0.623	0.842
	CC2	0.654		0.964		
Corporate Image	CI1	0.789	-a	0.951	0.496	0.726
	CI2	0.631		0.753		
	CI3	0.759		0.835		
Switching Cost	SC1	0.456	-a	0.741	0.842	0.876
	SC2	0.873		0.654		
	SC3	0.456		0.946		
Behavioral Loyalty	BL1	0.329	-a	0.751	0.789	0.256
	BL2	0.249		0.986		
Attitudinal Loyalty	AL1	0.372	-a	0.359	0.756	0.841
	AL2	0.249		0.768		
	AL3	0.248		0.346		

a Indicates a parameter fixed at 1.0 in the measurement model.

b All Critical Ratios (t-values) are significant at 0.05

all the items had R^2 values greater than 0.50, which shows that all variables are significantly related to their specified constructs and thus verifying the posited relationship among indicators and constructs. Composite reliability is a measure of the internal consistency of the construct indicators, which depicts the degree to which the indicators indicate the common latent construct. Anderson & Gerbing (1988) state that even a perfectly unidimensional scale will be of little practical use if the resultant composite score has unacceptably low reliability. Highly reliable constructs are those in which the indicators are highly intercorrelated, indicating that they are all measuring the same latent construct. Table 3 shows that composite reliability for various constructs. All constructs had composite reliability above the recommended level of 0.70 (Hair et al., 1998).

CONCLUSION

A review of literature revealed that there is no consensus among researchers on the definition and measurement of loyalty. The earlier studies on antecedents of customer loyalty have focused primarily on customer satisfaction, trust and commitment. The purpose of this study was to examine the effects of customer satisfaction, trust, commitment, switching costs and corporate image on behavioral and attitudinal loyalty. Another aim of the study was to describe the development and refinement of a scale for measuring customer loyalty and its antecedents. First, multi-item measures were developed and purified for measuring customer loyalty using standard scale development procedures on a sample of 250 mobile phone users. Confirmatory factor analysis was then applied on data collected from 853 mobile phone users. Results revealed that all the indicators had adequate item reliability. All the model fit indices were above the recommended criteria. Reliability was assessed using coefficient alpha, composite reliability and average variance extracted and all the values obtained were above the accepted range, the establishing the reliability of the constructs. Convergent and discriminant validity was established for all the eight constructs.

MANAGERIAL IMPLICATIONS

The present study makes both academic and practical contributions. From an academic point of view, it contributes to the existing literature on relationship marketing. The study first provides a theory-based framework for understanding the effects of satisfaction, trust and commitment, switching cost and corporate image on behavioral and attitudinal loyalty. A significant contribution that the model makes is the appreciation of the 'corporate image' construct and 'switching cost' construct and its influence on customer loyalty. Moreover, by measuring loyalty as a composite measure consisting of both behavioral loyalty and attitudinal loyalty, the study provides evidence of the multidimensional nature of loyalty construct. Using data collected from mobile phone users, it establishes reliability and validity of the scale. The newly refined and validated measures can be used by future researchers to study customer loyalty and its antecedent factors.

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