MARKETING MIX, CUSTOMER SATISFACTION AND LOYALTY: AN EMPIRICAL STUDY OF TELECOM SECTOR IN BHUTAN

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ABSTRACT

Telecom sector in Bhutan is still in evolving stage. The first network line was made operational in 1963. The study of marketing mix, customer satisfaction and loyalty is important for framing new policies and analysing growth of any service industry. There is nearly no study focusing on these variables especially in telecom sector of Bhutan. So the study attempts to fill the research gap. The study focuses on relationship and impact of marketing mix on customer satisfaction. Study also analyse the impact of customer satisfaction on customer loyalty. Data has been collected from Gedu town located in Chukha district in Bhutan. A total of one hundred one questionnaires were filled by different respondents. Different statistical tools like correlation, regression and t-test were used to analyze the collected data. Results revealed significant and positive correlation among variables under study i.e., marketing mix, customer satisfaction and loyalty. Further, no difference in customer satisfaction was found for public and private telecom service providers in Bhutan.

Keywords: Marketing mix, Customer satisfaction, Customer loyalty, Telecom Sector, Bhutan.

Introduction:

Bhutan is a small country situated in South Asia. It is unique in many features which includes low population density, mountain across the country, limited financial and technical resources etc. Bhutan government is much concerned towards preservation of its natural and cultural environment. Bhutan government emphasize on importance of relationship, culture and happiness. Unlike most of the countries, Gross Domestic Product (GDP) is not the indicator of development in Bhutan, but Gross National Happiness (GNH) is the parameter set for measuring development in the country. There is no doubt that GNH is very unique and effective tool for measurement of development of a national, but on the other side it is also the reason of limited interaction with outer world which effects development and growth. In 1961, Bhutan government recognised that for inclusive growth in various sectors, there was a need of modification in the policy of isolation. Government opened doors of Bhutan for various countries which helped in development of various sectors which include transportation, telecom, roads and electricity generation (Kezang & Whalley, 2004).

Telecom sector is not very old in Bhutan. The first network was established in 1963 with the technical and financial assistance from India. The milestone in telecommunication history of Bhutan was establishment of Ministry of Communication in 1970. Ministry of Communication of Bhutan worked hard with various countries to remove various hurdles lying in the path of telecom connectivity in Bhutan. Currently there are only two telecom service providers working in Bhutan named as Bhutan Telecom Limited (BTL) and Tashi InfoComm Limited.

Bhutan Telecom Limited (BTL):

BTL is leading state owned telecom service provider in Bhutan. It was established in July, 2000 with a vision of delivering excellent customer care services resulting in generation of sustained value. BTL provides GSM mobile service under the brand name of B-Mobile and internet services under the brand
name of DrukNet. BTL has network coverage in all 205 blocks of the country covering remote and isolated areas as well. BTL 3G service is available nearly in all the towns of the country. BTL has also launched 4G LTE services since October, 2013. BTL is not only leader in telecom services but it also fulfils its social commitment by performing various activities under Corporate Social Responsibilities (CSR). CSR activates include financial aids for rural urban camp, scout camp, publishing school magazine, issue of laptops, free and subsidized internet services1. These activities fulfill corporate ethics as well as help in attracting and retaining customers. CSR works as indirect promotion for the company which is one of the important elements in marketing mix. BTL is leader in all telecom services like fixed landline, pre-paid, post-paid, leased line, broadband and wireless broadband. BTL broadband service is available in almost all parts of the country. Minimum speed of broadband connection is 512 Kbps. For inaccessible areas BTL also has provision of wireless broadband which has range of up to 8 KM. BTL is also committed to provide comfortable and latest services to its customer. B-Wallet is one of such services which can be used to pay broadband bill, landline bill, post-paid bill and prepaid recharge by using bank account. It helps in saving time and energy as recharge and bill payment can be done anytime without going to BTL office or bank. BTL also offers BT Mobile application which includes services like information, provisioning and feedback. BTL is also concerned for conservation of environment. It has launched e-load (paperless recharge) facility which enables customer to get recharge electronically without paper coupon. Due to excellent coverage, social commitment and customer oriented strategies, BTL is having maximum customer base in Bhutan.

Tashi InfoComm Limited (TICL):

Tashi InfoComm Limited was launched in 2006. It is the first and only private sector telecom service provider in Bhutan. TICL launched its GSM service in 2008 under the brand name of Tashi Cell. Vision of TICL is to promote happiness and satisfaction among various stakeholders of the company which includes customers, employees, shareholders and society. TICL also promotes corporate culture in its day to day operations. TICL also supports natural and social upliftment programs under CSR scheme. It supports youth programs, promotion of national game, plantation program and various initiatives for social awareness. TICL believes in relationship building with its customers. Customer Care Centres (CSCs) are available in nearly all town of the country. Some CSCs are even functional in college premises so that students can use various services in campuses itself. TICL is also distributor of samsung phones in Bhutan. Samsung phones can be purchased from TICL offices along with a lot of interactive offers like free talk time and economical internet plans. TICL also promotes its services by offering various customized schemes for existing and new customers. In order to attract more customers company charges different rates for different hours of the day. Timing hours are divided into standard hours, peak hours and economy hours. TICL also offers Closed User Group (CUG) and Friends and Family (FNF) schemes which help customers to communicate with their near and dear at less charges2. TICL also promotes E Recharge for environment safety. It also deals in business of providing standard and premium internet leased line services throughout the country.

Review of Literature:

Customer satisfaction is a widely researched area. Various authors have studied customer satisfaction in different cultures and different countries. Studies have also been carried out in different industries like banking, telecom, food, automobiles, retail and many more. Though there are many researchers who studied elements of marketing mix along with service quality and other parameters. But there are relatively less studies which focus specifically on relationship of marketing mix and customer satisfaction in telecom sector. For example, Srinuan et al. (2013) analyzed impact of different pricing strategies on customer satisfaction in telecom market of Thailand. It was observed that highly complex plans in terms of pricing may lead to confusion among customers. Biggs and Kelly (2006) studied different pricing policies used by broadband service providers across 145 nations and concluded that flat pricing strategy is helpful in expanding broadband sector by increasing customer satisfaction. (Munnukka, 2005) examined price sensitivity of telecom customers in Finland with the help 3000 questionnaires circulated by postal system. Results showed that customer with high and less usage are more sensitive to price changes as compared to moderate usage customers. In a similar study of price and customer satisfaction in Spanish telecom market, Consuegra et al. (2007) concluded that price is important determinant of customer satisfaction. (Chakraborty & Sengupta, 2014) purposed model of customer satisfaction in telecom market by studying Indian public telecom service provider Bharat Sanchar Nigam Limited (BSNL). Quality, value and price were found significant factors in determining customer satisfaction. Various researchers have also studied impact of various determinants of marketing mix on customer satisfaction in telecom sector across globe, but there is nearly no research which study complete marketing

1 http://www.bt.bt/?p=1940

2 http://www.tashicell.com/mobile-services/prepaid-mobile
mix (7P) in relation with customer satisfaction specifically in Bhutan telecom sector. This is the main reason for conducting the present study. The following hypothesis has been proposed to find out the impact of marketing mix on customer satisfaction in telecom sector of Bhutan:

**H0:** There is no impact of marketing mix on customer satisfaction in telecom sector of Bhutan.

Hypothesis thus formulated can be tested for all the constituents of marketing mix, i.e., product, price, place, promotion, people, process and physical evidence. Hence, the following sub-hypotheses have been formulated:

- **H0_1:** There is no impact of product on customer satisfaction in telecom sector of Bhutan.
- **H0_2:** There is no impact of price on customer satisfaction in telecom sector of Bhutan.
- **H0_3:** There is no impact of place on customer satisfaction in telecom sector of Bhutan.
- **H0_4:** There is no impact of promotion on customer satisfaction in telecom sector of Bhutan.
- **H0_5:** There is no impact of people on customer satisfaction in telecom sector of Bhutan.
- **H0_6:** There is no impact of process on customer satisfaction in telecom sector of Bhutan.
- **H0_7:** There is no impact of physical evidence on customer satisfaction in telecom sector of Bhutan.

Kim *et al.* (2004) studied effect of customer satisfaction on loyalty in Korean telecom sector and reported a positive relationship between customer satisfaction and loyalty. In a study of U.S. wireless telecom sector, Eshghi *et al.* (2007) concluded that satisfied customers do not switch even if they have option of getting services from competitors at lesser price. (Khan, 2012) and (Khurshid, 2013) analyzed customer satisfaction and loyalty in telecom sector of Pakistan and reported significant relationship between customer satisfaction and loyalty. Lee *et al.* (2001) investigated impact of switching cost on customer satisfaction and loyalty in mobile sector of France. It was concluded that customers with high switching cost are more loyal as compared to customers with less switching cost. Moreover positive and significant relation between satisfaction and loyalty was also stated by authors. In a similar study of Greek telecom market (Santouridis & Trivellas, 2010) discussed role of service quality and customer satisfaction on loyalty. Service quality was found affecting both customer satisfaction and loyalty and also there was positive relationship between satisfaction and loyalty. Similar positive and significant results between customer satisfaction and loyalty were also reported in different industries like in Banking by Hallowell (1996) and in health care by Mittal and Lassar (1998). So the following hypothesis has been proposed to find out impact of customer satisfaction on loyalty in telecom sector of Bhutan:

**H0:** There is no impact of customer satisfaction on customer loyalty in telecom sector of Bhutan.

There are many studies in telecom sector which compares customer satisfaction of public and private telecom companies. Upadhyaya and Sharma (2012) analyzed customer satisfaction of Indian public and private telecom service providers by studying BSNL and Airtel in Gwalior district of Madhya Pradesh. Customers were found more satisfied by Airtel, a private sector telecom company as compared to BSNL, a public sector company. In similar comparative study of BSNL and Reliance by (Jain, 2013), BSNL was found scoring low on customer satisfaction as compared to Reliance. (Sathish *et al.* 2011) studied all telecom service providers in India and found Airtel as most preferred service provider followed by BSNL, Reliance and Aircel. On the basis of previous studies following hypothesis has been formulated:

**H0:** There is no difference in customer satisfaction across ownership in telecom sector of Bhutan.

The study attempts to analyse the impact of marketing mix and all its constituents on customer satisfaction in Telecom sector of Bhutan. The impact of customer satisfaction on loyalty has also been checked. Further, customer satisfaction of telecom sector of Bhutan has also been checked across ownership, public *vis-à-vis* private telecom service providers.

**Need of the Study:**

There is no doubt that marketing mix, customer satisfaction and customer loyalty are studied in detail all over the world across different industries and different cultures. But there is nearly no study for these variables in context of telecom sector in Bhutan. Here it is to be noted that Bhutan is very unique country in respect of population, geographical spread, growth model, attitude, and belief system of people. Current research tries to fulfil the literature gap by studying marketing mix along with customer satisfaction and loyalty in telecom sector of Bhutan.

**Objective of the Study:**

The study mainly examines the impact of marketing mix and all its constituents on customer satisfaction in context of telecom sector in Bhutan. Study also intend to achieve the following objectives:

1. To study impact of marketing mix on customer satisfaction in telecom sector of Bhutan.
2. To examine impact of customer satisfaction on customer loyalty in telecom sector of Bhutan.
3. To analyze customer satisfaction across ownership (public *vis-à-vis* private) in telecom sector of Bhutan.
Research Methodology:
Following methodology has been used to fulfill research objectives of the study:

Scope of the Study:
The scope of the study is limited to all the telecom service providers in Bhutan. Marketing mix, customer satisfaction and loyalty will be studied for Bhutan Telecom Limited (BTL) and Tashi InfoComm Limited (TICL).

Sample Selection:
Gedu town is taken as sampling area which is situated in Chukha district in south western Bhutan. Gedu is less populated town with population of 4993 as per statistics available for 2012. One of the primary reasons of selection of Gedu town is the presence of Gaeddu College of Business Studies. College has students, teachers, administrative staff and support staff from all over the Bhutan. Gedu also has Bank of Bhutan, Post Office and Royal Insurance Corporation of Bhutan Limited. Sample is collected from all important institutes in and around Gedu town including students, teachers, government, private and corporate employee, shoppers and businessman. The total sample size for the study is 101 respondents which are chosen by random sampling method.

Data Collection for the study:
Data for the study has been collected from primary as well as secondary sources. Primary data has been collected with the help of structured questionnaire. A total of 120 questionnaires were disturbed out of which 108 were recovered and 101 were found complete and suitable for further analysis. Secondary data has been collected from policy documents, circulars and web portal of various public and private telecom authorities of Bhutan.

Key Variables:
Authors have identified and defined variables (marketing mix, customer satisfaction, and customer loyalty) differently. Taking into account the applicability of the identified variables in telecom sector, the variables used in the study are as follows:

Marketing Mix (MMX):
The term marketing mix was coined by (Borden, 1964). As reported by (Singh, 2012), marketing mix consists of different variables which help to take strategic decision for acquiring advantage in the highly competitive market. It is also used to satisfy the customers. In product marketing mix, four Ps (product, price, place, promotion) given by McCarthy (1960) are studied, while in case of service marketing mix, three extended Ps (people, process, physical evidence) given by Booms and Bitner (1981) are also studied along with four already established Ps. Current study has also considered seven Ps of service marketing mix to study it in context of telecom sector in Bhutan.

Customer Satisfaction (CSAT):
Customer satisfaction is defined in many ways by different researchers. Some authors have related it with service quality (Gerpott et al., 2001; (Kim et al., 2004), while others have related it with customer perception about products or services (Anderson et al., 1994). Customer satisfaction is also defined as gap between expectation and actual performance (Hutcheson & Moutinho, 1998). It is also stated as important parameter to predict re purchase intention of customers (Wirtz, 2003). Some researchers favour one item scale for measuring customer satisfaction (Cronin & Taylor, 1992); Gerpott et al., (2001) while others prefer multiple item scale (Lee et al., 2001; (Lai, 2004); Deng et al., 2010). For current study eight item scales is used to measure customer satisfaction.

Customer Loyalty (CLOY):
Customer loyalty is related to bond or attachment felt by customer towards product or service (Abdullah & Hilmi, 2014). A loyal customer is likely to continue with the same service provider in future. Loyalty is also measured from repeat purchase, frequency of purchase and brand preference of customer (Lee et al., 2001). A total of six items are chosen for determining customer loyalty.

Tools for Analysis:
The following tools have been used to analyze the data gathered for the study:
(a) Cronbach alpha to find out the reliability of data.
(b) Kolmogrov-Smirnov test to check normality of data.
(c) Correlation to check the relationship between marketing mix, customer satisfaction, and customer loyalty.
(d) Regression analysis to find out impact of marketing mix on customer satisfaction and impact of customer satisfaction on customer loyalty.
(e) Independent t-test to compare customer satisfaction between public and private telecom service providers.

The data has been analyzed with the help of SPSS 16.0.

Findings of the Study:
According to (Field, 2005), reliability must be checked to validate a questionnaire. Reliability refers to the consistency of results when the research object
has been repeatedly measured. To test the reliability of the survey instrument, i.e., questionnaire, cronbach alpha was calculated. In the present study, scale developed for marketing mix comprised of seven factors, constituting a total of 51 items. The reliability coefficient indicated that the instrument is quite reliable as the alpha coefficient is 0.918 (> 0.60). Reliability of scale for customer satisfaction with eight items comes out to be 0.921 indicating that the instrument developed is reliable. Further, scale for customer loyalty (0.795) constituted of six items is also reliable.

Validity of the instrument was also checked. First, the parameters were verified using a panel of experts. Second, the questionnaire was pretested for general readability and design. Lastly, several doctoral students reviewed the pertinence of items for the scales. The face validity of the survey instrument was established subsequent to the modifications which were made on the basis of the responses received. Further, normality of data has been checked using Kolmogrov-Smirnov test and data came out to be normal.

Correlation Analysis:

Correlation analysis has been applied to check the relationship between marketing mix, customer satisfaction, and customer loyalty. Pearson correlation has been examined among all the variables to measure the association between them. Correlation matrix for the key variables in the analysis has been presented in Table 1. The correlation matrix shows a significant and positive correlation of overall marketing mix (MMX) with all the variables of marketing mix with value ranging from 0.571 to 0.790. The result further shows a significant and highly positive correlation between Product (PRDT) and Price (PRC) at one percent level with magnitude of 0.913. Place (PLC) is significantly positive for Price (PRC) and Process (PRCS) with magnitude of 0.212 and 0.248 respectively at five percent level. All other variables of marketing mix are positively related with each other at one percent significant level with magnitude ranging from 0.271 to 0.594.

Marketing mix (MMX) along with all its constituents is positively significant for satisfaction (CSAT) with value ranging from 0.261 to 0.651 at one percent level. Place (PLC) is insignificant to customer loyalty (CLOY) whereas all other variables are significantly positive for loyalty (CLOY). Satisfaction (CSAT) and Loyalty (CLOY) are positively and significantly related to each other at one percent level.

Overall, there is a positive and significant relationship among all the variables of marketing mix among themselves except Place (PLC). Further, Marketing Mix (MMX), Customer Satisfaction (CSAT) and Customer Loyalty (CLOY) are positively and significantly related to each other. Similar results have been reported by different researchers (Hallowell, 1996); (Mittal & Lassar, 1998); Khan, 2012).

Regression Analysis:

The strength of association between customer satisfaction and marketing mix variables was measured by using a linear regression. The following regression models were used to assess the impact of each of the explanatory variables (PRDT, PRC, PLC, PRMN, PPL, PRCS, PHEV) and Marketing Mix (MMX) on CSAT.

\[
CSAT_i = \beta_0 + \beta_1 PRDT_i + \beta_2 PLC_i + \beta_3 PPL_i + \beta_4 PRCS_i + \beta_5 PHEV_i + \epsilon_i
\]

where,

CSAT = Customer Satisfaction (Dependent Variable for Model 1 and 2)

PRDT, PRC, PLC, PRMN, PPL, PRCS, PHEV= Explanatory Variables for Model 1 (Product, Price, Place, Promotion, People, Process, and Physical Evidence respectively)

MMX = Marketing Mix (Explanatory Variable for Model 2)

\(\beta_1,\beta_2,\ldots,\beta_5\) = coefficients of explanatory variables

\(\epsilon\) = residual term

Multi-colinearity problem is likely to occur when explanatory variables correlate with each other. Consequently, the effect of each variable of the dependent variables becomes difficult to identify. Hence, Tolerance Value (TV) for each explanatory variable was used to measure multi-colinearity. Normally, a set of explanatory variables is highly correlated when the value of tolerance is closer to zero. Model 1 examines the impact of marketing mix variables (Product, Price, Place, Promotion, People, Process, and Physical Evidence) on customer satisfaction. Similarly, Model 2 examines the impact of overall marketing mix on customer satisfaction. Results of regression are presented in Table 2. Column 1 represents the explanatory variables of the study. The results of impact of marketing mix variables (PRDT, PRC, PLC, PRMN, PRCS, PPL, PHEV) on customer satisfaction (CSAT), i.e., Model 1 are presented in column 2 of the table. As evident from the table, the intercept (\(\beta = -0.654; p < 0.10\)) is found to be significantly negative at ten percent level. A significant positive coefficient is reported for PRC (\(\beta_4 = 0.090, p < 0.05\)), PRMN (\(\beta_4 = 0.044, p < 0.05\)), PPL (\(\beta_5 = 0.334, p < 0.01\)), and PRCS (\(\beta_6 = 0.218, p < 0.10\)); while PRDT, PLC, and PHEV are insignificant. R-square for the analysis is 0.470 and F-statistics is significant at one percent level indicating the model fitness. Further, the model explains 43% variation in customer satisfaction. Regression results indicate that price, promotion, people, and process impact customer satisfaction for telecom sector in Bhutan positively and significantly, whereas product, place and physical evidence do not
have any significant impact on customer satisfaction. This leads to the acceptance of the null hypothesis $H_{01a}$, i.e., there is no impact of product on customer satisfaction in telecom sector of Bhutan, along with $H_{01b}$, i.e., there is no impact of price on customer satisfaction in telecom sector of Bhutan. Further, the results indicate that price, promotion, people, and process impact customer satisfaction positively and significantly. Thus, this leads to rejection of null hypothesis $H_{01b}$, i.e., there is no impact of price on customer satisfaction in telecom sector of Bhutan. Results of impact of marketing mix (MMX) on customer satisfaction (CSAT), i.e., Model 2 are shown in column 3. The intercept ($\beta = -0.627; p < 0.10$) is found to be significantly negative at ten percent level. MMX ($\beta = 0.929, p < 0.01$) has reported a positive and significant coefficient for CSAT with high magnitude. $R$-square for the analysis is 0.424 and $F$-statistics is significant at one percent level indicating the model fitness. Further, the model explains 41.9 % variation in customer satisfaction. As results suggest that marketing mix impact customer satisfaction of telecom sector in Bhutan in a positive and significant way, null hypothesis, $H_{01}$, i.e., there is no impact of marketing mix on customer satisfaction in telecom sector of Bhutan, is rejected.

Table 3 presents the results of impact of customer satisfaction (CSAT) on customer loyalty (CLOY). Results indicates that intercept ($\beta = 0.656; p < 0.01$) is positive and significant at one percent level. CSAT ($\beta = 0.754, p < 0.01$) has also reported a positive and significant coefficient for CLOY. Magnitude of coefficient is also high. $R$-square for the analysis is 0.501 and $F$-statistics is significant at one percent level indicating the model fitness. Further, the model explains 49.6 % variation in Customer Loyalty. The results indicate a positive and significant impact of customer satisfaction on loyalty which leads to rejection of null hypothesis $H_{02}$, i.e., there is no impact of customer satisfaction on customer loyalty in telecom sector of Bhutan. The similar results have also been stated previously by Kim et al. (2004), (Santouridis & Trivellas, 2010), and Lee et al. (2001).

To check whether customer satisfaction varies with different service providers, independent sample t-test has been applied. The results are reported in Table 4. $F$ statistic is insignificant which clearly indicates that satisfaction of customers in Bhutan telecom sector does not vary with the change in company, i.e., customer satisfaction is indifferent for Tashi and BTL customers. This leads to the acceptance of null hypothesis $H_{03}$, i.e., there is no difference in customer satisfaction across ownership in telecom sector of Bhutan. The results are in contradiction with Sathish et al. (2011), (Upadhyaya & Sharma, 2012) and (Jain, 2013). The reason for contradictory results may be different economical and cultural setup and availability of limited service providers in Bhutan.

**Implications:**

The study has various practical implications for researchers and academicians. The findings of the study will be helpful to understand relationship among marketing mix, customer satisfaction and loyalty. There are many studies in isolation regarding marketing mix and customer satisfaction and loyalty, but all together these marketing terms are studied very rarely in telecom field. Further, there was a lack of evidence of such research in Bhutan especially in telecom sector. The results of the present study are relevant for various practitioners in telecom sector including managers, directors and staff members. Bhutan telecom sector is still in evolving stage. In order to attain sustainable growth, telecom companies need to focus on customer satisfaction which leads in customer loyalty as indicated in findings of the study. The findings are of great use for policy makers and various high level authorities in developing various plans and policies for telecom sector. Moreover the study can be used by researchers of different industries and different locations throughout the world.

**Conclusion:**

The study analyzed impact of marketing mix on customer satisfaction and impact of customer satisfaction on loyalty in telecom sector of Bhutan. The study has been conducted with the help of both primary and secondary data. Data has been collected with the help of questionnaire filled by various respondents all across the Gedu town in Bhutan. Results indicated significant and positive correlation among different marketing mix variables. Marketing mix, customer satisfaction and customer loyalty are found positively and significantly related to each other. Further, the results indicated that price, promotion, people, and process impact customer satisfaction positively and significantly. The results are consistent with previous studies, for example, (Biggs & Kelly, 2006) and Srinuan et al. (2013) have also reported similar results. Researcher also studied customer satisfaction across ownership in Bhutan telecom sector; result confirmed that satisfaction of customers in Bhutan telecom sector does not change with public and private telecom companies, i.e.,
customer satisfaction is same for both Tashi and BTL customers.

Limitations and Directions for Future Research:

There is no doubt that study has significant findings and implication for different sections of society, but still there are some limitations associated with the study. First of all study could not be done extensively due to various barriers faced by researcher in Bhutan which includes difficult to access different parts of the country and language barrier. Research is carried out only in one town of Bhutan. Therefore researchers, academicians and policy maker should be cautious in using and implementing the results of the study. It would be a better study if data was collected from different districts and town from the country. Future research can be carried out to study marketing mix, customer satisfaction and loyalty in different industries. Comparative research can also be carried out among different nations to find out variation in customer satisfaction and loyalty.

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**TABLES**

### Table 1: Correlation Matrix

| Variables   | PRDT   | PRC   | PLC   | PRMN   | PPL   | PRCS   | PHEV   | MMX   | CSAT   | CLOY   |
|-------------|--------|-------|-------|--------|-------|--------|--------|-------|--------|--------|
| PRDT        | 1.000  |       |       |        |       |        |        |       |        |        |
| PRC         | 0.913*** | 1.000 |       |        |       |        |        |       |        |        |
| PLC         | 0.271*** | 0.212** | 1.000 |        |       |        |        |       |        |        |
| PRMN        | 0.418*** | 0.457*** | 0.322*** | 1.000 |       |        |        |       |        |        |
| PPL         | 0.378*** | 0.317*** | 0.380*** | 0.594*** | 1.000 |        |        |       |        |        |
| PRCS        | 0.304*** | 0.322*** | 0.248*** | 0.455*** | 0.537*** | 1.000 |        |       |        |        |
| PHEV        | 0.331*** | 0.371*** | 0.335*** | 0.529*** | 0.489*** | 0.364*** | 1.000 |       |        |        |
| MMX         | 0.780*** | 0.790*** | 0.571*** | 0.749*** | 0.715*** | 0.617*** | 0.660*** | 1.000 |        |        |
| CSAT        | 0.525*** | 0.512*** | 0.261*** | 0.474*** | 0.566*** | 0.478*** | 0.402*** | 0.651*** | 1.000 |        |
| CLOY        | 0.482*** | 0.474*** | 0.139   | 0.414*** | 0.466*** | 0.342*** | 0.457*** | 0.560*** | 0.708*** | 1.000 |

Note: ***Correlation is significant at the 0.01 level (two-tailed). **Correlation is significant at the 0.05 level (two-tailed). *Correlation is significant at the 0.1 level (two-tailed). Results obtained by using SPSS 16.0.

### Table 2: Regression Results for impact of Marketing Mix and all its components on Customer Satisfaction

| Explanatory Variables | Model 1(a) | Model 1(b) |
|-----------------------|------------|------------|
|                       | CSAT       | CSAT       |
| Intercept             | -0.654*    | -0.627*    |
| PRDT                  | 0.260      |            |
| PRC                   | 0.090**    |            |
| PLC                   | -0.010     |            |
| PRMN                  | 0.044**    |            |
| PPL                   | 0.334***   |            |
| PRCS                  | 0.218*     |            |
| PHEV                  | 0.069      |            |
| MMX                   |            | 0.929***   |
| No. of Observations   | 101        | 101        |
| $R^2$                 | 0.470      | 0.424      |
| Adj. $R^2$            | 0.430      | 0.419      |
| $F$-statistic         | 11.786***  | 72.984***  |

Dependent variable is CSAT.

*** indicates level of significance at 1 percent. The test of significance is two-tailed.

** indicates level of significance at 5 percent. The test of significance is two-tailed.

* indicates level of significance at 10 percent. The test of significance is two-tailed.

Results obtained by using SPSS 16.0.
Table 3: Regression Results for impact of Customer Satisfaction on Customer Loyalty

| Explanatory Variable | Dependent Variable |
|----------------------|-------------------|
|                      | CLOY              |
| Intercept            | 0.656***          |
| CSAT                 | 0.754***          |
| No. of Observations  | 101               |
| $R^2$                | 0.501             |
| Adj. $R^2$           | 0.496             |
| $F$- statistic       | 99.519***         |

Dependent variable is CLOY.

*** indicates level of significance at 1 percent. The test of significance is two-tailed.

Results are obtained by using SPSS 16.0.

Table 4: Results of Independent Sample t-test

| Customer Satisfaction | Levene's Test for Equality of Variances | t-test for Equality of Means |
|-----------------------|-----------------------------------------|------------------------------|
|                       | F           | Sig. | t    | df | Sig. (2-tailed) |
| Equal variances assumed| 1.482       | 0.226| 1.205| 99 | 0.231          |
| Equal variances not assumed| 1.255 | 50.115| 0.215|

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