Effects of Customer Relationship Management (CRM) Strategies on Average Revenue per User (ARPU) in the context of Telecommunication Sector

Rajeev Sharma
Research Scholar D.A.V.V.,
Indore, (M.P.),
India

Dr. Uttam Rao Jagtap
Associate Professor, ShriVaishnav Institute
of Management, Indore, (M.P.),
India

Dr. D. P. Mishra
Founder Director, Shri Vaishnav
Institute of Management, Indore,
(M.P.), India

Abstract

This study helps to determine the right CRM strategies desired by the organization in order to get profit. It builds the association between the economic considerations of the customer with the right choice of CRM strategies. It depicts the impact of various CRM strategies i.e., how much they affect the telecom operator for getting revenue from the customer in terms of choosing plan type and expenditure nature. Our research shows that customer satisfaction and customer loyalty are the most critical factors affecting the customer's choice to encourage monthly expenses. Also, customer satisfaction is only responsible for choosing the type of plan avail to the customer. This finding gives benefits to the telecom sector player to include these finding to develop a CRM system which deliberates the optimum value to the customer. The right type of CRM strategy gives maximum benefit to the company in terms of getting high revenue per user.

Keywords: CRM Strategies, Loyalty, Satisfaction, Telecommunication Sector

Introduction

The Indian telecom sector was developed and saturated, and thus in this competitive environment, corporate want to sustain and keep making a profit from the customers. Such CRM strategies will help achieve the organization's objective. Organization applies CRM as a tool to understand the customer's desires and wants in order to categories the customer and fulfill their needs in order to give a better value proposition. CRM strategy rarely used for the categorization of customers as per the current state of expenditure and current level of profitability. The organization spends a lot of money and effort in order to understand customer needs and choices and build an association with the customer with the help of the CRM tool. Recent research findings from Gartner Inc. indicate that seventy percent of managers have to invest in CRM strategy in the future. There is a sudden shift from mass marketing to one to one relationship marketing.

In Asia, India is having a second-largest share of the population behind China, but India has the largest share of the youth population in Asia. This is the reason behind more expenditure, as disposable income is high among the young population. They have immense knowledge of advancement in technology, which profoundly impacts consumption

and investment pattern in telecom expenditure. The latest advancements have been adopted by smartphones & they replace PCs & laptops as smartphones are more advanced, providing high-speed data in routine life, which makes it challenging for telecom providers to meet customer expectations & benefit organizations too. Also, the consumer agrees to pay a higher price for better services.

Research Objective

The main objective of this study is to identify various CRM strategies that have how much positively associated with the choice of plan type and regular expenditure. This study is helping to analyse telecom service provider & to help an organization to build various CRM strategies to derive maximum value from customer contributing towards the profitability of the company also towards shareholder of the company. In sum, this study makes two significant contributions:

• To identify the dependency of an assessment method of the various telecom service provider on a regular & monthly basis.

• To identify the dependency of an assessment method of the telecom service provider on plan type selection.

Literature Review

Customer Relationship Management

As per Payne & Frow (2005), CRM evolved from the relationship marketing that has objective to creating, developing, and draw out relationships with the targeted customers and achieve maximum customer revenue, which contributes to the organizational profitability as well as shareholder's value. According to Babatunde and Ajayi (2010), CRM is an emerging customer innovation process which majorly focuses on the growth of customers profitably by offering value to the customer to enhance customer relationship. Also, Peppers and Roger (1995) told that the CRM process could be considered as a series of identification, then differentiation, & the interaction between organization and customer and finally customization steps. Similarly, Kotler and Armstrong (2004) suggested that CRM as the inclusive technique of construction and maintaining customers profitably by providing customer value and gave higher satisfaction. Any organization wants to boost its business penetration. This is achieved by enhancing the quality of service.

Customer Value, Satisfaction, Trust, Repurchase intention, Loyalty & Service Quality in Telecommunications-

Customer Value: Prior studies have proven that customer value augments customer loyalty and decreases customer attrition rates (Parasuraman and Grewal, 2000; Sirdeshmukh et al., 2002). Cronin et al. (1997) indicated that the presence of value to models encompassing service quality and sacrifice increased the predictive power of the model to explain re-purchase intentions. Woodruff (1997) described that customer value comprises "both desired and received value," and it "stems from customers' learned perceptions, preferences, and evaluations." On the value perception, customers decide to buy and re-purchase (Holbrook, 1994).

Customer Satisfaction& Service Quality: Parsuraman et al. (1994) identified that service quality affects customer satisfaction. He developed the model called SERVAQUAL Model, which is measures service quality. Parsururaman et al. (1988) SERVAQUAL model; have 22 items instrument were used for valuation of customer perception on service quality. Oliver (1997) stated that service quality could be measured by the gap between the states of expectation and fulfils the expectation state based on customer judgment. Gerpott et al. (2001) find that customer satisfaction is the overall reflective Judgement about how faraway customer expectations compared to the service have been fulfilled. A satisfied customer helps the company to sustain in the cut-throat business environment, and loyal customer also contributes to profitability.
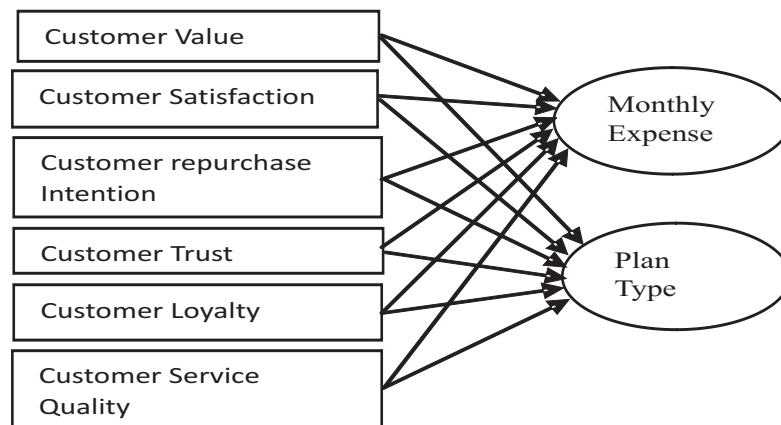
Customer Re-Purchase Intention: Repurchase intention is the process includes individual purchasing goods/service from the same company (Hellier et al. 2003). Some prior studies give evidence that higher customer satisfaction leads to higher repurchase intention (Lee et al., 2009), but not necessarily valid in this new paradigm. When the customer has the intention to purchase the same brand, goods, or services again called repurchase intention (Goh et al. 2016). Repurchase intention is primarily based on past customer experience (Kuo et al. 2009). This study focused on mainly Average revenue per user by repurchase intention have in the mind of the customer. This is the subjective judgments that may play a crucial role in building the relationship between telecom operators and consumers. Loyal customers tend to repurchase more often and spend more money over time (Ganesh et al., 2000; Soderland, 2006; Selin et al., 1987).

Customer Trust: Morgan and Hunt (1994) believe that trust plays a significant role in affecting the relationship. Anderson and Narus (1990) focus that trust build when both parties feel on each other, positive outcome received. To trust the brand, the customer gets positive, perceived quality. When customers trust a brand, this may be transformed into a positive buying intention of the brand (Lau and Lee, 1999). Previous research shows that have a positive relationship between trust in an organization and

customer loyalty (Lau and Lee, 1999; Chaudhuri and Holbrook, 2001).

Customer Loyalty: There are two forms of loyalty fist is behavioral, and another is attitudinal loyalty. Behavioral loyal customers maybe not loyal, customers repeatedly purchase product or service without having any intention. This may occur habit, convenience, or availability of only a specific brand (Day, 1969; Dick and Basu, 1994). Nevertheless, on the counterpart, attitudinal loyalty is expressed to repurchases, positive word of mouth, referrals to others (Rundle Thiele, 2005; Zeithamal et al. 1996). This is most useful for the organization to enhance the average revenue per user. Toyese (2014) find in their research that among all the strategies adopted for higher loyalty in telecommunication, CRM strategies have a significant impact and more focused on customer acquisition and retention rates. (Isqaqa, 2012) study in the Pakistan telecommunication industry demonstrates that service quality has a high impact on loyalty by the customers.

Research Framework

Research Methodology

Research purpose

Nowadays, in the telecommunication sector, with continuous changes, & with more involvement of government authorities, new technological innovations like 3G, 4G, globalization, privatization, de-regularization of the market leads to maturity level in this sector. India is ready for the 5G spectrum, and nearly after 2020, 5G technology launched in India.

In today's business environment, the telecommunication service provider gives different sorts of plans in order to attract customers so that monthly expenditure will grow, contributing to organizational profit. The main objective of this research is to analyze underlying factors that affect user selection plans; also their monthly expenses, thus more concentrated towards developing CRM strategies.

Hypothesis

Dependence of variable of the telecom service provider on the Monthly Expense & Plan Type

H1: Customer value is positively associated with Monthly Expense & Plan Type in Telecom Services.

H2: Customer satisfaction is positively associated with Monthly Expense & Plan Type in Telecom Services.

H3: Re-purchase Intention is positively associated with Monthly Expense& Plan Type in Telecom Services.

H4: Customer Trust is positively associated with Monthly Expense & Plan Type in Telecom Services.

H5: Customer Loyalty is positively associated with

Monthly Expense & Plan Type in Telecom Services.

H6: Service Quality is positively associated with Monthly Expense & Plan Type in Telecom Services.

Research Methods

Research methodology has both a conclusive & exploratory phase. The qualitative phase of research comprises of in-depth interviews & Focused Group Discussion with employees & customers of the telecom service provider in the field. Also, a definite study followed this through a questionnaire surveyed. Results of the research analysed by using tools like coefficient Cronbach's α for reliability, Pearson's correlation, and regression analysis techniques.

Sampling& data collection procedure

Population: it includes all mobile subscribers in India comprises of Pre-paid, Post-paid & fixed line subscribers.

Sampling Method: Random sampling was used

Sample size: In total 750 participants are selected as respondent for the survey out of which 500 participants give response for all questions of survey.

Instrument development: During the process of questionnaire making, we have used literature from previous studies, & also research-based tools like Likert scale, which measures service quality, loyalty, trust satisfaction, values, & repurchase intention. The conclusion of the research is based on a five-point Likert scale from strongly disagree to strongly agree (1 to 5) are enlisted and presented in the questionnaire after dropping few statements and carrying out a pilot study. Finally, in this research, thirty-five statements included.

Sr. No.	1	2	3	4	5	6
Variable	Value	Satisfaction	Re-Purchase Intention	Trust	Loyalty	Service Quality
No. of Items	5	6	3	5	5	11
Cronbach's α	0.801	0.732	0.471	0.783	0.741	0.872

Analysis of Results

The below Table 1 depicts statistical data regarding relationship between independent & dependent variables. Below given table shows R squared, t, beta value, Sig, Multiple R & Simple R. R squared denotes the proportion of variation in the variable, which range from 0 to 1. "t" in the table indicates the statistics to determine the relative importance of every variable given in the table, also greater the t-value more importance of it increases in the table. The beta value is a measure of the affect of the predictor variable on the dependent (criterion) variable. Multiple R denotes the strength with greater value depicting how strong is the association. Simple R displays the correlation in between different variables, ranging from -1 to 1. Similarly sign R shows positive or negative relationship between variables.

Table 1: Regression Statistics

			(Constant)	Value	Satisfaction	Re-Purchase intention	Trust	Loyalty	Service Quality
Model-I	Dependent Variable: Monthly Expense	.	2.603	.006	.148	.036	.092	.137	.108
		t	8.562	.087	2.309	.703	1.420	2.112	1.796
		Sig	.000	.930	.021	.482	.156	.035	.073
Model-II	Dependent Variable: Plan Type	β	3.954	.084	.232	.021	.085	.102	.028
		t	12.959	1.192	3.601	.412	1.311	1.560	.467
		Sig	0.000	.234	.000	.680	.191	.119	.641
Collinearity Statistics		Tolerance		.716	.815	.770	.671	.743	.854
		VIF		1.397	1.227	1.298	1.490	1.346	1.170

Various six types of assessment methods are derived called independent variables; on the other hand, Monthly Expenses and plan type are dependent variables. Through this study, a regression analysis is done for understanding the impact of Assessment measures of Telecom service providers on a monthly basis. By analyzing research result, customer satisfaction & customer loyalty can be termed as important assessment measure which depends upon customer's decision regarding monthly expenses also, customer satisfaction is another impact assessment

measure to decide on consumer's plan type. The result was derived and the equation which was formulated is as follows:

Regression model for monthly expense

Monthly Expense= 2.603 + 0.006*V + 0. 148*SAT +0.036*RPI+ 0.137*LOY+0.092*T +0.108*SQ

Regression model for Plan type

Plan Type= 3.954 +0.084*V +0. 232*SAT+0.021*RPI+ 0.102*LOY +0.085*T+ 0.028*SQ

Table 2: Results of Regression

Dependent Variable	Monthly Expense	Plan Type
Factors	Satisfaction & Loyalty	Satisfaction
R Values	Simple R-0.381 Multiple R- 0.075 R Square- 0.079	Simple R-0.484 Multiple R- 0.089 R Square- 0.092

Table 2 represents 0.381 & 0.79 values of R & R square for Monthly expense. As per its customer loyalty & customer satisfaction has 38.1% of influence rate on Monthly expenses, remaining CRM Strategies have less effect on Monthly expenses. Other factors, such as Trust, Service quality, Customer Value, Re-purchase Intention, did not have much role to play in Monthly expenses. Thus Hypothesis H2 and H5 are accepted. The figure given below defines the relationship of Monthly Expense with the Assessment measures of Telecom Service Providers.

0.484 & 0.092 are the values of R & R square for Plan type. As per it, customer satisfaction has a 48.4% influence rate on Plan Type, remaining CRM strategies have less effect on the Plan Type. Other factors such as Customer Value, Re-Purchase Intention, Service Quality, Trust, and Customer Loyalty do not have much associated, which affects the selection of Plan Type. Thus Hypothesis H5 is accepted. The figure below explains the relationship of preferred Plan Type with the variable of Telecom Service Providers.

Figure 1: Regression Model

Discussion And Conclusion

The primary concern for this research is to determine the economic factor affecting Average revenue per user in terms of expenditure & plan type in association with CRM strategies. Telecom companies that want to have repurchase intention & get more profit than their CRM strategies must be more focused on customer loyalty & customer satisfaction leads to tremendous growth in average revenue per user. Conclusion of this research decides on customer loyalty & customer satisfaction which is essential for monthly expenses that means if customer is satisfied and loyal then customer stretch his budget on the monthly expense in telecom service whereas on other hand customer satisfaction is one of the factors of CRM affecting plan type that means if customer is more satisfied he/she would prefer long term plan which contributes in organization profit and enhance average revenue per user.

Limitation And Future Research

There is a limitation of the sample size for any research. In future research work, more variety & also a large sample size can be taken, but for this study, the small sample size is taken. Another limitation is our study focused on the telecommunication sector, which tends to more service-oriented. So maybe other service industries do not make applicable to these findings. The third limitation also, we take only six CRM strategies; in further researches, various other factors can be taken, which affects CRM strategy.

Implications of The Research Work

The findings of the study have important implications for managers of the telecommunication sector, especially in terms of the quality of services that could be provided; and the significant influence that satisfaction has on the behavioral re-purchase intentions of their customers. The benefits of this research can be availed by the telecom service provider on priority than academicians & practitioners also take benefit of it. This research work helps to determine which type of CRM strategy can be used for influencing customer re-purchase intention regarding the selection of plan type or monthly expenses. Telecom service providers can best have used it for determining customer choices & augment average revenue per user.

References

Anderson, J.C. and Narus, J. A. (1990), "A model of distributor firm and manufacturer firm working partnerships", Journal of Marketing, Vol. 54, January, pp. 42-58.

Babatunde B.O and E.O. Ajayi, 2010. "The Relevance of Customer Relationship Management in the Nigerian Banking Sector (A case study of Intercontinental Bank Plc)". Information management 12; pp. 98-108.

Chaudhri, A. and Holbrook, M.B. (2001), "The chain effects from brand trust and brand affect to brand performance: the role of brand loyalty", Journal of Marketing, Vol. 65, April, pp. 31-93.

Cronin, J.J., Brady, M.K., Brand, R.R., Hightower, R. Jr and Shemwell, D.J. (1997), "A cross-sectional test of the effect and conceptualization of service value", Journal of services Marketing, Vol. 11 No. 6, pp. 375-391.

Day, G.S. (1969), "A two-dimensional concept of brand loyalty", Journal of Advertising Research, Vol. 9 No. 3, pp. 29-35.

Dick, A.S. and Basu, K. (1994), "Customer loyalty: toward an integrated conceptual framework", Journal of the Academy of Marketing Science, Vol. 22 No. 2, pp. 99-113.

Don Peppers, Martha Rogers, (1995) "A new marketing paradigm: Share of customer, not market share", Planning Review, Vol. 23 Issue: 2, pp.14-18.

Ganesh, J., Arnold, M. and Reynolds, K. (2000), "Understanding the customer base of service providers: an examination of the differences between switchers and stayers", Journal of Marketing, Vol. 64 No. 3, pp. 65-87.

Gerpott, T., Rams, W. and Schindler, A (2001), "Customer retention, loyalty and satisfaction in the German mobile cellular telecommunications market", Telecommunication policy, Vol. 25 No.4, pp. 249-269.

Hellier, P.K., Geursen, G.M., Carr, R.A. and Rickard, J.A. (2003), "Customer repurchase intention: ageneral structural equation model", European Journal of Marketing, Vol. 37 Nos 11/12, pp. 1762-1800.

Isqaqa, M.I. (2012), "Perceived value, service quality, corporate image and customer loyalty: empirical assessment from Pakistan", Serbian journal of Management, Vol. 7 No. 1, pp. 25-36.

Kotler, P. and Armstrong, G. (2004), Principles of Marketing, 10th ed., Prentice-Hall, Upper Saddle River, NJ.

Kuo, Y.F., Wu, C.M. and Deng, W.J. (2009), "The relationships among service quality, perceived value, customer satisfaction, and post-purchase intention in mobile value-added services",

Computers in Human Behavior, Vol. 25 No. 4, pp. 887-896.

Lau, J. and Lee, J. (1999) "The impact of switching costs on the customer satisfaction-loyalty link: mobile phone service in France", Journal of service marketing, Vol. 15 No. 1, pp. 35-48.

Lee, H., Choi, S.-Y. and Kang, Y.-S. (2009), "Formation of e-satisfaction and repurchase intention:moderating roles of computer self-efficacy and computer anxiety", Expert Systems with Applications: An International Journal, Vol. 36 No. 4, pp. 7848-7859.

Morgan, R.M. and Hunt, S.D. (1994), "The commitment trust theory of relationship marketing", Journal of marketing, Vol. 58, July, pp. 20-38.

Oliver, R.L. (1997), satisfaction: "A Behavioural Perspective on the consumer", McGraw Hill, New York, NY.

Rundle-Thiele, S. (2005), "Elaborating customer loyalty: exploring loyalty to wine retailers", Journal of Retailing and Consumer Services, Vol. 12 No. 5, pp. 333-344.

Toyese, A. y. (2014), "Strategies employed by telecommunication firms to promote customer loyalty", Journal of Business and Retail Management Research, Vol. 8 No. 2, pp. 1-7.

Payne, A., &Frow, P. (2005). "A strategic framework for customer relationship management". Journal of Marketing, 69(4), 167-176.

Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1994), "Reassessment of expectations as a comparison standard in measuring service quality: implications for future research", Journal of

Marketing, Vol. 58, No. 1, pp. 111-124.

Parasuraman, A. and Grewal, D. (2000), "Serving customers and consumers effectively in the twenty-first century: a conceptual framework and overview", Journal of Academy of Marketing Science, Vol. 28 No. 1, pp. 9-16.

Selin, S., Howard, D.R., Udd, E. and Cable, T. (1987), "An analysis of consumer loyalty to

municipal recreation programs", Leisure Sciences, Vol. 10, pp. 217-23.

Sirdeshmukh, D., Singh, J. and Sabol, B. (2002), "Consumer trust, value, and loyalty in relational exchanges", Journal of Marketing, Vol. 66 No. 1, pp. 15-37.

Soderlund, M. (2006), "Measuring customer loyalty with multi item scales: a case for caution",International Journal of Service Industry Management, Vol. 17 No. 1, pp. 76-98.

Woodruff, R. (1997), "Customer value: the next source for competitive advantage", Journal of Academy of Marketing Science, Vol. 25 No. 2, pp. 139-153.

Zeithaml, V.A., Berry, L.L. and Parasuraman, A. (1996), "The behavioural consequences of service quality", Journal of Marketing, Vol. 60 No. 2, pp. 31-46.