

The Impact of e-CRM on Loyalty and Retention of Telecom Customers in Ahmedabad City**Prof. Suraj M. Shah¹**Assistant Professor,
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Centre for Management Studies (Faculty of Management),
Ganpat University, Gujarat**ABSTRACT**

Customers are the main driver for an organization's success and survival, organizations seek to meet customers' demands and expectations to gain profit and competitive advantage. Through e-CRM organizations orientation aim to serve customers electronically, thus reducing costs and providing effective, efficient and real times services to enhance customer retention and loyalty. The churn phenomenon is extremely acute in the telecom industry with customers joining and quitting in short periods. This research aims to study the impact of electronic customer relationship management in creating loyalty and retention of customers in Indian mobile telecommunication sector. The type of research was exploratory and conclusive descriptive research, i.e. data analysis was quantitative and tests the specific hypothesis. Single cross sectional research design means one sample of respondent has been drawn from the target population and information has been obtained from this sample once. Survey method with a structured questionnaire using likert scale given to the sample of population and designed to elicit specific information from the respondents. Data was collected from existing telecom service consumers in Ahmedabad city. The data was analyzed using Chi Square, Multiple regression and correlation with the help of SPSS software.

Keywords: e-CRM, Customer Loyalty, Customer Retention, Telecom Service Consumers.

1.0 Introduction:

The shift from a product-focused business strategy to a customer-focused one has been a major business transformation agent. Companies are investing in technologies that enable a customer-focused strategy. Nowadays, customers are more demanding, more knowledgeable, and require more attention. Increasingly, firms are shifting their focus to the customer, raising the importance of customer relationship management (CRM). Customer Relationship Management (CRM) is a comprehensive business and marketing strategy that integrates technology, process, and all business activities around the customer. CRM is a way to identify, acquire, and retain customers, helps companies maximize the value of every customer interaction and thus improve corporate performance. With the rapid growth of electronic business and rise of Internet-based services, the internet has provided a platform to deliver CRM functions on the Web (e-CRM) which is focused on web-based interaction between companies and their customers. eCRM, or electronic Customer Relationship Management, is an integrated online sales, marketing and service strategy that is used to identify, attract and retain customers by creating and enhancing customer interaction through innovative technology. Through e-CRM

organizations aim to serve customers electronically, thus reducing costs and providing effective, efficient and real times services to enhance customer retention and loyalty.

The Indian telecom sector has been met with competitive pressure such as new technologies and value added services through continuous innovations. Though many service industries are affected by the churn phenomenon, the problem is acute in the telecom industry with customers joining and quitting in short periods, thus affecting their bottom line. The ultimate goal of CRM in telecom sector is to provide a comprehensive suite of software applications that enable them to increase revenue, productivity and customer satisfaction by managing, synchronizing and coordinating customer interactions across all touch points including web, customer contact centres, field organization and distribution channels.

2.0 Literature review:

Dash and Mishra (2012) studied the impact of CRM on insurance sector, and found brand popularity, innovative product delivery, quick and honest response, Building relationship, financial security as the important factors for CRM in the sector.

In a study done on e-CRM in the banking sector in India, Dhingra and Dhingra (2013) found that Customer interaction and satisfaction, Convenience, speed and accuracy of transactions, availability of latest information technology are some advantages provided by banks using e-CRM.

Boris Milovic (2012) in his study on e-CRM in hotel industry, found that creation and maintenance of loyalty requires that companies to understand that Internet is customer-oriented environment where the customer should be regarded less as a target and more as a partner. Internet reduces costs, extends the scope of the market and increases quality of services. It also increases the value of customer relationships at certain levels, such as access, convenience and low cost.

Rabbai (2012) found that there is an impact of Electronic Customer Relationship Management (E-CRM) according to (Information Quality, Customer Service Quality, Personalization level and Fulfillment) on Customer Loyalty according to (Behavioral and Attitudinal Loyalty) in “Zain” Company.

Ahmad and Chowdhury, (2012) studied customers’ perception of value from e-CRM features on airline e ticketing Websites and found that site customization, site information features were most disliked features by customers. Complaining ability and feed-back channels, FAQs, loyalty programs were some features required by customers.

Irani and Ali (2009) proposed that Pre-Purchase/eCRM is constructed from three independent variables: Web-Site Design, Search Capabilities, and Loyalty Programme. Payment Methods, and Privacy/security are proposed as the independent variables of At-Purchase/eCRM, while Post-Purchase/eCRM is constructed from three independent variables: Order tracking, on time delivery and after sale service.

Miremadi and Aminilari, (2012) surveyed 200 customers who use Iranian mobile telecom operators’ services to find the relationship between e-CRM effective factors and loyalty and retention factors. They concluded that strategic priority should be given to tangibility, scalability and flexibility that are important factors to construct the customer loyalty in Iranian mobile telecom industry whereas for implementing the customer retention consideration, priority should be given to personal compatibility, professional competence, frontline employees, quality of services and pricing policies attractions.

3.0 RESEARCH METHODOLOGY:

3.1 RESEARCH OBJECTIVES

Objectives of research:

1. To study the impact of e-CRM on Loyalty and Retention of Telecom Customers in Ahmedabad City.

2. To study out telecom service consumer's perception on e-CRM, customers Retention and loyalty components.
3. To study the relationship of e- CRM with customer retention and loyalty.

3.2 RESEARCH DESIGN:

The type of research was exploratory and conclusive descriptive research, i.e. data analysis was quantitative and tests the specific hypothesis. Single cross sectional research design means one sample of respondent has been drawn from the target population and information has been obtained from this sample once. Survey method with a structured questionnaire using likert scale given to the sample of population and designed to elicit specific information from the respondents. Data was collected from existing telecom services consumers in Ahmedabad city of the Gujarat state.

3.3 SAMPLE DESIGN:

Target populations were samples, a subgroups of a population selected for the study. Sample element would be telecom services consumers in Ahmedabad city of the Gujarat state. Non probability with convenience sampling was used.

4.0 RESEARCH ANALYSIS:

Sr. No	Demographic profile of Respondents	Attributes	Frequency	Percentage
1.	Age	Below 25	138	92.0
		26-35	8	5.3
		36-45	2	1.3
		Above 46	2	1.3
2.	Gender	Male	99	66.0
		Female	51	34.0
3.	Occupation	Students	124	82.7
		Professionals	3	2.0
		Salaried employees	16	10.7
		Self employed	7	4.7
4.	Income (Monthly)	Less than 10,000	88	58.7
		10,001 to 20,000	21	14.0
		20,001 to 30,000	18	12.0
		30,001 to 40,000	8	5.3
		Above 40,000	15	10.0
5.	Education Qualification	Undergraduate	10	6.7
		Graduate	97	64.7
		Post graduate	43	28.7
6.	Marital Status	Married	20	13.3
		Unmarried	130	86.7
7.	Mobile Telecom Operators services used.	Vodafone	68	45.3
		Airtel	31	20.7
		Tata Docomo	8	5.3
		Uninor	11	7.3
		Videocon	3	2.0
		BSNL	6	4.0
		Reliance	4	2.7
8.	Types of SIM card Used.	Pre paid	125	83.3
		Post paid	25	16.7

4.1 RELIABILITY TEST:

Sr. No.	Components:	Cronbach's Alpha Value	Result
1.	Customer Loyalty	0.632	Accepted
2.	Retention of Customer	0.812	Accepted
3.	e-CRM	0.773	Accepted

4.2 CHI-SQUARE TEST:

Sr. No.	ALTERNATE HYPOTHESIS	P VALUE	RESULT
H1	There is association between Age and Mobile Telecom Operators services used.	0.008	Accepted
H2	There is association between Age and Types of SIM card Used.	0.002	Accepted
H3	There is association between Gender and Mobile Telecom Operators services used.	0.000	Accepted
H4	There is association between Occupations and Types of SIM card Used.	0.000	Accepted
H5	There is association between Monthly Income and Mobile Telecom Operators services used.	0.003	Accepted
H6	There is association between Monthly Income and Types of SIM card Used.	0.017	Accepted
H7	There is association between Educational Qualifications and Mobile Telecom Operators services used.	0.163	Rejected
H8	There is association between Educational Qualifications and Types of SIM card Used.	0.671	Rejected
H9	There is association between Marital Status and Mobile Telecom Operators services used.	0.163	Rejected
H10	There is association between Marital Status and Types of SIM card Used.	0.436	Rejected

RESULT ANALYSIS:

There is an association between Age, Gender, Monthly income and Mobile Telecom Operators services used. There is association between Age, Occupations, Monthly Income and Types of SIM card Used. There is no association between Educational qualifications, Marital Status and Mobile Telecom Operators services used. There is no association between Educational qualifications, Marital Status and Types of SIM card Used.

4.3 MEAN ANALYSIS:

Descriptive Statistics	
CUSTOMER LOYALTY	Mean
Intro of New Technology	4.0000
Responsiveness	3.9933
Value Delivery of service	3.8933
Ability to Offer Solutions	3.8800
Price	3.8733

INTERPRETATION:

Intros of New Technology, Responsiveness, Value Delivery of service, Ability to Offer Solutions and Price have high mean values and these are important variable for telecom service customers.

Descriptive Statistics	
RETENTION CUSTOMER	Mean
Consistency in Providing Good Quality Service	4.0733
Performance	4.0067
Comfortable Relationship	3.9867
Terms of Price	3.9600
Service Security	3.9267
Calling Rate	3.8933
Quick Response to Consumers Complaints	3.8933

INTERPRETATION:

Retention of customer variables like Consistency in Providing Performance, Responsiveness, Comfortable Relationship, Terms of Price and Service Security, Calling Rate and Quick Response to Consumers Complaints have high mean values and these are important variable for telecom service customers.

Descriptive Statistics	
e-CRM	Mean
Mobile use	4.2067
e-mail	4.1333
Social network use(FB/Twitter/WhatsApp)	3.9733
Web/ Internet	3.9733
Chatting	3.9667

INTERPRETATION:

e-CRM variables like Mobile use, e-mail, Social network use(FB/Twitter/WhatsApp), Web/ Internet and Chatting have high mean values and these are important variable for telecom service customers.

4.4 MULTIPLE REGRESSIONS:

ANOVA^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.703	2	5.852	15.557	.000 ^a
	Residual	55.292	147	.376		
	Total	66.995	149			
a. Predictors: (Constant), CL_SUMMATED, RC_SUMMATED						
b. Dependent Variable: ERCM_SUMMATED						

Coefficients ^a											
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	1.292	.483		2.673	.008					
	RC_SUMMA TED	.453	.119	.320	3.805	.000	.392	.299	.285	.796	1.256
	CL_SUMMA TED	.231	.120	.161	1.920	.050	.306	.156	.144	.796	1.256
a. Dependent Variable: ERCM_SUMMATED											

4.4.1 Hypothesis for t test:

Ho1: There is no significant impact of e-CRM on customer loyalty in Ahmedabad City.

Ho2: There is no significant impact of e-CRM on Retention of Customer in Ahmedabad City.

Interpretation of P value of t test:

From above table, There is a significant impact of e-CRM on customer loyalty and customer retention in Ahmedabad City. P values are 0.00 and 0.05 respectively.

4.4.2 Simple Linear Regression Equation:

e-CRM $Y=1.292+0.453X_1+.231X_2$ where X_1 is Customer Loyalty, X_2 is Retention of Customer.

4.4.3 Interpretation of equation:

From Above equation, X_1 is Customer Loyalty, X_2 is Retention of Customer have positive impact on e-CRM.

4.4.4 Standardized Coefficient:

To compare the different independent variables standardized coefficient value is used. 'Standardized' means these values for each of the different variables have been converted to the same scale so independent variables can compare. In this case, Customer Loyalty and Retention of Customer variables have unique contribution to explaining the dependent variable, e-CRM.

4.4.5 Multicollinearity:

There is no presence of multicollinearity because VIF value for all independent variables is less than 10 and tolerance value for all independent variables is more than 0.1.

4.5 PEARSON CORRELATION:

Correlations				
		RC_SUMMATED	CL_SUMMATED	ECRM_SUMMATED
RC_SUMMATED	Pearson Correlation	1	.472**	.405**
	Sig. (2-tailed)		.000	.000
	Sum of Squares and Cross-products	33.822	15.751	18.265
	Covariance	.227	.106	.123
	N	150	150	150
CL_SUMMATED	Pearson Correlation	.472**	1	.290**
	Sig. (2-tailed)	.000		.000
	Sum of Squares and Cross-products	15.751	32.864	12.902
	Covariance	.106	.221	.087
	N	150	150	150
ECRM_SUMMATED	Pearson Correlation	.405**	.290**	1
	Sig. (2-tailed)	.000	.000	
	Sum of Squares and Cross-products	18.265	12.902	60.054
	Covariance	.123	.087	.403
	N	150	150	150
**. Correlation is significant at the 0.01 level (2-tailed).				

HYPOTHESIS FOR CORRELATION:

H1: There is a positive correlation between e-CRM and retention of customer.

H2: There is a positive correlation between e-CRM and Customer Loyalty.

H3: There is a positive correlation between Customer Loyalty and retention of customer.

INTERPRETATION:

Research shows that there is a positive correlation between e-CRM and retention of customer, e-CRM and customer Loyalty, customer Loyalty and retention of customer. P values are 0.000 at 99% significance level.

5.0 FINDINGS OF THE STUDY:

1. Research shows that 66% of the telecom service consumers are male & remaining 34% of them are female.
2. 92% of the telecom service consumers fall below 25 year age groups and remaining 8% of them fall between age group of 26-60 year.
3. 82.7% of the telecom service consumers are students, 10.7% of them are salaried employees and remaining 4.7% of the telecom service consumers are considered as self employed.
4. 64.7% of the telecom service consumers are Graduate, 28.7% of them are post graduate and remaining 6.7% of telecom service consumers are considered as undergraduate.
5. 58.7% of the telecom service consumers fall less than Rs.10, 000 monthly income groups, 14.0% of the telecom service consumers fall between Rs.10,000 to 20,000 monthly income groups, 12.0% of the telecom service consumers fall between Rs.20,001 to 30,000 monthly income groups, and remaining 10% of the telecom service consumers fall above 40,000 Rs. monthly income groups.

6. Research shows that 86.7% of the telecom services consumers are considered as unmarried and remaining 13.3% of the telecom services consumers are married.
7. 45.3% of the telecom services consumers used Vodafone mobile telecom services, 20.7% of the telecom services consumers used Airtel mobile telecom services, 12.7% of the telecom services consumers used Idea mobile telecom services and remaining 23.3% of the telecom services consumers used Reliance, Uninor, BSNL and Videocon mobile telecom services.
8. 83.3% of the telecom services consumers used pre paid Sim card and 16.7% of the telecom services consumers used post paid mobile telecom services.
9. Cronbach's alpha values for customer loyalty are 0.632, retention of Customer is 0.812 and e-CRM is 0.773, so, all are above 0.6, all data reliable.
10. There is an association between Age, Gender, Monthly income and Mobile Telecom Operators services used. There is association between Age, Occupations, Monthly Income and Types of SIM card Used. There is no association between Educational qualifications, Marital Status and Mobile Telecom Operators services used. There is no association between Educational qualifications, Marital Status and Types of SIM card Used.
11. Intros of New Technology, Responsiveness, Value Delivery of service, Ability to Offer Solutions and Price have high mean values and these are important variable for telecom service customers.
12. Retention of customer variables like Consistency in Providing Performance, Responsiveness, Comfortable Relationship, Terms of Price and Service Security, Calling Rate and Quick Response to Consumers Complaints have high mean values and these are important variable for telecom service customers.
13. e-CRM variables like Mobile use, e-mail, Social network use(FB/Twitter/WhatsApp), Web/ Internet and Chatting have high mean values and these are important variable for telecom service customers.
14. There is a significant impact of e-CRM on customer loyalty and customer retention in Ahmedabad City. P values are 0.00 and 0.05 respectively.
15. $e\text{-CRM } Y = 1.292 + 0.453X_1 + 0.231X_2$ where X_1 is Customer Loyalty, X_2 is Retention of Customer. From Above equation, X_1 is Customer Loyalty, X_2 is Retention of Customer have positive impact on e-CRM.
16. Significance P value of F test is 0.000, which is less than 0.05 so, the regression model is significant.
17. There is a positive co relationship between e CRM and retention of customer and Customer Loyalty.

6.0 MANAGERIAL IMPLICATIONS AND CONCLUSION:

1. Mobile telecom service provider company must focus on the various important variables like Intros of New Technology, Responsiveness, Value Delivery of service, Ability to Offer Solutions and Price have high mean values and these are important variable for telecom service customers.
2. Retention of customer variables like Consistency in Providing Performance, Responsiveness, Comfortable Relationship, Terms of Price and Service Security, Calling Rate and Quick Response to Consumers Complaints have high mean values and these are important variable for telecom service customers.
3. e-CRM variables like Mobile use, e-mail, Social network use(FB/Twitter/WhatsApp), Web/ Internet and Chatting have high mean values and these are important variable for telecom service customers.
4. There is an association between Age, Gender, Monthly income and Mobile Telecom Operators services used. There is association between Age, Occupations, Monthly Income and Types of SIM card Used. So, Telecom Companies also give focus on age, gender and income of the telecom services consumers.

5. Telecom service providers also focus on e-CRM component, because our research shows that e –CRM is significantly correlated with Customer loyalty and retention of mobile telecom consumers.

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