The Impact of Customer Relationship Management (CRM) Practices on Customer Retention and the Mediating Effect of Customer Satisfaction

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ABSTRACT

CRM is built around the ideology of relational exchanges. It refers to all marketing activities directed towards establishing, developing and maintaining successful relational exchanges. Its objective is to attract, maintain and enhance customer relationships with existing and potential customers. It evolved from the concept of database marketing to relationship marketing to present form of CRM. CRM is implemented in wide components of business like customer service, involvement of customers in the business, personalization, communication and rewards etc. It is applicable at the enterprise level to direct all activities of the firm towards the customer. CRM implementation at the departmental level was less successful but implementation at the enterprise level is more successful. Competition and globalization has made CRM as one of the mandatory components of business. Firms can survive and sustain by creating and keeping valuable customers. It is possible if the firm delivers value at every customer interaction and it can be done easily if the firms know and understand their customers well. CRM helps firms to understand their customer and take précised decision. Hence it is a necessity for the existence of a business.
CRM also helps in managing customer life cycle that is acquisition; satisfaction, retention and development of customers. Customer life cycle can be managed by identifying and adopting the most suitable CRM practices. Managing customer life cycle by identifying and adopting the most suiting CRM practices is the key objective of CRM. This article tries to see the effect of CRM practices of the firm on customer retention. This study also tries to see the mediating effect of customer's satisfaction.

Keywords: CRM, CRM practices, Customer satisfaction, customer retention

INTRODUCTION:

CRM is a concept of the last decade. It originated as a database management where the data used to be compiled in spreadsheets and retrieved for selling purposes only. With the need of time it evolved into relationship marketing in the last decades of the 20th century where basic functions like data mining where performed. Finally it took the shape of today's CRM the ultimate form of customer centrism. It has become the necessity of the successful business and a competitive advantage. CRM today is used by the big business houses though it is applicable in almost all forms of business. CRM at this stage has neither brought miraculous success nor miserable failure. But it is also true that, CRM applied rightly will bring miracles. CRM applied at the departmental levels has brought mixed results. And CRM applied at the organizational level has brought the biggest success. CRM should be applied at the enterprise level with the right mix of practices. This article tries to understand the effect of CRM practices on CRM outcomes like customer retention and also tries to see the interaction of customer satisfaction.

LITERATURE REVIEW:

CRM is designed for optimizing profit, revenue and customer satisfaction. It aligns the enterprise around the customer segments. It develops customer satisfying behaviors by linking the processes from suppliers to customers (Gartner, 2003). CRM is for acquiring, satisfying and retaining customers. CRM thrives for providing satisfaction and delight at each level of customer interaction (Pahuja&Verma, 2008). Satisfied customer gets delighted and becomes loyal (Jauhari, 2001)

CRM will be successful provided it is implemented at all levels of the enterprise (Gartner, 2003)Gartner has named it as true CRM. Gartner (2003) for the first time identified the best four practices that lead to CRM success and four areas where those practices should be applied.The four practices are vision, strategy, valued customer experience, organizational collaboration, and the four areas where they should be applied are process, information, technology and metrics. It is popularly called eight building blocks of CRM.This study is based on the Gartner's first four building blocks which are the best CRM practices and their influence on customer retention.

Vision:

As per Gartner vision includes all practices that are necessary for building the picture of a customer centric enterprise. It includes development of leadership from top, commitment to the idea of CRM, clarity on the objectives of CRM, advantages of CRM and its uniqueness.

Strategy:

Strategies are necessary to convert customers into assets. It is possible by delivering customer value propositions. Organizations must develop long term road maps to fit decisions and articulate the goals into action. CRM must be understood as a combination of technology, people and process.

Valued customer experience:

Gartner (2003) study reveals that customers create perception about the organization on the basis of their experience at the time of interaction. Customers should be involved in the CRM process to deliver ongoing value. All channels should be integrated and the basics should be obtained first. The change and the communication should be managed properly.

Organizational collaboration:

CRM requires a paradigm shift in culture, a shift from product centrism to customer centrism. It also requires a change in structure and behavior, establishment of cross functional teams, integration of change management and training and appointment of an overall CRM manager or leader. For such activities to be successful there should be strong collaboration across the organization.

The CRM best practices such as vision, strategy, customer experience and organizational collaboration are applicable on CRM processes such as customer life cycle management and knowledge management to enhance customer satisfaction and loyalty (Gartner, 2003)

Satisfaction is a function of all satisfaction oriented transactions (Johnson, Anderson &Fornell, 1995; Shin& Kim, 2008).

OBJECTIVE OF THE STUDY:

This study tries to understand the impact of Gartner's best practices for CRM on customer retention mediated by customer's satisfaction. The Gartner's study suggests that vision, strategy, customer experience and organizational culture will effect on customer life cycle. And the customer life cycle is acquisition, satisfaction, retention and development. Therefore this study uses the Gartner's framework and tries to see the influence of Gartner's best CRM practices such as vision, strategy, customer experience and organizational culture on customer satisfaction. Therefore the hypotheses of the study are,

H01: Vision of the enterprise has no effect on customer retention
H02: Strategy of the enterprise has no effect on customer retention
H03: Customer experience has no effect on customer retention
H04: Organizational culture has no effect on customer retention
H05: There is no mediation effect of customer satisfaction on the above relationships.

RESEARCH METHODOLOGY:

This study is based on primary data. The data is collected from the retail store Big Bazar, Bhubaneswar. The respondents of the study are the employees of the store are from different designations starting from the store keepers to the floor manager. They are from all levels of the organization hierarchy lower, medium and top. The data is collected with sufficient care and the same care is given for its analysis. The sample of the study consists

of 397 respondents, who are the employees of the store.

Measures:

The study consists of four independent variables such as vision, strategy, valued customer experience and organizational collaboration and two dependent variables such as customer retention and customer satisfaction. A scale of 20 items is used for the study. Out of which 13 items belong tothe best CRM practices suggested by Gartner (2003), 4 items for measuring the customer satisfaction (Anderson &Srinivasan ,2003; Cronin & Taylor, 1992; kim et al .,2004; Oliver,1997; Shin & Kim ,2008; Turel&Serenko , 2006; Zeithml et al. 2011) and 3 items for customer retention (Campbell, 2013; Dechkriengkraikun et al., 2002; Heskett et al., 1994; Murphy and Murphy, 2002; Reichheld and Sasser Jr.,1990; Reichheld, 1996; Rootman, 2011; Vahid, 2009). The scale measures constructs such as Vision, Strategy, Valued customer experience, Organizational collaboration and customer satisfaction.

It is necessary to conduct a pretest before the actual survey (Hair et al., 2007). Therefore a pretest is conducted by taking a small sample of 30 respondents who are similar to the actual respondents to check the appropriateness of the scale. The scale was checked for its appropriateness, ambiguity and ease of response. And it was found to be good. Then the scale is finalized and the survey was carried out with around 450 respondents but some of the responses were not complete hence the finalsample with complete information of 397 were obtained and that is the sample size of the study. First an exploratory factor analysis is done to understand the underlying constructs. Followed by a confirmatory factor analysis to check how well the specification of factors fit the data.

Insight into the place of research:

The study was carried at Bhubaneswar, the capital city of Odisha. Bhubaneswar is known for the temples and is called the Temple city of Odisha. The city has been the center of culture and economy of the state for the last 3000 years. Today the city is well grown in all the dimensions of length, breadth and height.The city has almost 15 retail giants and Big Bazar is one of them.The Big Bazar is also called Forum mart present at Kharvel Nagar. Big Bazar Forum martis chosen because it attracts customers from almost all segments of the market as it deals in varied natured products and it is one of the oldest retailers in the city, practicing CRM.

DATA ANALYSIS AND INFERENCES:

Structural equation modeling (SEM) is used to analyze the data and the model. SEM includes two models measurement model and a structural model. A measurement model tells how well the measured variables represent the constructs and a structural model describes the structural relationships among the constructs.

MEASUREMENT MODEL:

The measurement model includes CFA (Confirmatory factor analysis) (Teo, 2011) and it is useful in understanding the extent to which measured variables represent the constructs (Hair et al., 2007). CFA is one of the components of Structural equation modeling (SEM). There are different software's that help in conducting SEM. One among them is AMOS (Analysis of motion structures). This study has used Amos version 20. Before CFA an exploratory factor analysis (EFA) is done by using SPSS 20 to extract the variables of the constructs and then a CFA is done with the help of a measurement model. While conducting CFA the parameters of the model are estimated with the help of maximum likelihood estimation as maximum likelihood is a better estimation method among the other methods (Lai et al. 2007).

It is necessary to check the construct validity before proceeding for CFA. Table-1 tells about the construct validity and it ensures that the set of items actually represent the theoretical latentconstruct. Construct validity can be checked with the help of convergent validity and discriminant validity. Convergentvalidity is the proportion of variance for each item and discriminant validity is the extent to which an independent variable is truly distinct from other independent variables in measuring the dependent variable (Hair et al., 2006). Convergent validity is checked by the values of standardized factor loadings, composite reliability and average variance extracted (AVE) and all should be more than 0.7(Hair et al., 2006). From the Table-2 it is evident that all values such as standardized factor loadings; CR and AVE for the items are above 0.7 which supports a strong convergent validity. Discriminant validity can be tested with the help of AVE andmaximum shared variance (MSV). And AVE should be greater than MSV for the discriminant validity. In this model AVE is greater than MSV for all constructs (see Table no-1) and it indicates discriminant validity. Therefore the measurement model shows good construct validity.

Table 1: Discriminant validity

	CR	AVE	MSV	MaxR (H)	Satisf-action	Vision	Strategy	Expe-rience	Collabo--ration	Reten-tion
Satisfaction	0.966	0.876	0.803	0.972	0.936					
Vision	0.880	0.880	0.486	0.977	0.672	0.938				
Strategy	0.896	0.741	0.145	0.980	0.381					
Experience	0.931	0.772	0.000	0.987	-0.003		0.009			
Collaboration	0.934	0.826	0.214	0.989	0.463	0.400	0.230	0.011		
Retention	0.937	0.833	0.803	0.991	0.896	0.697	0.326	0.002	0.417	

To have a good model fit the value of the root mean square of approximation (RMSEA) should be less than 0.08 and the values of goodness of fit index (GFI), adjusted goodness of fit index (AGFI), normed fit index (NFI) and comparative fit index (CFI) all should be more than 0.9. The ratio between chi square (χ2) and degrees of freedom (df) that means χ2/ dfshould be less than 2.5 (Gerpott et al., 2001; Homburg & Baumgartner, 1995; Hair et al., 2006).

The obtained values for the measurement model are, for χ2/df is 2.513which is <5, RMSEA is 0.062<0.08, the values of GFI 0.91>0.9, AGFI 0.878<0.9, NFI 0.953>0.9, CFI 0.971>0.9 (See, Fig-1). Therefore the measures are more than the required threshold values except AGFI hence the measurement model indicates a good model fit (see Table-2). We can conclude that the model is adequate hence items in the model are reliable indicators of hypothesized constructs and we can proceed for testing structural relationships (Teo, 2011).
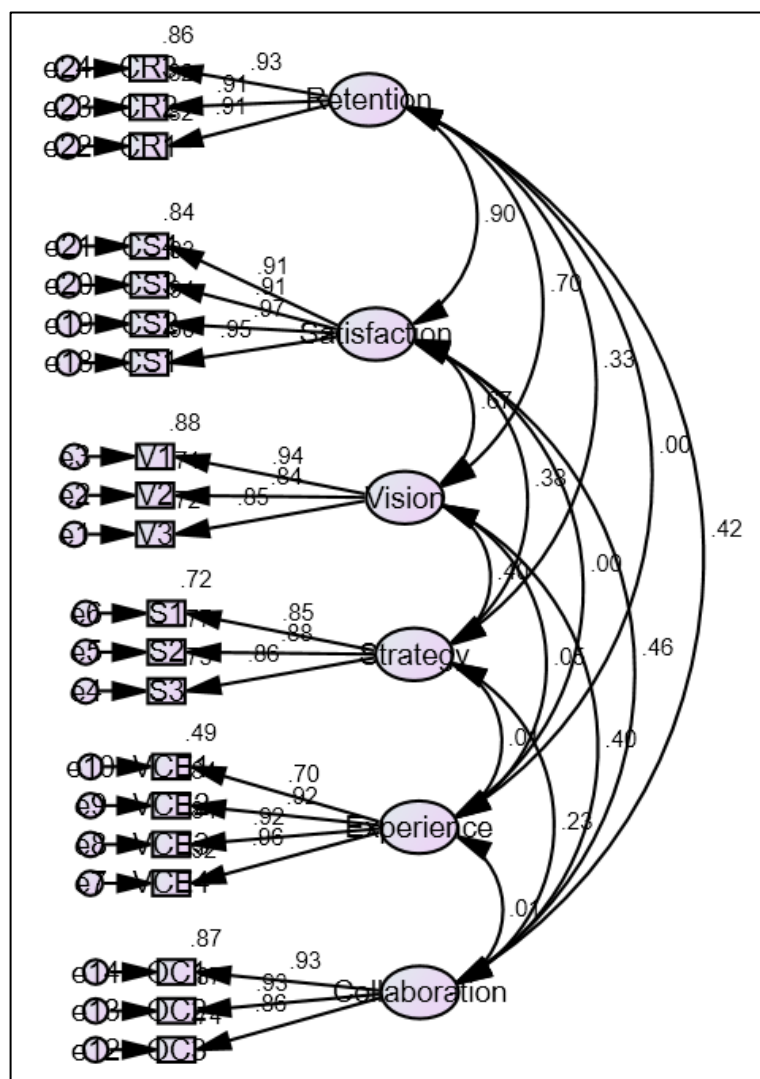
Fig.1: Measurement model

Table no-2: Measurement model summary:

CMIN					
Model	**NPAR**	**CMIN**	**DF**	**P**	**CMIN/DF**
Default model	55	389.561	155	0	2.513
Saturated model	210	0	0		
Independence model	20	8362.785	190	0	44.015
RMR, GFI					
Model	**RMR**	**GFI**	**AGFI**	**PGFI**	
Default model	0.04	0.91	0.878	0.672	
Saturated model	0	1			
Independence model	0.65	0.217	0.135	0.197	
Baseline Comparisons					
Model	**NFI** **Delta1**	**RFI** **rho1**	**IFI** **Delta2**	**TLI** **rho2**	**CFI**
Default model	0.953	0.943	0.971	0.965	0.971
Saturated model	1		1		1
Independence model	0	0	0	0	0
RMSEA					
Model	**RMSEA**	**LO 90**	**HI 90**	**PCLOSE**	
Default model	0.062	0.054	0.07	0.006	
Independence model	0.33	0.324	0.336	0	

(Model fit summary for the measurement model)

Structural model:

Structural equation modeling is used to test the hypotheses and the same can be seen from Fig-2. The summary of the structural model are $\chi 2/df$ is 1.492 <5, RMSEA is 0.035<0.08, the values of GFI 0.959>0.9, AGFI 0.941>0.9, NFI 0.975>0.9, CFI 0.991>0.9. Therefore all measures are more than their threshold values therefore the structural model indicates a good model fit (see Table-3).
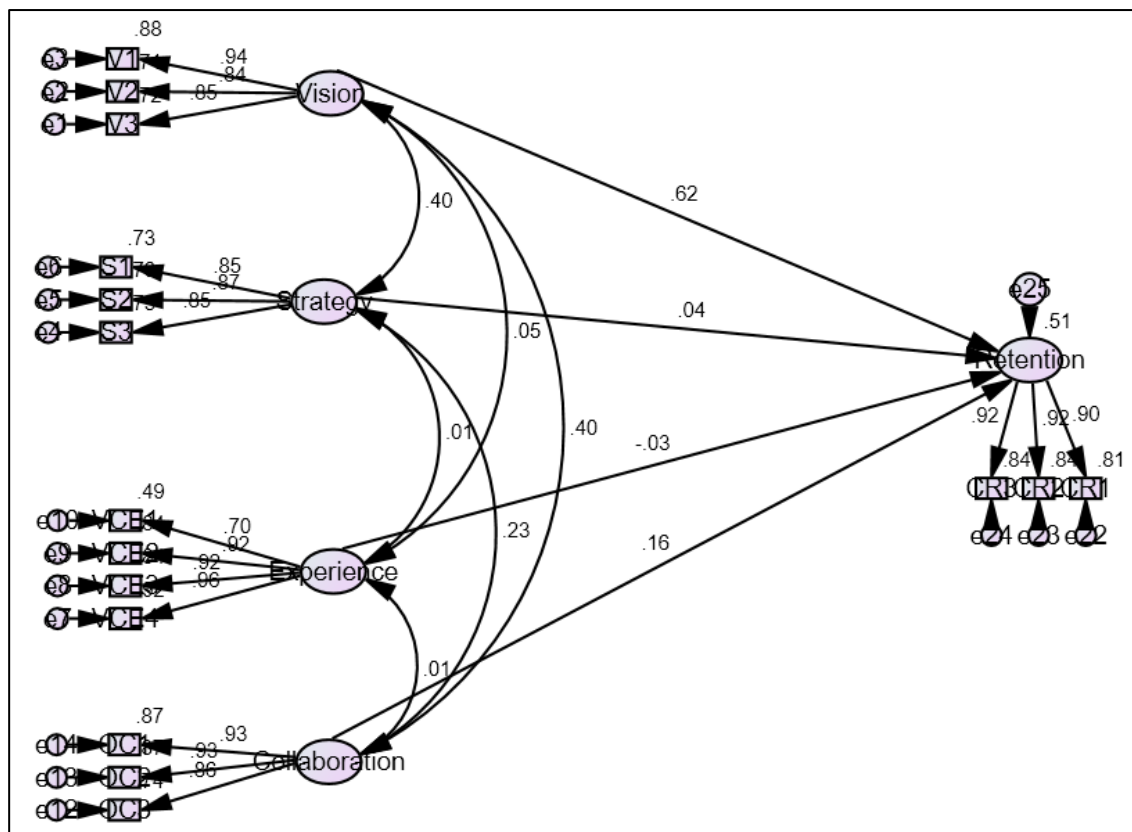
Fig-2: Structural model

Table-3: Model summary for the structural model

| Model Fit Summary					
CMIN					
Model	**NPAR**	**CMIN**	**DF**	**P**	**CMIN/DF**
Default model	42	140.292	94	0.001	1.492
Saturated model	136	0	0		
Independence model	16	5532.542	120	0	46.105
RMR, GFI					
Model	**RMR**	**GFI**	**AGFI**	**PGFI**	
Default model	0.038	0.959	0.941	0.663	
Saturated model	0	1			
Independence model	0.572	0.313	0.221	0.276	
Baseline Comparisons					
Model	**NFI** Delta1	**RFI** rho1	**IFI** Delta2	**TLI** rho2	**CFI**
Default model	0.975	0.968	0.991	0.989	0.991
Saturated model	1		1		1
Independence model	0	0	0	0	0
RMSEA					
Model	**RMSEA**	**LO 90**	**HI 90**	**PCLOSE**	
Default model	0.035	0.022	0.047	0.982	
Independence model	0.337	0.33	0.345	0	

From the summary of the structural model we can notice that, Vision, collaboration are the most significant influencer of satisfaction with values vision (c=0.0.62, p<0.01) and Collaboration (c=0.16, p<0.01) respectively. They both significantly influence customer satisfaction. Organizational vision is the most significant influencer of satisfaction and the second positive influencer is organizational collaboration. It indicates that the practices like leadership; understanding about CRM, cross functional teams, training and change management and appointment of CRM leader will positively influence customer satisfaction. Strategy, vision are not the statistically significant influencer of customer satisfaction (Table-5).

The mediation effect of Customer satisfaction:
Direct effect:
In order to check the mediation effect of customer satisfaction on the relationship between CRM practices (Vision, Strategy, Experience and Collaboration) and retention first the direct effects are measured from the following structural model without introducing the indirect effect of customer satisfaction (Fig-3). The direct effects can be observed in table no-4

Fig-3: Structural model to examine the direct effects of CRM practices on retention
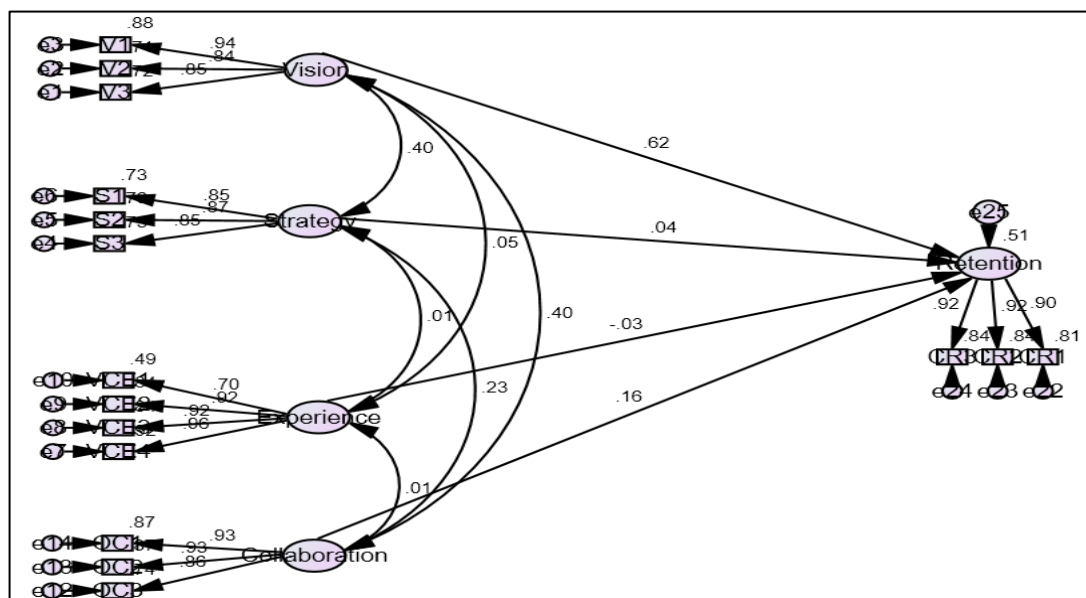
It is found that the bête co-efficient of the direct effects of CRM practices on Customer retention are Vision (c=0.62, p<0.05), Strategy (c=0.04, p>0.05), Experience (c=-0.03, p>0.05), Collaboration (c=0.16, p<0.05). Therefore it means vision and collaboration are having significant direct effect on retention of customer and the strategy and experience are insignificant effect on customer retention. This can be seen from table-4.
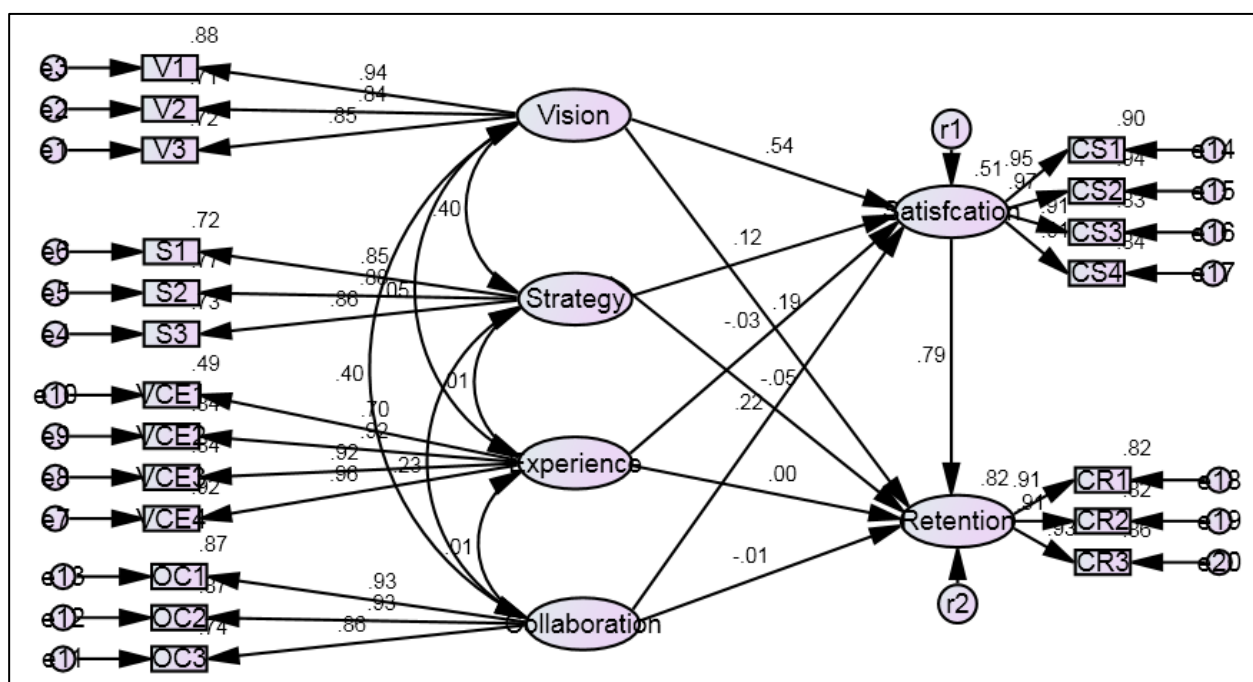
Table 4

			Estimate	S.E.	C.R.	P
Retention	<---	Vision	0.62	0.038	12.085	***
Retention	<---	Strategy	0.04	0.04	0.923	0.356
Retention	<---	Experience	-0.03	0.031	-0.713	0.476
Retention	<---	Collaboration	0.16	0.037	3.67	***

Indirect effect:

The mediating effect of customer satisfaction can be checked by introducing it in the structural model as shown in fig-4.

Fig 4: The mediation effect of satisfaction

By introducing customer satisfaction as a mediating variable as seen in the above diagram it is noticed that, there is a decrease in beta coefficient of the direct effect of vision on retention (which changed from c=0.62 to c=0.19) and the effect is significant. Therefore we can conclude that customer satisfaction is partially mediating the effect of vision on customer retention. On the other hand it can also be noticed that the beta coefficient between collaboration and customer retention has not only got reduced from 0.16 to -0.13 but also the effect become insignificant (at p<0.05). Therefore it can be concluded that customer satisfaction completely mediates the relationship between collaboration and customer retention. It can be observed from Table no-5.

Table 5

			Estimate	S.E.	C.R.	P
Retention	<---	Vision	0.197	0.041	4.75	***
Retention	<---	Experience	-0.003	0.022	-0.118	0.906
Retention	<---	Collaboration	-0.013	0.028	-0.482	0.63
Retention	<---	Strategy	-0.049	0.032	-1.56	0.119
Retention	<---	Satisfaction	0.618	0.034	17.993	***
Satisfaction	<---	Vision	0.718	0.066	10.867	***
Satisfaction	<---	Strategy	0.152	0.058	2.619	0.009
Satisfaction	<---	Experience	-0.033	0.041	-0.815	0.415
Satisfaction	<---	Collaboration	0.256	0.05	5.138	***

The direct, indirect and total effects of CRM practices on customer retention can be clearly found from the following table -6.

Table 6: thedirect, indirect and total effect

Standardized Direct Effects (Group number 1 - Default model)

	Collaboration	Experience	Strategy	Vision	Satisfaction	Retention
Satisfaction	.222	-.031	.115	.538	.000	.000
Retention	-.015	-.003	-.048	.190	.793	.000

Standardized Indirect Effects (Group number 1 - Default model)

	Collaboration	Experience	Strategy	Vision	Satisfaction	Retention
Satisfaction	.000	.000	.000	.000	.000	.000
Retention	.176	-.025	.091	.427	.000	.000

Standardized Total Effects (Group number 1 - Default model)

	Collaboration	Experience	Strategy	Vision	Satisfaction	Retention
Satisfaction	.222	-.031	.115	.538	.000	.000
Retention	.161	-.028	.043	.617	.793	.000

CONCLUSION:

The study finds that firm's practices related to Vision and Organizational collaboration will positively influence the customer retention. Therefore the companies must concentrate on the practices related to Vision and organizational collaboration such as development of leadership, understanding the uniqueness of CRM and how it can help, establishment of cross functional team, change management and training from the beginning and the appointment of the CRM leader. The study also concludes that there is a mediating effect of customer satisfaction on the relationship between CRM practices and customer retention. Customer satisfaction partially mediates the relationship between vision and customer retentionwhere as it completely mediates the relationship between organizational collaboration and customer retention. The findings of the study may be influenced by the attitudes of the respondents and may not be generalized as the study is micro in nature.

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APPENDIX

Table 1: (Scale for the study) Questionnaire

S. No	Variables	Measurement
1	V1	Development of leadership from the top.
2	V2	Understand how CRM will help
3	V3	How CRM is unique
4	S1	Development of a long term CRM roadmap
5	S2	Articulate CRM goals and tactics
6	S3	All customers are not equal
7	VCE1	Involvement of customers in CRM process
8	VCE2	Integration of all channels
9	VCE3	Manage change and communication with your customers
10	VCE4	Get the basics right first
11	OC1	Establishment of cross functional teams
12	OC2	Integrate change management and training from the start
13	OC3	Appointment of an overall CRM
14	CS1	Overall satisfaction of CRM
15	CS2	Meeting customer needs and making them happy
16	CS3	Customers feel good
17	CS4	Preferred by the customer
18	CR1	Word of mouth
19	CR2	Loyalty
20	CR3	Cost reduction