Analysing CRM Practices of Indian and Multinational Pharmaceutical Companies Vis-À-Vis Doctors Perception

*Dr. Yogesh Jain
**Subhash Chandra Sharma

*Professor & Academic Coordinator, Maharaja Group of Colleges, Udaipur.
**Research Scholar, Pacific University, Udaipur.

Abstract

Customer relationship management means increasing revenues and profitability by coordinating, consolidating and integrating all points of contact that enterprises have with their customers, which is what in effect integrates sales, marketing and service. Increasingly, Pharma Industry has becoming heavily dependent on 'Customer Relationship Management.' The experience in the recent times reveals that "CRM" as it is known in the Industry today has been reduced to planning personalized gifts and personalized services. Pharma companies, are investing a lot of promotional spend, but whether they have understood the meaning of real CRM leaves much to be desired. The companies aim to fit all of its CRM activities into its brands' relationship marketing strategies. As per the objective of the paper first four important variables were identified which were responsible for the satisfaction from the CRM activities and out of the four it has found that the three has differences between the perception of doctors for Indian and Multinational companies.

Key words: Customer relationship management (CRM), Indian Pharmaceutical companies, Multinational Pharmaceutical companies and Doctors perception.

Introduction

Managers spend time for researching their customer and make efforts in strategizing towards building relationships. Some key aspects were found out under this research to know that how managements can orient their thinking of how best to realize building customer relations towards ensuring a healthy bottom line. Customer relationship management is the dominant paradigm for all marketing teams. By avoiding the disjointed, uncoordinated efforts, all elements of customer management occur under the broader umbrella of customer relationship management. Patients and physicians move through a process that begins with education and awareness for relevant brands and treatments. Individuals then move through customer acquisition to adherence and, finally, advocacy (Day and Wensley, 1983). The steps are not new, but the marketing organization views customers holistically by understanding their position and progress on the CRM ladder. The multibillion-dollar Pharmaceutical industry grows mainly through knowledge wealth creation. This sector has transformed a lot over the years. The big Pharmaceutical companies that were there about 15-20 years back are not in picture these days (Chouhan et.al, 2014; Chouhan et. al, 2013). The analysis of Indian pharmaceutical sector shows that the innovative products, product life cycle management and marketing management steps taken by the Pharmaceutical companies have led them to flourish and the companies that refused to change their strategy lost the race. Against this backdrop, the present study attempts to measure empirically the CRM in pharmaceutical industry at southern India.

Objectives of the proposed study:

In accordance with this objective, an empirical survey was conducted surrounding following objective:

1. To analyse the various CRM practices of Indian and multinational Pharmaceutical companies as per the doctors perception.
2. To identify the variables behind the satisfaction of doctors from CRM approaches used by Indian and multinational companies in South India.
3. To measure the differences between the Indian and multinational companies on selected variables of satisfaction from CRM activities.

Review of Literature

The evolution of relationship marketing began with the works of Arndt (1979), Bagozzi (1974), Day and Wensley (1983), Dwyer et al. (1987), and Levitt (1983). Bagozzi (1974) was among the first to argue that the exchange relationships are the essence of marketing. Similarly, Arndt (1979) introduced the notion of the long-term buyer-seller relationship in the context of domesticated markets. He believed that the long-term buyer-seller relationship is an important factor in the growth of domesticated markets. Others also suggested that marketing should replace the transaction paradigm with buyer-seller relationships such that the buyer-seller relationships do not end after the initial sale is made; rather it is just the beginning (Day and Wensley 1983; Dwyer et al. 1987; Levitt 1983).Guo et.al, (2014) expressed that CRM, is a concept for increasing companies' profitability by enabling them to identify and concentrate on their profitable customers. Andrade & Andiel (2014) expressed that the German pharmaceutical sales now exceed and the industry have the prospects for growth and improvement of shareholder value been more challenging. Ross (2013) revealed that in twentieth century, business strategists have been wrestling with the theory and practice of integrating the customer with CRM approach. Reimann, Schilke & Thomas (2009) expressed that managers and academics increasingly raise issues about the real value of CRM, with its direct and unconditional performance effect. They investigated the role of critical mechanisms underlying the CRM-performance link, and contributed to the literature by sketching attention to the various influence of CRM in diverse industry environments. The research has also analyzes data from in-depth field interviews and a large-scale, cross-industry survey, and results reveal that CRM does not affect firm performance directly. Schaller, Piller & Reichwald (2009) provided demonstration the models that can be developed for individualization based Collaborative CRM. Ross (2002) revealed that the relentless search for new ways of providing value to the customer has become the dominant objective for firms seeking to utilize the supply chain to sustain leadership in their markets and industries (Chouhan & Verma, 2014: a &b), Chouhan, 2013; Chouhan et.al, 2014; Chouhan et, al, 2013). Companies today are under no illusion that unless they can structure the agile infrastructures and interoperable supply chains necessary to guarantee personalized, quick-response delivery and the ability to provide unique sources of marketplace value even their best customers will not hesitate to search the Internet for a global supplier who will provide the service value they desire (Chouhan et.al, 2014; Chouhan et, al, 2013).

Research Methodology

The research methodology of this study is divided in following points:

- **Source of data-**The source of data collection is primary data which is collected from the Doctors working in south India and act as CRM partners of the Pharmaceutical companies.
- **Sample size-**the sample 183 doctors of South India were selected randomly. They have been asked the CRM practices of Indian and multinational Companies. The filled questionnaire and the data were collected from 183 doctors as a representative sample**.**

- **Sampling technique-**The sampling technique used is convenient sampling.
- **Hypothesis-** as per the nature of the research two hypotheses were developed and shown under the head of data analysis.
- **Analysing Tool**: Multivariate Regression Analysis was used to analyse the data and to identify that which independent variable results change in dependent variable. Further the independent sample t tests were used to identify the differences between the Indian and Multinational companies..

Data Analysis

As per the research objective of the paper the data were collected which includes12 dependent variables to find out the factors responsible for the CRM practices of the Indian and foreign multinational companies:

H_0: The attributes configuring CRM activities of Indian and Multinational Pharmaceutical companies of various dimension has no influence over the satisfaction of Doctors from CRM activities

H_1: The attributes configuring CRM activities of Indian and Multinational Pharmaceutical companies of various dimension has significantly influence satisfaction of Doctors from CRM activities.

To analyse the data and significant of the hypothesis Multivariate Regression Analysis of various CRM activates were conducted as under:

Table 1: Multivariate Regression Analysis

Descriptive Statistics			
	Mean	Std. Deviation	N
Satisfaction	3.3696	.72281	368
CRM_1	3.4891	.75275	368
CRM_2	3.5761	.94806	368
CRM_3	3.2228	.86992	368
CRM_4	3.4620	.98139	368
CRM_5	3.3043	1.00124	368
CRM_6	3.3995	.95438	368
CRM_7	3.8451	.85162	368
CRM_8	3.6141	.94134	368
CRM_9	3.2364	.96029	368
CRM_10	3.2935	.86138	368
CRM_11	3.4891	.83838	368
CRM_12	3.5027	.92497	368

b. Correlation

		CRM_1	CRM_2	CRM_3	CRM_4	CRM_5	CRM_6	CRM_7	CRM_8	CRM_9	CRM_10	CRM_11	CRM_12
Correlation	Satisfaction	-.058	-.033	.042	-.015	.002	.149	.031	-.066	.341	.066	.052	.125
Sig. (1-tailed)	Satisfaction	.135	.263	.211	.389	.483	.002	.275	.103	.000	.103	.162	.008
N	Satisfaction	368	368	368	368	368	368	368	368	368	368	368	368

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	CRM_9	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
2	CRM_6	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
3	CRM_8	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
4	CRM_4	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).

a. Dependent Variable: Satisfaction

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.341[a]	.116	.114	.68043	.116	48.137	1	366	.000
2	.358[b]	.128	.124	.67670	.012	5.046	1	365	.025
3	.380[c]	.144	.137	.67141	.016	6.774	1	364	.010
4	.406[d]	.165	.156	.66417	.021	8.976	1	363	.003

a. Predictors: (Constant), CRM_9

b. Predictors: (Constant), CRM_9, CRM_6

c. Predictors: (Constant), CRM_9, CRM_6, CRM_8

d. Predictors: (Constant), CRM_9, CRM_6, CRM_8, CRM_4

ANOVA[e]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22.287	1	22.287	48.137	.000[a]
	Residual	169.452	366	.463		
	Total	191.739	367			
2	Regression	24.597	2	12.299	26.858	.000[b]
	Residual	167.142	365	.458		
	Total	191.739	367			
3	Regression	27.651	3	9.217	20.446	.000[c]
	Residual	164.088	364	.451		
	Total	191.739	367			
4	Regression	31.610	4	7.903	17.915	.000[d]
	Residual	160.129	363	.441		
	Total	191.739	367			

a. Predictors: (Constant), CRM_9

b. Predictors: (Constant), CRM_9, CRM_6

c. Predictors: (Constant), CRM_9, CRM_6, CRM_8

d. Predictors: (Constant), CRM_9, CRM_6, CRM_8, CRM_4

e. Dependent Variable: Satisfaction

Coefficients[a]									
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	2.539	.125		20.337	.000			
	CRM_9	.257	.037	.341	6.938	.000	.341	.341	.341
2	(Constant)	2.286	.168		13.632	.000			
	CRM_9	.247	.037	.328	6.667	.000	.341	.329	.326
	CRM_6	.084	.037	.111	2.246	.025	.149	.117	.110
3	(Constant)	2.559	.197		13.014	.000			
	CRM_9	.256	.037	.341	6.942	.000	.341	.342	.337
	CRM_6	.100	.037	.132	2.660	.008	.149	.138	.129
	CRM_8	-.099	.038	-.129	-2.603	.010	-.066	-.135	-.126
4	(Constant)	2.830	.215		13.190	.000			
	CRM_9	.262	.037	.348	7.169	.000	.341	.352	.344
	CRM_6	.168	.043	.221	3.857	.000	.149	.198	.185
	CRM_8	-.123	.038	-.161	-3.207	.001	-.066	-.166	-.154
	CRM_4	-.125	.042	-.170	-2.996	.003	-.015	-.155	-.144
a. Dependent Variable: Satisfaction									

The final Regression model with 4 independent variables (CRM_9, CRM_6, CRM_8 and CRM_4) explains almost 15.6% of the variance of change in satisfaction from CRM activities of Indian and Multinational Pharmaceutical companies. Also, the standard errors of the estimate has been reduced to .66417, which means that at 95% level, the margin of errors for any predicted value of change in satisfaction can be calculated as ± 1.30177 (1.96 X .66417). The regression coefficients, plus the constraints are significant at 0.05 levels. The impacts of multi colinerarity in the 4 variables were substantial (Chandra et.al, 2012:a & b). The ANOVA analysis further provides the statistical test for overall model fit in terms of F Ratio. The total sum of squares (191.739) is the squared error that would accrue if the mean of satisfaction from CRM activities has also been changed to predict the dependent variable. Using the values of selected variables these errors can be reduced by 16.49% (31.610/191.739). This reduction is deemed statistically significant with the F ratio of 17.915 and significance at level of 0.000[d]. With the above analysis it can be conclude that only four variables i.e, Organizing continuous medical education (CME); Packaging of Product; Provide Research Molecules and Organise Patient awareness/ Education Program (PEP) explains the CRM practices of Indian and multinational pharmaceutical companies in south India.

Further as per the objectives of the paper and to measure the gap in the differences between the Indian and multinational Pharmaceuticals companies, the selected variables were analysed with following hypothesis:

H1: There is significant difference among doctors for CRM approaches of selected Indian and Multinational Pharmaceutical Companies of Southern India.

To know whether the differences between the opinions of doctors were due to the types of company i.e., Indian or multinational the independent sample t test were carried out (Khan et.al, 2012) and the results were provided in table-6.8 as under:

Table-2: Hospital wise differences of doctor's perception

a. Group Statistics					
	comp	N	Mean	Std. Deviation	Std. Error Mean
CRM_9	1.00	184	3.2446	.82976	.06117
	2.00	184	3.2283	1.07737	.07942
CRM_4	1.00	184	3.9620	.89545	.06601
	2.00	184	2.9620	.79181	.05837
CRM_6	1.00	184	3.5870	1.05739	.07795
	2.00	184	3.2120	.79868	.05888
CRM_8	1.00	184	3.3804	1.07979	.07960
	2.00	184	3.8478	.70803	.05220

b. Independent Samples Test											
		Levene's Test for Equality of Variances		t-test for Equality of Means							
									95% Confidence Interval of the Difference		
		F	Sig	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper	
CRM_9	Equal variances assumed	7.240	.007	.163	366	.871	.01630	.10025	-.18083	.21344	
	Equal variances not assumed			.163	343.593	.871	.01630	.10025	-.18088	.21349	
CRM_4	Equal variances assumed	1.989	.159	11.348	366	.000	1.00	.08812	.82672	1.17328	
	Equal variances not assumed			11.348	360.599	.000	1.00	.08812	.82671	1.17329	
CRM_6	Equal variances assumed	12.428	.000	3.839	366	.000	.375	.09769	.18290	.56710	
	Equal variances not assumed			3.839	340.534	.000	.375	.09769	.18285	.56715	
CRM_8	Equal variances assumed	57.990	.000	-4.9 1	366	.000	-.467	.09519	-.65458	-.28020	
	Equal variances not assumed			-4.910	315.812	.000	-.4673	.09519	-.65468	-.28010	

The Independent sample test results at 343. 593degree of freedom for the variables Organise Patient awareness/ Education Program (PEP) (CRM_9)found significant differences ($t_{343.\ 593}$=.163; p>0.05). Therefore, the difference between Indian and Multinational pharmaceutical company is statistically insignificant at 5% level of significance. Thus, no one Indian or multinational pharmaceutical companies perceive CRM_9 as CRM practices more than other Companies of Southern India ($\mu_{Multinational}$=3.2283=μ_{Indian}=3.2446).

The Independent sample test results at 366 degree of freedom for the variables Organizing continuous medical education (CME) (CRM_4) found significant differences (t_{366}=11.348; p<0.05). Therefore, the difference between Indian and Multinational pharmaceutical company is statistically significant at 5% level of significance. Thus, the Indian pharmaceutical companies perceive PRM as CRM practices more than multinational Pharmaceutical Companies of Southern India ($\mu_{Multinational}$=2.9620<μ_{Indian}=3.9620).

The Independent sample test results at 340.534degree of freedom for the variables Provide Research Molecules Packaging (CRM_6) found significant differences ($t_{340.534}$=3.839; p<0.05). Therefore, the difference between Indian and Multinational pharmaceutical company is statistically significant at 5% level of significance. Thus, the Indian pharmaceutical companies provides Provide Research Molecules Packaging as CRM practices more than multinational Pharmaceutical Companies of Southern India ($\mu_{Multinational}$=3.2120<μ_{Indian}=3.5870).

The Independent sample test results at 315.812 degree of freedom for the variables Packaging of Product (CRM_8) found significant differences ($t_{315.812}$=-4.910; p<0.05). Therefore, the difference between Indian and Multinational pharmaceutical company is statistically significant at 5% level of significance. Thus, the multinational pharmaceutical companies perceive Packaging of Product as CRM practices more than Indian Pharmaceutical Companies of Southern India ($\mu_{Multinational}$=3.8478>μ_{Indian}=3.3804).

Conclusion

The task of managing CRM Activities is generally assigned to a person or team. In a CRM program there will usually be a program director and, depending on the size of the program, separate managers for each activity. This way, program management is close to the relevant department (marketing, product, or general management), but more focused, so as to improve program execution. The Doctor's perception regarding satisfaction from the CRM activities of Indian & multinational Pharmaceutical companies have shown that for the four variables Organizing continuous medical education (CME), Provide Research Molecules, Packaging of Product & Organise Patient awareness/ Education Program (PEP)have revealed the satisfaction of doctors from CRM approaches used by Indian and multinational companies in South India. Three variables are having the differences among the selected four variables between the Indian and multinational companies on selected variables of satisfaction from CRM activities. The practical application of this research can be in the form of meeting the need of the doctors so that the pharma companies can perform better and satisfied its major CRM partner i.e., Doctors in a significant manner.

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QUESTIONNAIRE

Qualification	:	
Specialty	:	
Age in years	:	Up to 30 ☐ 31 to 40 ☐ 41 to 50 ☐ 51 to 60 ☐ 60 ☐
Gender	:	Male ☐ Female ☐
Hospital	:	Government ☐ Private ☐

Indicate your agreement or disagreement on the following CRM practices, according to given scale

0	Absent	2	Un-satisfied	4	Satisfied
1	Fully unsatisfied	3	No opinion	5	Fully satisfied

Various CRM Practices	**MULTINATIONAL** Pharmaceutical Companies	**INDIAN** Pharmaceutical Companies
Scientific abstracts/papers		
Price of Product		
Provide Samples		
Organizing continuous medical education (CME)		
Participation in State/All India Level in medical events(IAP/ API/ Respicon/Othocon/FOGSI)		
Provide Research Molecules		
Provide educational on line material / sites (LANCET/BMJ etc.)		
Packaging of Product		
Organise Patient awareness/ Education Program (PEP)		
.Investment in research & development		
.Donation of Instruments/ free medicine for hospital/clinic		
.Sponsoring free health checkup/medical camps		