IMPACT OF RELATIONSHIP MARKETING STRATEGIES IN BUILDING CUSTOMER VALUE (The Study on Venus Remedies Limited)

Sanjeev Pradhan¹, Diwash Gurung²

¹Ass. Professor, Research Scholar, Faculty of Management, K and K Int'l College, Kathmandu, Nepal ²Sales and Marketing Manager, Leon Motors Pvt. Ltd., Nepal

ABSTRACT

The study is done to assess the correlation between the various forms of relationship marketing (RM) strategies and the resulting customer value. This study explains the various social and financial needs of the doctors from the pharmaceutical company perspective. This study helps to consider the best RM strategies to build better customer value. Questionnaire and personal interview method were considered to collect the data. Sample doctors were chosen from one of top 7 hospitals here in Nepal. Study shows positive correlation between RM strategies and customer value. Multiple linear regression of adding social benefit and adding financial benefit with customer values shows the value of β_1 (slope of adding social benefit RM strategies) and β_2 (slope of adding financial benefit RM strategies) with 0.2679836 and 0.4662382 respectively, means that various relationship marketing strategies shows direct positive relationship with customer value.

The study find that the pharmaceutical company need to care and socially satisfy their customer needs. For that, occasional initiation of phone call to their customer is necessary. Conflict or problem if any, needs to be handled properly. Good follow through on commitment is necessary. But adding financial benefit RM strategies like marketer expertise, regular communication/or company's presentation and academic investment (in terms of academic conference sponsorship, books etc.) are more preferred.

Keywords:Customer Value, Financial Benefit, Relationship Marketing Strategies and Social Benefit

ISSN (O) 2394 - 1537 ISSN (P) 2394 - 1529

Paper Type:Research Paper

I. BACKGROUND OF THE STUDY

1.1 Contextual Information

Correlation-regression analysis is done to study the impact of various relationship marketing (RM) strategies conducted by Venus Remedies Limited in building values to their customers here in Kathmandu. The strategies used are adding social benefits and adding financial benefits to the doctors, who prescribe Sulbactomax injection or are their potential customer. Venus is a Chandigarh (India) based multinational pharmaceutical company having its operation across 74 countries globally. The prescriber and pharmaceutical marketer relationships are assessed here. Adding social benefit and adding financial benefit factors are correlated-regressed against building of customer values.

The relationship marketing is often attributed to Berry (1983). RM is the process of identifying, developing, maintaining and terminating relational exchange with the purpose of enhancing performance(Gronroos 1997; Sheth and Parvatiyar 2000). Smart marketers build long - term, trusting and win - win 'relationships' with valued customers. They promise and deliver high quality, good service, at fair price to the other parties over time. Company delivers maximum value to its customers to grow at fiercely competitive market. Customer value is the psychological perceptions in the mind of customer. It helps the customers to perceive that given product offers highest customer delivered value.

Value in essence is more than pricing and reimbursement. It's about getting under the skin of the key customers. It helps to understand what the company is being measured on and what their key priorities are. It is about showing the relevance of products to their customer needs.

1.2 Statement of Problem

New market conditions sharpen competition, especially to new entrants like Venus Remedies who has been in Nepali market since last two and half years only. The number of competitor is rising and the products and services offered are less differentiated at their core. This results in decreasing of offered customer value and increase in business cost. Effective CRM has become a strategic imperative for company, to move closer to customers, expanding more efforts in finding new ways to create value for their customers and transforming the customer relationship into fulfilment of their need.

Proper CRM strategies potentially impact customer satisfaction rating and can lead to increase in their customer values.

Therefore, the research problem is the study of impact of relationship marketing strategies in building customer value, and to obtain more efficiency in building customer relationship.

1.3 Objective of the Study

The purpose of this study is to explore the impact of RM strategies in building customer value. In order to reach our purpose, the following are the objectives:

- a) To study the impacts of various RM strategies to develop customer value.
- b) To know the social, psychographic and behavioural factors that may help to increase customer value.
- c) To study different marketing strategies helpful in achieving sales and marketing goals of the company.
- d) To know the actual requisite value dimensions, the doctor want to perceive or want to have from Venus Remedies.
- e) To study and analyse the present and future probable prescriber of Sulbactomax.

1.4 Limitations of the Study

Sample size of 31 (questionnaire method) and 17 (structured personal method) is small. Larger sample size ≈ 100 would have been better.

Doctors are selected from one among top 7 hospitals here in Nepal (study is conducted at Kathmandu only). It would have been better if the sample dispersion range was bigger ie. from Kathmandu and other town of Nepal.

II. RESEARCH METHODOLOGY AND DESIGN

2.1 Research Methodology

Various RM strategies are correlated and regressed against customer value and the impact of former on latter is studied. This quantitative analysis is done on data collected through questionnaires method. Qualitative analysis is also undertaken from the data collected through structured personal interview to facilitate more clarity in our study.

2.1.1 Research Design

Both quantitative and qualitative mode of research is being considered. The study mainly focuses on the former type for understanding the impact of various RM strategies in building customer value.

Correlation and regression analysis is done with 0.5% level of significance for hypothesis testing.

Hypothesis testing

Null hypothesis, H₀: There is no correlation between RM strategies and customer value.

www.ijstm.com

ISSN (O) 2394 - 1537 ISSN (P) 2394 - 1529

Alternate hypothesis, H_1 : There is a correlation between RM strategies and customer value.

2.1.2 Nature and Source of Data

The primary data for conducting quantitative research are collected through questionnaire method. For qualitative study, data are collected through structured personal interview. Prescription survey and retail audit, as proposed in our study proposal has been felt as non-feasible, so this method of data collection through chemist counter has not been carried out.

2.1.3 Sample and Sampling Method with Rationale

This study samples are collected from doctors at following hospitals:

- a) Tribhuvan University and Teaching Hospital (TUTH), Maharajgunj
- b) Kanti Children's Hospital, Maharajgunj
- c) National Academy of Medical Science (Bir), Mahaboudha
- d) Om Hospital and Research Centre, Chabahil
- e) Medicare Hospital, Chabahil
- f) Vayoda Hospital, Sanepa
- g) Birendra Army Hospital, Chhauni

Convenience sampling method is preferred as the company is in regular communication with these doctors, and some are good prescriber of Sulbactomax.

2.1.4 Data Collection

The questionnaire and personal interview data are collected from 31 and 17 doctors respectively as shown in the table 1 below.

Name of Hospital	Number of questionnaire sample	Number of personal interview sample
Teaching University and Teaching		
Hospital(TUTH)	6	4
Kanti Children's Hospital	7	6
National Academy of Medical		
Science (Bir)	5	4
Om Hospital and Research Centre		
	6	3
Medicare Hospital	3	2
Vayoda Hospital	1	1

Table 1. Sample Tabulation

www.ijstm.com

ISSN (O) 2394 - 1537 ISSN (P) 2394 - 1529

Birendra Army Hospital	3	3
Total hospital:	Total sample: 31	Total sample: 17

The data are collected and analysed as:

Customer value = f {(Social benefit RM strategies), (Financial benefitRM strategies)} Here, Social benefit RM strategies = f {(Caring company), (Need satisfaction), (Initiation of phone call), (Conflict resolution), (Accepting responsibility)}

Financial benefit RM strategies = f {(Expertise), (Offering of personalised dinner/supper), (Regular communication), (Academic investment), (free sampling)}

2.1.5 Statistical Tools used

STATA software is used to analyse data for correlation and regression analysis. This software is chosen for its applicability and ease in handling statistical analysis.

III: DATA INTERPRETATION AND FINDINGS

Table2. Data Tabulation

				SB	FB	CV			CV	SB		CV
Ν	SB	FB	CV	Avg	Avg	Avg	SB1	FB1	1	t	FBt	t
01	13	15	32	2.6	3	3.2	13	10	32	2.6	3.333333	3.2
02	19	21	35	3.8	4.2	3.5	19	13	35	3.8	4.333333	3.5
03	15	18	34	3	3.6	3.4	15	11	34	3	3.666667	3.4
04	19	19	34	3.8	3.8	3.4	19	12	34	3.8	4	3.4
05	21	16	41	4.2	3.2	4.1	21	11	41	4.2	3.666667	4.1
06	13	14	32	2.6	2.8	3.2	13	9	32	2.6	3	3.2
07	21	20	45	4.2	4	4.5	21	13	45	4.2	4.333333	4.5
08	21	18	33	4.2	3.6	3.3	21	12	33	4.2	4	3.3
09	20	17	39	4	3.4	3.9	20	11	39	4	3.666667	3.9
10	19	22	42	3.8	4.4	4.2	19	14	42	3.8	4.666667	4.2
11	20	20	40	4	4	4	20	12	40	4	4	4
12	20	21	44	4	4.2	4.4	20	14	44	4	4.666667	4.4
13	17	16	35	3.4	3.2	3.5	17	11	35	3.4	3.666667	3.5
14	23	21	42	4.6	4.2	4.2	23	14	42	4.6	4.666667	4.2
15	19	22	37	3.8	4.4	3.7	19	13	37	3.8	4.333333	3.7
16	19	18	36	3.8	3.6	3.6	19	10	36	3.8	3.333333	3.6
17	18	20	31	3.6	4	3.1	18	11	31	3.6	3.666667	3.1
18	17	20	36	3.4	4	3.6	17	12	36	3.4	4	3.6
19	22	20	40	4.4	4	4	22	12	40	4.4	4	4
20	17	17	32	3.4	3.4	3.2	17	10	32	3.4	3.333333	3.2
21	15	16	39	3	3.2	3.9	15	11	39	3	3.666667	3.9

32 | Page



www.ijstm.com

ISSN (O) 2394 - 1537 ISSN (P) 2394 - 1529

										14	DIA (1 / 20/7 - 1)4	
22	19	15	34	3.8	3	3.4	19	11	34	3.8	3.666667	3.4
23	18	19	37	3.6	3.8	3.7	18	12	37	3.6	4	3.7
24	20	19	39	4	3.8	3.9	20	12	39	4	4	3.9
25	20	17	35	4	3.4	3.5	20	11	35	4	3.666667	3.5
26	16	19	36	3.2	3.8	3.6	16	13	36	3.2	4.333333	3.6
27	23	22	47	4.6	3.8	4.7	23	15	47	4.6	5	4.7
28	15	17	31	3	3.4	3.1	15	11	31	3	3.666667	3.1
29	16	18	37	3.2	3.6	3.7	16	11	37	3.2	3.666667	3.7
30	24	22	42	4.8	4.4	4.2	24	13	42	4.8	4.333333	4.2
31	20	19	39	4	3.8	3.9	20	12	39	4	4	3.9

Table 2.show summated and average value of adding social benefit (SB), adding financial benefit (FB) and building customer value (CV) variables. Personalised dinner/supper (qn 7) and free sampling (qn 10) from financial benefit variables are omitted from the study. Hence financial benefit RM strategies variables are re-summated and averaged. Regression analysis is conducted taking SBt, FBt and CVt as adding social benefit, adding financial benefit and customer value variables respectively.

Summary Statistics of Relationship Marketing Strategies (Social and Financial Benefit) and Customer Value

Summary statistics gives quick and simple description of the data, including mean, standard deviation, minimum and maximum value etc. Here, 31 observations are done to analyse the impact of RM strategies (social benefit and financial benefit) in building customer values, with normal standard deviations (table 3).

Variable	Obs	Mean	Std. Dev.	Min	Max
SBt	31	3.735484	.5571047	2.6	4.8
FBt	31	3.946237	.4562063	3	5
CVt	31	3.722581	.4232491	3.1	4.7

Table3. Summary Statistics of Social Benefits, Financial and Customer Value

Linear Regression Analysis of Relationship Marketing Strategies and Customer Value Correlation Matrix

Pearson coefficients (r) determine the extent to which values of the two variables are proportional to each other

Table4a. Correlation Matrix of SBt, FBt and CVt

ISSN (O) 2394 - 1537 ISSN (P) 2394 - 1529

	SBt	FBt	CVt
SBt	1.0000		
FBt	0.6329	1.0000	
CVt	0.6708	0.7258	1.0000

The correlation relationship between adding social benefit (SBt) and customer value (CVt) is strongly related with r value of 0.6708 (table 4a). The same is between adding financial benefit (FBt) and customer value with r value of 0.7258.

R square measures how well the regression line approximates the real data points. R^2 of 0.6014 indicates 60% of the response variable variation is explained by a linear model.

Here $R = 1 - \frac{SS \text{ for residual}}{T \text{ otal } SS}$

F test compares statistical models that have been fitted to a data set, in order to identify the model that best fit the population from which the data were sampled.

The F-test compares the multiple linear regression model to the no-relationship model (test the null hypothesis that the no-relationship model is correct). Equivalently, the F-test the null hypothesis that all two slope parameters are equal to zero. This model includes 3 regression coefficients (1 intercept, 2 slopes), and the no-relationship model includes 1 regression coefficient, namely, the intercept. The degree of freedom (df) for the numerator is therefore 3 - 1 = 2. Also, the denominator df is equal to 31 - 3 = 28. Here, F = 21.12 is significant at 0.05% (table 4b).

Table4b. Regression Model

Source	SS	df	MS	Number of obs = 31
				F(2, 28) = 21.12
Model	3.23183087	2	1.61591543	Prob > F = 0.0000
Residual	2.14236268	28	.076512953	R-squared = 0.6014
				Adj R-squared = 0.5729
Total	5.37419355	30	.179139785	Root MSE = .27661

Regression equation explains the relationship between adding social RM strategies, adding financial benefit RM strategies and its resultant building of customer value algebraically.

Or, $CVt = \beta_0 + \beta_1 (SBt) + \beta_2 (FBt) + \varepsilon$ where β_0 is a constant and is the actual intercept at the dependent variable axis, β_1 and β_2 are the slope (also called the regression coefficient) of adding social benefit and adding financial benefit respectively and ε is the random error term that describe the real data above and below the line.

www.ijstm.com

Estimated Regression Line (or equation or model)

Regression line is a line drawn through the points on a scatterplot to summarise the relationship between the variables being studied. When it slopes down (from top left to bottom right), this indicates a negative or inverse relationship between the variables, when it slopes up (from bottom left to top right), a positive or direct relationship is indicated. Here the relationship is positive (table 4c).

Table 4c. Coefficients

CVt	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
SBt	.2679836	.1170869	2.29	0.030	.0281419	.5078252
FBt	.4662382	.1429828	3.26	0.003	.1733512	.7591252
_cons	.8816461	.4469267	1.97	0.058	0338418	1.797134

Predicted customer value = 0.8816461 + 0.2679836 (social benefit) + 0.4662382 (financial benefit), here slope of the β_1 and β_2 coefficients are 0.2679836 and 0.4662382 respectively, means that various relationship marketing strategies like adding social benefit and/or financial benefit shows direct positive relationship with customer value. The value of t is significant for both the relationship strategies at 0.5% confidence level as shown by the above table.

Added-variable plot of social benefit and financial benefit

The graph of added-variable plot reveals the presence of problematic observations if any, during regression analysis.

Figure 4.av-plot of social benefit and financial benefit against customer



Figure 4 shows the estimated regression line superimposed on the scatter diagram. Positive linear relationship exists between both the relationship marketing strategies and customer value development. The slope of adding social benefit is 0.26798356 when adding financial benefit is kept constant and of adding financial benefit is 0.46623822

www.ijstm.com



when adding social benefit is kept constant. Here, a regression of customer value on adding social benefit and adding financial benefit has the same coefficient and standard error (up to a degree-of-freedom adjustment) as the estimated coefficient and standard error for the regressor in the original regression. In our sample, values of adding social benefit ranges from 2.6 to 4.8 and adding financial benefit ranges from 3 to 5, thus the equation should be used to generate estimates of total customer value within these ranges of independent variable only.

Qualitative test

	RM factors	RM tactical tools	Percentage
		Phone call	6
	Mode of communication	Email	7
Social		Text	2
benefit RM		Communication	6
strategy		Face to face confrontation	4
	Problem solution skills	Problem solution Expertise	2
		4 times in a month	6
Financial	Regular call presentation	2 times in a month	6
benefit RM		Once a month	3
strategy		Conference	12
	Academic investment	Books	9
		Gadgets	4
		Updating knowledge/literatures	8
		Knowledgeable seller	3
	Values desired during	Uniqueness/motivative ness	3
Customer	presentation		
value		Frequent visit	5
	Customer loyalty measures	Quality and price	11
		Friendly/transparency	3

Table 5. Frequency of Qualitative Factor in Percentage

As per table 5, doctors prefer email and initiation of positive phone calls to text as the mode of communication with Venus remedies. Good communication is preferred as the good problem solution skills when and if situation is required. Doctors prefer to entertain marketer regular call/presentation twice or 4 times in an average per month. Sponsoring of scientific conference in terms of venue registration/flight arrangement/accommodation or local transportation is the most preferred mode of academic investment closely followed by sponsorship of academic materials like medical text books, publication etc. Sharing of updating literatures from medical journals like 'The Lancet' and 'The New

www.ijstm.com

ISSN (O) 2394 - 1537 ISSN (P) 2394 - 1529

England Journal of Medicine' was the values they wanted to seek from the company marketer during the sales presentation. For customer loyalty retention measures, the doctors preferred good quality product and frequent call from the company side.

IV: SUMMARY AND CONCLUSION

The null hypothesis that there is no correlation between RM strategies and customer value is rejected with an alternate hypothesis. This study analyse the various RM strategies Venus Remedies conducts in the doctors here in Kathmandu. The correlation-regression analysis is done to assess the impact of adding social benefit and adding financial benefit in building customer value. The study revolves around the value of doctors (especially physician and paediatrician segment) only as they are the sole authority figure to write Sulbactomax.

This quantitative analysis is done on data collected through questionnaire method, and the hypothesis that there is no correlation between marketing strategies and customer value is tested.

The questionnaire 1 to 5 are framed for social benefit RM strategies, 6 to 10 for financial benefit RM strategies and 11 to 20 for building of customer values (has come either from social/financial benefit or both).

The 60% of the response variable variation is explained by a linear model as indicated by R^2 value of 0.6014. F value of 21.12 is significant at 0.05% confidence level. The predicted regression equation is: customer value = 0.8816461 + 0.2679836 (social benefit) + 0.4662382 (financial benefit), show positive linear relationship between both the relationship marketing strategies and customer value development.

Box plot, Kernel density estimation, Q normality and Shapiro-Wilk test are conducted to test the normality. To test homoskedasticity, residual vs. fitted plot, Breusch-Pagan / Cook-Weisberg and Cameron and Trivedi's decomposition of IM-test are done.

To test multicollinearity, variance inflation factor test is done.

The linktest and regression specification error test (RESET) is done to test the proper specification of the model.

REFERENCES

- [1.] Karayani, Despina. A cluster analysis of physician's values, prescribing behaviour and attitudes towards firms' marketing communications, University of Patras, Greece, page 1-22.
- [2.] Customer perceived value, satisfaction and loyalty: The role of switching costs, Zhilin Yang City University of Hong Kong, Robin T. Peterson, New Mexico State University, page no. 1-24.

www.ijstm.com

ISSN (O) 2394 - 1537 ISSN (P) 2394 - 1529

- [3.] Singh, Yogesh Kumar. Fundamental of research methodology and statistics, page no. 1-323.
- [4.] HaimOwitz, Ira J. Healthcare relationship marketing strategy, design and measurement, page 1-19.
- [5.] Krishnan, S.CRM in pharma marketing Interlink insight, vol. 11, issue-1, 2012-13
- [6.] Parvatiyar, Atul and Jagdish N. Sheth. (2001). Customer Relationship Management: Emerging practice, process and discipline, Journal of economics and social research 3 (2) 2001, page no. 1-34
- [7.] Turkman, K. F. Linear regression, page 1-56.
- [8.] Regression analysis: Basic concepts, Allin Cottrell.
- [9.] Kotler, Philip, Joelshalowitz, and Robert J. Stevens. Strategic marketing for health care organizations, building a customer driven health system