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Analysis of Factors Affecting the Implementation of Customer Relationship Management in Manufacturing Industries in India

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ABSTRACT

Today is an era of intense competition. There are several factors that have created turbulence in the business environment. They will not quietly accept whatever is given to them but rather will be ready to participate in the planning and production of the product that they want. Because of this new demanding role of customers, acquiring new customers, retaining the existing ones, and gaining their loyalty and trust has become very difficult. All these factors have forced the businesses to think of all the possible ways to manage relations with customers to have a better understanding of the customers and their expectations. This gave rise to disciplines like Customer Relationship Management (CRM). It is very clear that building customer relationship is the fundamental business of every enterprise and it requires a holistic strategy and process to make it successful. It has been recognized as a good research problem to study what exactly is being done with respect to relation building with customers. The primary data of the research was collected with the help of a structured questionnaire. A review of literature was carried out to get a clear idea of the basic concepts of CRM. The data analysis is carried out with the help of the appropriate techniques. The data was coded and recorded

with the help of Microsoft Excel. Frequency tables were generated and observations based on percentages were noted. An in depth study of the CRM initiative of the organizations was carried out with the help of information on the company websites and the questionnaires. The statistical analysis for testing the hypothesis is carried out with the help of Microsoft Excel add-in Analysis Toolpak.

Keywords:—Customer Relationship Management, CRM Lifecycle, CRM Implementation Framework, Manufacturing Sector, Independent Sample Test, Levene's Test.

I. INTRODUCTION

For a successful business one must have a large number of "good customers". Good customers are ready to be involved in the business and are usually willing to invest their time and effort to help develop new product and service. Thus they tend to migrate from good customers to better customers. Reducing customer defections can boost profits by 25-85 %. In 73% of the cases, the organization made no attempt to persuade dissatisfied customers to stay; even though 35 % said that a simple apology would have prevented them from moving to the competition. Sixty eight

percent of customer defections take place because customers feel poorly treated.

The beginnings of CRM were from historical age right from the time trade started when the form of conducting business was different with different rules of the business appropriate to the then prevailing surroundings. Even CRM thinking has evolved over a period of time. Many thinkers have provided frameworks and ideas that have helped firms to connect with their customers. The thinking started with the concept of direct marketing leading to focused and accurate marketing. Further came the concept of value creation which can also act as a differentiator for the firm as well as gain a competitive advantage in the competition. The next step was changing over from mass marketing to customer marketing using technology as an enabler. The concept of mass customization was also introduced by then bringing into the picture customer relations and their importance to a business and its survival and growth.

1.1 Customer Relationship Management (CRM)

The precise definition of CRM is difficult as it is a complex and comprehensive process that takes the organization to customer centricity,

- CRM is a strategic business initiative which is enterprise wide and these initiatives are aimed at treating each individual customer differently
- CRM is a comprehensive strategy and process of acquiring, retaining and partnering with selective customers to create superior value for the company and the customer
- CRM is a philosophy and a business strategy, supported by a system and a technology, designed to improve

human interactions in a business environment. CRM is a customer focused business strategy designed to optimize revenue, profitability and customer loyalty

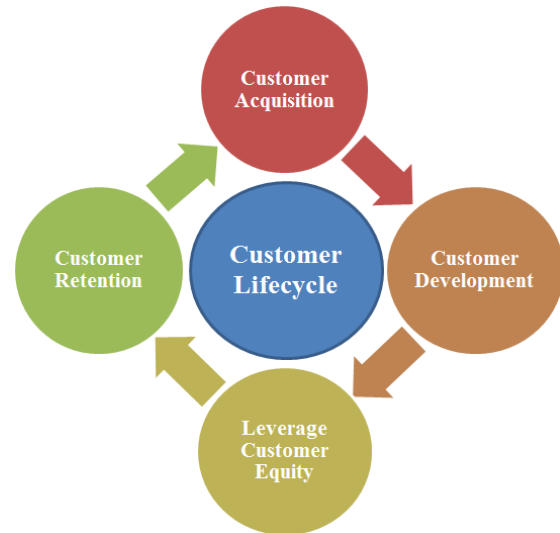


Figure 1: Customer Lifecycle

The customer life cycle starts with a clear and precise assessment of customer needs and then attracting them with the traditional modes of advertising or through recommendations. The next step would be customer development i.e. please the customer by offering him a product of his dreams by learning about it from him through close relations with him. Then comes the stage of leveraging customer equity wherein cross selling and up selling are resorted to but while keeping in mind that there must be mutual value creation. The last part of customer life cycle management is retaining the existing customers and trying for more customers through referrals of these satisfied customers.

CRM is therefore a strategic management tool that utilizes tools and technologies to leverage the information collected at the front end of the business and to integrate it with processes and back office operations to create value for customers and create customer loyalty. CRM is a combination of

processes, tools and technologies to increase profitability and cross sell, at the same time create value to the customer. A better understanding of customer needs helps us to focus better on those operations that are valued by customers and giving less importance to those operations which the customers do not value. It helps to identify precisely what is pulling the existing customers so that the same can be used to find new customers. It is thus a basic building block of an organization.

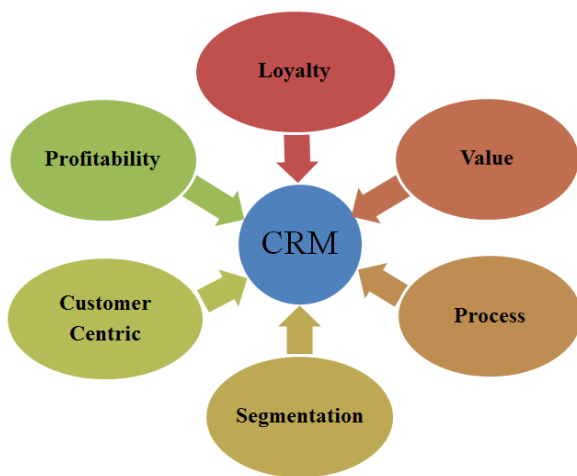


Figure 2: The basic ingredients of CRM

Customer relations today have become very crucial for a business to be successful because they are an important link with the customer. Retaining customers is easier with good customer relations. Hence understanding what these customer relations are, goes a long way in creating value for the customer and the business.

1.2 Research Problem

While carrying out this research, the importance and relevance of CRM for a business organization has been realized. Lot of efforts and initiatives are taken in this area in the advanced countries as well as in India. The visibility of these efforts is very high in the service sector but the CRM effort taken in the manufacturing sector has very little visibility. As a result, if the end

consumers come to know about the efforts taken by the organization for value addition to the consumers, they would not only appreciate the efforts but would come forward for co-operation. Thus it would be a good research problem to study what exactly is being done in the manufacturing sector with respect to relation building with customers. The study would also include the details about the extent of efforts in various industries and organizations.

1.3 Research Objectives

- To identify the various means of communication employed for successful CRM.
- To trace the modification in organization structure to make CRM a success.
- To study the use of technology to improve the effectiveness of customer relations.
- To analyze organizational processes implemented to deliver value to customers.
- To work out a model for evolution of CRM.

1.4 Importance of the Study

The topic is particularly relevant today given the fierce competition and the demanding consumers. The only way in which a business can protect itself in this uncertain condition is by coming closer to the customer to understand his psychology, his expectations, his buying process and the relevant behavior. Gathering feedback about the customer's perception about the product, the organization, the brand could give vital inputs about the performance of the organization. Operational, collaborative and analytical CRM together help gather the front office and back office information and to integrate it so as to have good coordination, between the various functions

in serving the customer more effectively and efficiently, coming close to the customer is possible only by developing long-lasting relations based on trust and confidence that will bring the customer back to the organization again and again. By understanding what exactly is the status of the concept of CRM in the manufacturing industry sector, it could give directions for possible future development. It would therefore be very interesting and enlightening to study the level of understanding and implementation of CRM in the Indian manufacturing sector.

II. LITERATURE SURVEY

Ignacio Cepeda-Carrion et al (2017) contributed to the literature by identifying and analyzing possible combinations between critical knowledge management processes (absorptive capacity, knowledge transfer and knowledge application), which will result in the creation of superior customer value.

Anke Lepthien et al (2017) develop and empirically analyze a theoretical framework of consumer reactions to customer demarketing based on the theory of dual entitlement by conducting seven experiments in which the main effect of observing customer demarketing and analyze several moderating and mediating factors were identified.

Sunghyup Sean Hyun et al (2017) examined the dimensionality of hospitality customer relationships and, second, to develop a multi-dimensional customer relationship scale validated with both antecedent measures of marketing effectiveness and effect measures of financial performance. For both the hotel and restaurant industries, scale development procedures with confirmatory factor analyses were used to identify the dimensions of customer relationships:

engagement, motivation, commitment, cross-buying, word of mouth, and defection.

Zhan Wang et al (2017) examined how social media usage can help firms build new CRM capabilities and thus improve marketing adoption strategies and business performance. It is suggest that social CRM capability is critical when companies merge social media into their marketing strategies to improve customer engagement and firm performance. This study contributes to extant literature by confirming a new form of CRM capabilities – social CRM – using the resource-based view and dynamic capabilities theory frameworks, and by demonstrating that social media usage plays a moderating role by amplifying the positive impact of social CRM capabilities on firm performance.

Asieh Ghazian et al (2016) examined the relationship between customer relationship management and customer response among customers in Tehran LG Company. The method used in this study is a descriptive survey. The analysis results showed that Internet service and customer response, brand development, and the customer support and response to price, brand development, brand preference, purchase castle and finally the reaction to price support and marketing, brand development, brand preference and intend to buy a significant relationship was observed.

Cerchia Alina Elena (2016) aims to analyze how social media supports the development of customer relationship management. It is examined the significant role of social media, the use and the rise of social networks. The use of social media marketing represents a strong factor in developing a CRM strategy. The study emphasizes examples of how companies can benefit from the use of social media, growing sales and profitability, creating advertisements, acquiring new customers,

retaining them and make them loyal. Organizations should adapt to the rise of this new trend – social media.

Mehdi Bagheri Ghalenoie et al (2016) recognized and evaluated effective human resources in customer relationship management. The statistical community of this research is the employees of private banks of Shiraz city and data has been collected by means of questionnaire. The findings of this research show the positive effect of human factors on the customer relationship management and amongst these, factors such as view, understanding and self-recognition of human resources guaranteed the outmost effectiveness.

NituClaudiuValentin ET AL (2016) aims to reflect own contributions to the development of management theory and management practice in Romania. The main objective of this scientific research is to highlight the importance of social media as a mean of business development by creating new opportunities through promotion and a better brand visibility in the market. Quantitative investigation of this paper was conducted based on assessment questionnaire, addressed to the employees of some Romanian companies. The qualitative investigation was conducted at the end of the research, based on analysis and structuring the information obtained. As a result of the conducted study it was found that the media is one of the main trainers of public opinion, if not the main, controlling the public sphere. It conveys information, but also it controls and steers the public opinion.

ZeynabSoltani et al (2016) presented a comprehensive study and survey on the state of the art mechanisms in the scope of the CRM. It follows this goal by looking at five categories in which CRM plays a significant role: E-CRM, knowledge management, data mining, data quality and,

social CRM. In each category, a couple of studies are presented and determinants of CRM are described and discussed. The major development in these five categories is reviewed and the new challenges are outlined. Also, a systematic literature review (SLR) in each of these five categories is provided.

Ramendra Thakur et al (2016) uses the customer portfoliomanagement (CPM) approaches to examine how a company can define the value of customers and segment these customers into portfolios. By segmenting customers into portfolios, an organization can better understand the relative importance of each customer to the company's total profit. Such an understanding will help companies retain valuable customers create additional value with these customers through relationship development. The purpose of this article is to contribute to the body of customer relationship management (CRM) literature by introducing a conceptual framework of the customer portfoliomanagement (CPM) matrix. From this framework, a firm can segment its customer base into four portfolios, platinum, gold, silver, and bronze, and deliver services accordingly.

Shan Wang et al (2016) investigates whether early mover advantage (EMA) exists among entrepreneurial e-tailers operating on third-party e-commerce platforms. Contrary to traditional wisdom, the current research hypothesizes that e-tailers may enjoy early mover advantages because of the consumer demand inertia amplified by the nature of the Internet and the system design characteristics of e-commerce platforms.

III. RESEARCH METHODOLOGY

The research conducted is of the exploratory and descriptive type. It attempts to explore what is the organization's idea of

CRM, what are the concrete measures undertaken by the firm for the implementation of CRM, which enablers have been utilized and to what extent. It describes all the initiatives and efforts for customer relationship building by the industry as a whole and by the firm on individual level. The organizations in and around Madhya Pradesh were considered for the research study. The research included a study of all the customer centric activities and initiatives that are necessary for building good customer relations. The organizations in the manufacturing sector were considered for the study. These comprised organizations from the consumer product sector and the industrial product sector of the manufacturing sector. The research study was carried out with the help of online survey questionnaire with the heads of CRM divisions wherever applicable; officers dealing with CRM related activities/ executives from the marketing department dealing with CRM activities. It is observed during the pilot study that small scale units were not aware of the concept of doing something professionally for CRM. A list of manufacturing units in and around Madhya Pradesh was obtained from Department of Commerce, Industry and Employment, Government of Madhya Pradesh. 25 companies doing good business and competing with these companies were added to the list. 2-5 selected companies from each sector were identified and approached and the list was made as pervasive as possible. The sampling method followed was purposive and convenience sampling. The sample size was determined using the formula of sample size determination for small population. The population size was 120 as per the list provided. The primary data was collected with the help of a structured online survey. The secondary sources of information that helped study CRM in great details are

Reference books, Case studies, Journals and magazines, Newspapers, Company websites. The questionnaire was designed with the aim of collecting the CRM related information from the officials in the selected organizations. The questions framed were mainly on the basis of Likert scale to provide options for an accurate answer. While framing the questionnaire, it has been kept in mind that the questionnaire had encompassed all types of respondents. Though some had never heard of a few things others were doing so much that there was a fear of their rating the questionnaire as rudimentary or frivolous. The researcher was aware that some of the respondents may not choose any of the options and hence their response would have to be tabulated as 'No answer'. Each question was framed keeping in mind these various aspects.

The statistical analysis was carried out with the help of MS Excel software with special add-in called Analysis Toolpak. The tests applied were independent sample t –tests as there were two groups of data one group of consumer product companies and the other group of industrial product companies. A comparison between these two groups to study the difference in trends with respect to certain factors as well as the difference in practices followed could be studied. The type of firm was the independent variable and the metric rating given was the dependent variable. Since there were no multiple scales item the reliability and validity tests were not required.

IV. DATA COLLECTION

The study used a self-administered structured online survey questionnaire prepared in Google Form as the main tool for collecting data. The questionnaire was divided into two sections; Section A contained background data, while section B contained quality management practices and

its impact on organizational performance. The content of the structured questionnaire are designed as multiple choice questions based on 5-point Likert scales and also the use of scripted introduction and order of questions as per the research objectives.

The online survey questionnaire was administered through emails and social networking.

Parameters and Variables

Ease of business for customers

- Use of Voice Mails
- Use of Intelligent call routing
- Use of e-mail response
- Use of Contact Centre desktop
- Use of Tele business
- Use of ATM
- Use of Kiosks

Provisions in the organization structure

- CRM Division
- Customer care center
- Call Centre
- Task force to attend to customer problems
- Team to look into customer relations

Enabling contact with customers

- Sales people
- Net Chat
- Service Personnel
- Consumer Communities
- Call Centre
- Strategic account manager
- Web Sites
- Marketing Department

Use of internet

- Electronic Catalogs
- Order booking
- Product Specification, Pricing etc.
- Order status enquiry
- Suggestion from customers/Net chat/Interactive dialogue
- Contact Management

Sources for customer information

- Internal Personnel
- Internal documents
- Annual reports
- Customer Websites
- Public database
- Competitors
- Analysts
- Research groups
- Trade Journals

Communication channels for communicating with customers

- Telephone, Fax, Mobile
- Conference call
- Voice mail
- e-mail
- Database

Sources to tap customer opinion

- Customer Panel
- Customer visit
- Market Research
- Customer website
- Toll free number
- Trade show
- Sales Calls
- Customer feedback

Basis of customer segmentation

- Geography
- Size of the company
- Profitability potential
- Status of customer loyalty

Use of technology for business functions

- Billing and invoicing
- Complaint Management
- Sales and Marketing
- Contact Management
- After Sales Service
- Inventory Management
- Processing Orders
- Logistics
- Sales force automation
- Customer service helpdesk

Processes for better customer focus

- Information sharing with customer and open lines of communication
- Developing joint solutions to problems
- Customer participation in product development and planning
- Joint investment in technology development
- Purchase process modification for specific customers
- Supply chain management
- Co designing, co-marketing, co-development

Steps taken by HR to inculcate CRM culture

- Special training to deal with customers
- Regular meetings
- Encouraging alliance based behavior

- Workshops
- Teamwork
- Newsletter
- Group dynamics
- Change Management
- Open communication culture
- Motivation for CRM

Quality drivers for successful CRM

- Service Quality Indicator
- Quality circle
- Voice of customer
- Vendor Development
- Gap analysis
- Knowledge Management
- Maintaining communication log

Respondent's ideas of good customer service

- Responsive service
- Proactive relationship
- Frequent personal contacts
- Empowered employees
- Information sharing from customer interface points to back office
- Rewarding employees for excellent customer care
- Customer segmentation
- Good employee relations
- Easy contact mechanisms for customers
- Encouraging feedback from customers

Tools for improving customer loyalty

- Loyalty cards
- Membership cards
- Gifts as per customer liking
- Direct marketing

- Efficient customer response
- Dealer clubs
- Free consultancy on related issues
- Conference meeting workshops
- Holiday Packages

Respondent’s opinions about CRM

- Customer satisfaction is directly related to customer loyalty:
- Customer relations help acquire customer loyalty rather than customer satisfaction
- Happy employees=happy customers
- Customers complaints offer an excellent opportunity to increase customer loyalty
- CRM is a strategy not a technology application

Data Analysis and Findings

Independent Samples T-Test

The Independent Samples T-test compares the means of two independent groups in order to determine whether there is statistical evidence that the associated population means are significantly different. The Independent Samples T-test is a parametric test.

The Independent Samples T-test is commonly used to test the following:

- Statistical differences between the means of two groups
- Statistical differences between the means of two interventions
- Statistical differences between the means of two change scores

Descriptive Statistics of Parameters

Table 1: ANOVA Test

Parameter	F value	P value
Ease of business for customers	5.447	0.024
Provisions in the organization structure	2.396	0.128
Enabling contact with customers	5.417	0.024
Use of internet	7.438	0.009
Sources for customer information	1.898	0.175
Communication channels for communicating with customers	0.858	0.359
Sources to tap customer opinion	1.784	0.188
Basis of customer segmentation	0.451	0.505
Use of technology for business functions	12.125	0.001
Processes for better customer focus	9.348	0.004
Steps taken by HR to inculcate CRM culture	0.304	0.584
Quality drivers for successful CRM	5.533	0.023
Respondent’s ideas of good customer service	5.973	0.018
Tools for improving customer loyalty	4.637	0.036
Respondent’s opinions about CRM	1.695	0.199

V. RESULTS

Communication and contact channels for CRM:

- The most popular mode followed for ease of transaction is the e-mail response followed by the Tele-business and contact Centre desk top. These helps in nurturing customer

relations.

- The most preferred mode of communication adopted by organizations to interact with customers is the telephone, fax, mobile and e mail.
- The traditional channels of salespeople, marketing department and service personnel are still largely used for maintaining contact with the customers.

Provisions in the Organization Structure:

- Very few organizations have an independent CRM division although a large number of organizations have task force and teams to look into customer relations.
- In addition many organizations have customer care centers and many organizations from the consumer product sector have call centers to provide 24x7 accessibility to customers.
- The provision of a fully dedicated person, the strategic account manager, in the organization structure to cater to customer needs is adapted to a considerable extent in the manufacturing sector.

Customer information -the life and blood of CRM

- Almost all the respondents maintain an in house database for customer profiling. Internal personnel and internal documents are the most popular sources to acquire customer information.
- Customer opinion is tapped mainly during customer visits and a systematic customer feedback activity. Sales calls are also used to a considerable extent to tap customer

opinion.

Technology as an enabler for CRM

- Internet is being mainly used for display of electronic catalogue of the products and product specifications; pricing etc.
- Many organizations have their websites to disseminate information about the organization, products offered and associated services.
- All the organizations are using advanced software for making the business functions such as billing, invoicing, complaint management etc.

Customer focused processes

- Many organizations are keen to develop joint solutions to problems with the customers. Some widely adopted customer focused processes are information sharing and open lines of communication for getting close to the customers and supply chain management.
- Half the respondents have value drivers such as voice of customer, vendor development and service quality indicator in place. Gap analysis and quality circle is practiced by a small group of respondents.
- Efficient customer response is the most prominent tool for acquiring customer loyalty followed by conferences, meetings and workshops.

Role of HR

- Special training to deal with customers, regular meetings and workshops are considered important and are widely used to create an atmosphere conducive to CRM.

Newsletters for better internal communication are adopted a considerable number of organizations. Open communication culture, teamwork, motivation for CRM, alliance based behavior are comparatively less used.

- Responsive customer service, proactive relations, frequent personal contact, empowered employees, rewarding employees for excellent customer care and encouraging feedback are considered important by a huge majority of respondents.
- The philosophy of CRM has been rightly inculcated in the organizational culture by the efforts of the HR with the help of the people dealing with CRM. Almost all the respondents have accepted CRM as a strategy and not a mere technical application.

VI. CONCLUSIONS

There is a marked change in the outlook of the manufacturing sector with respect to CRM. The businesses are gearing up on many fronts to understand the expectations and problems of the customers. This helps them to come up with customized products to satisfy the customer. The organizations are taking initiatives to tap customer opinion and collect their feedback through the traditional channels of marketing, sales and service personnel as well as the technology enabled channels which give 24 x 7 accessibility to the customers/ end consumers. The HR departments are taking several initiatives to inculcate the CRM culture and develop the right mindset which is the basic necessity for successful implementation of CRM. It can therefore be concluded that CRM will see many innovative initiatives in the years to come and will establish itself as a valuable discipline.

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