



Application of Information Technology Techniques in Design of a CRM Model for Telecommunication Company

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Abstract

Nowadays, Customer Relationship Management (in short CRM) is gaining more and more importance due to the competitive market. Most developing countries which are experiencing economic reforms need to apply new CRM methods in order to retain and increase their domestic and foreign customers. Customer Relationship Management has a prominent importance in Telecommunication companies, specifically for the Data section customers' office, which is responsible for data processing and providing of the relations between offices and organizations. In this research paper, we present a new model which is more suitable for Data customers in a Telecommunication company. In our research we considered Customer Relationship management from three aspects: technology, procedures and human factors, and we have defined the main criteria and sub criteria of each one. The proposed model in one hand takes a step toward dynamism and increasing customer satisfaction, and on the other hand improving level of service and increase in the profits of telecommunication Company.

Keywords: Customer Relationship Management, Information Technology, Strategy, Satisfaction.

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1. Introduction

Today's highly dynamic market, customers expect the organization to offer the most goods with the most suitable prices, and organizations are always trying to find new methods and innovations in making and marketing goods, and even they call customer's value under the title of their "source of comparative benefits"

In the new procedures of working, attracting customers' satisfaction, in the aim list of organizations, assigns a great and essential position to itself and prime managers know very well that their succession in getting to the main aims of the organization entails gaining customers' satisfaction.

On the other hand we can't say all customers equally have a role in succession of the organization. Thus gaining key customers' satisfaction would be of greater sensitivity.

Hence it's necessary to apply a system in the organization for attracting and retaining customers and for enhancing their loyalty.

A system that can manage the relationships of the organization and customer's pretty well. Nowadays such systems are known as Customer Relationship management systems and some softwares in the name of CRM are being sold that can empower organizations more to gain customers' satisfaction.

By electronic business appearance, electronic customers also have appeared. Systems of Enterprise Resource Planning heretofore presented methods of Customer Relationship management but electronic customer expects to have access to offices by E-mail, contact centers, fax and internet.

By each contact, customers expect to be answered quickly.

Since the out dated ERP systems were not able to respond to different aspects of customer management, CRM entered to its new and reasonable branch, and on the ground of some reports, the primitive introduction of modern CRM systems started in 1980.

2. LITERATURE OF THE SUBJECT

2.1 CRM Definitions

Traditional marketing strategies for the purpose of market share enhancement were centralized around a 4p axis, meaning Price, Product, Placement, and Promotion. And their primitive attention was on the turnover increase between seller and buyer. But CRM is a type of business strategy that is beyond turnover increase and its purpose is profit making increase, income and customer's satisfaction. For getting to such aims, organizations make use of a large collection of tools, methods and relationships with customers [1].

On the basis of considerations of Gartner Group¹, Customer Relationship management is dividable into 2 separate parts.

Firstly it's a business strategy that prepares organization for being precursor through customers or customer centric. Secondly it's a strong tool in delivering profit making goods to customers through understanding and foreseeing their needs [2].

Gartner Consulting Group defines CRM as follows:

CRM is a business strategy that its achievements, profitability, revenue and customer satisfaction with the organization, customer classification, promotion behaviors and implementing customer satisfaction for the binding process gives the customer the optimum circuit.

CRM technologies should make possible a comprehensive recognition of customers, a more efficient interaction with customers and integration between all of customers' relational channels and Front Office operation [8].

Sapient consulting office has defined Customer Relationship management as this: CRM is an organizational customer centric model that makes use of customers' information for creating a special method. For the purpose of increasing value by continuous learning and by offering distinct experiences to customers, this method is being employed consistently in all Customer Relationship channels [11].

2.2 CRM technologies

Technologies used by CRM can be divided into three general categories:

A) Operational CRM: includes all procedures of Customer Relationship, from marketing and

selling procedure to after sales services and receiving reaction from customers. In terms, all domestic systems of the office consisting services, orders, bills and etc, are included in this category. Operational CRM has been divided into two types of eCRM and mCRM [4].

B) Analytical CRM: in analytical CRM, tools and methods are used to analyze the gained information from operational CRM and prepares the results of that for business performance management Analytic CRM is inextricably affected by data bank architecture and makes use of analytic methods In order to optimize the use of performance capability for analysis and giving report. Abstract words, analytic CRM is obtaining data, saving, processing, interpreting and reporting to the users of client data [9].

C) Collaborative CRM: in this type of relationship, for contacting the organization, customers choose the easiest possible way such as: telephone, cell phone, fax, internet and the other appropriate ways. Due to the method of choice by customers and that most procedures (from data gathering to processing and customer referral), reach to the respective agent in the least time possible, collaborative CRM makes the customer refer again and continue relationship with the office [3].

3. STUDYING PRESENTED FRAMES BY SOME ACTIVE OFFICES IN THE CONTEXT OF CRM:

In this section we study some software, frames and presented models by some worldwide credible offices that work in CRM context as the most reputable offices.

3.1 Seibel office:

Products of this office consist of practical programs for electronic business and empowering organizations in the context of selling, marketing and giving services along different channels and various business lines.

These products, aid organization by offering the best practical tools particular about industries, practical plans, Customer Relationship management and business procedures. Empowering organizations for better experience gaining, fulfilling customers' requirements and increasing profit through relationship with customers are among the capabilities of software of the office. Seibel office is one of the offices that operates only in CRM field.

3.2 Oracle office:

Oracle office with a work experience of more than 30 years, is the inventor of a new model for database on the basis of rational structure. The office specialized field of work is Customer

¹. Gartner Consulting Group

Relationship management, electronic business, billing and supplying chain management. The main product of this office is E-Business Suit including:

- Oracle Order Management
- 11i Advanced Pricing
- Oracle Order Fulfillment
- Oracle Configuration 11i
- Release management
- Warehouse Management

By using this product, offices can reduce work complexities of their offices. This product after installation on office servers, by the help of sophisticated practical programs takes control of software and hardwires.

3.3 Winner office

The proposed frame of winner is as follows [10].

Creating a database consisting customer's information
 analyzing existing data in database
 recognizing and choosing customers
 targeting customers
 employing methods for creating relationship with the considered customers(Customer Relationship management programs)
 customers' personal information management. -

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3.4 Amdocs office:

Figure 1 illustrates the proposed frame of this office [6]. Here customers are divided into 4 categories of potential, customers, personnel and partners. Also different channels of relationship with customers are:

Web, E-mail, Cell phone, fax, terminal sales and telephone; that all of these channels get united in the contact center (Collaborative CRM).

4. PRESENTING PROPOSED MODEL FOR APPLYING CRM:

According to presented issues, the main items of the proposed frame for CRM consist of technology, procedures and humanistic points. In this section with inspiration from worldwide chief frames, criteria and sub criteria of proposed model that has been planned by Iran structure would be presented as following:

4.1 Technology:

Is one of the strategies of CRM that includes operational, analytic and collaborative CRM? Operational CRM that is as the window shop of the organization and initial point of relationship with customers includes eCRM, mCRM and channels of relationship with customers.

eCRM is used for establishing a relationship with customers through web. Portals of offices, organizations and institutes are samples of eCRM . mCRM is a new type of eCRM that by cordless instruments such as cell phone and laptop provides the possibility of relationship with customers. The aim of mCRM is to increase the capability and customer's operation in every possible place. (In the office, while moving in the street or in a place of entertainment)[2].



Figure 1: The proposed frame of Amdocs office

Relational channels of this model are: voicemail, sms, e-mail, second class mail (regular mail), fax and internet (office's portal) that are at the center of contact.

Now, there is a point unit as the contact center for relationship with customers of the whole province in data center which will facilitate customers' relationship with different units of data by using the voicemail. Besides consulting presentation possibility and deriving customers' opinions and suggestions through existing contact center in data center, customers' complains and opinions also are derived by public relationships of the office and undergoes many analysis.

Talking about technology, all three types of CRM technologies are being applied. So that organization for having relationship with customers, makes use of operational CRM and relational channels; and by analyzing existing data in customers' database makes use of analytic CRM. In another term, analytic CRM analyzes the whole collected data from customers that have been placed in database by operational CRM, and refers the type of dealing with each customer type to operational CRM. This form of information will be circulating between the two sections.

Also by considering contact center as the main channel of relationship with customers, that itself consists of several relational channels seems necessary for simultaneous usage of different channels' interactive information of relationship with customers, uniting computer and telephone applications that means using Collaborative CRM.

4.2 Procedures

This criteria estimates marketing procedures, selling and after sale services. Using the following frame is obligatory in the field of preplanning procedures:

Contact points and the processes that effect on customers and draw their sketches

Identify key procedures from customers' point of view and find out procedures that can bring the most dissatisfaction, in first stage concentrate on them.

Characterize and outrank these procedures on the basis of their effects on the aim of CRM

Apply the necessary changes on the organization (no procedure should be left without an administrator and executor).

Using customers' aims specify measurable or a conception aim. Give a type of service level agreement to customers for every key procedure.

Outrank procedures on the basis of their importance to customers and their effects on CRM aims.

4.3 Humanistic factors

One of the main points in Customer Relationship management is proper behavior with customers and respecting them in a face to face relationship.

So that customers' needs are met in the least time possible, and their status is dignified, customers' personal information management also can be regarded as a solution for rectifying customers' distrust of organizations in presenting information and using CRM strategy.

By ensuring customers that in this case their personal information are kept to the organization, organizations will be able to establish an easier relationship with their customers and gather more accurate information about them, and consequently offer better, more varied and efficient products and services.

Customers expect organization to have a thorough information about their membership history, and know when customers have received what kind of services, what changes have occurred and how much has been their payments. This possibility should be placed in customers' achieve database of customer data, that elicits every customer's data from database after his contact, and will be provided to the users.

Other important main issues in the context of humanistic factors are emotion management and personnel wage which are included in the proposed frame.

Because organizations lack the staff motivated to accept change and fear of losing job status, the resistance against change increases.

By managing emotional factors and rectifying employee's services that are regarded as domestic customers, we can overcome the problems to some extent.

On the other hand, customers' satisfaction is one of the new operation assessments and organizational services quality criteria. Because of this reason in the proposed model, customer's satisfaction level and surveys of customers also have been regarded as sub criteria of humanistic factors.

Besides educating personnel with technical subjects, tactics of making an efficient relationship with customers and offering the necessary educations should go under consideration. Chart 3 shows the main criteria and sub criteria of the model in brief.

Table 3: criteria and sub criteria of presented model

Sub criteria	Main criteria of model	CRM strategy	column
eCRM	Operational CRM	technology	1
mCRM			
Relational channel			
Data base	Analytical CRM		
Analyzing data			
Uniting computer and telephone application	Collaborative CRM		
Simultaneous use of relational channel			
Identifying and attracting customers	marketing	procedures	2
Target Customers' management			
Outranking customers			
Foreseeing substructures			
Planning and sale foreseeing	Sale		
Managing software and hardwire systems			
Conventions management			
Customers' profile			
Sale management			
Customers' loyalty plans			
Planning and services foreseeing	services after sale		
Customers' services and support			
Resources Optimization			
Special services			

5. CONCLUSION

Applying CRM in the present comparative world seems to be an obligation and without it no organization can retain its customers in the length of time. Technology is the main pillar of having contact with customers but singly is not enough and the needed procedures for engineering should be repeated, also humanistic subjects should be taken into account. In this article we have tried to study CRM with a realistic point of view in Iranian offices particularly in telecommunication Company and by studying some chief models in the world

and domesticating them for the cultural and social atmosphere of Iran and offering a model suitable with our countries conditions, we should take an step for dynamism and customers' satisfaction increase. Also considering the fact that CRM has been applied to no telecommunication Company of cities, the presented model can be considered by agents and experts in the important project of applying CRM to Telephone & Telegraph Companies.

customers' personal information management	customers	Humanistic factors	3
managing customers variant requests			
Direct (face to face) contact with customer			
Evaluating customers' satisfaction level			
Emotional factors management and rectifying personnel services	personnel		
Updating personnel's information and educating them			

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