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# A New Paradigm in Customer Relationship Management

*Bhanu Prakash Nunna*

## Abstract

This chapter details around the new paradigm within Customer Relationship Management that the industry is going through. It covers topics like Customer Expectations, different levels in Customer Satisfaction, types of Customers especially talking about Millennial's and their mindset with respect to the expectations of a certain product, and how the customer relationship is changing the game in the market. This chapter also covers some of the key sections such as how Customer relationship management and information technology are playing a key role to enable firms to achieve their goals and targets. Finally, it summarizes some of the key successful best practices to be adopted by firms which can help build trust and relationship with their customers. There by increasing the revenue and customer satisfaction creating win-win situation for both parties.

**Keywords:** artificial intelligence, machine learning, CSAT, information technology, big data and CRM

## 1. Introduction

In this chapter, we will introduce some of fundamental approaches to start building customer relationship, go over the relationship between CRM and IT.

I believe that every user has some basic expectations in terms of customer relationship irrespective of whether a firm or an organization has a department to handle the same and if a firm is willing to invest in such positions who manage relationship with customers.

What is Customer Relationship Management? What are the key goals of CRM for any firms or organizations? How do we measure CRM metrics? What are the different logical levels of CRM? These are some of the basic questions that anyone would have. In my view, Customer Relationship Management is a journey and not a milestone. The reason it is journey is because the wants of the customer changes every day-in, day-out. So, firms need to constantly evolve and try to understand the actual requirements of customers, provide him/her with insight into your latest product/services portfolio and ensure he/she is happy with the suggested solutions. It again depends on the life cycle of product/services of the firms until what stage of the product life cycle they think that the relationship needs to be served.

Organizations have to define the goals and objectives which are measurable and traceable for all roles involved in Customer Relationship Management. This will help firms to measure and track the progress of the Organization in terms of how their products are performing and what customers are saying about their over-all experience when they consume the products/services of any organizations.

## **2. Customer relationship management and IT**

Customer Relationship Management as mentioned earlier is a journey and not a milestone. After the third industrial revolution, which marked a new era with Information technology as a new domain in the industrial sector, the fourth revolution totally changed the way people connect with each other, how IT is becoming one of the core platforms in every industry that we can think. People are smarter, think differently and their choices entered into a new level creating a different bench mark for firms to satisfy the customers.

Customer Relationship existed from early 80s as well but it was very straight forward and targeted towards managing relationships on a regular basis using human interactions. For example, when I used to go to a bank during mid-80s, my father used to know lot of people in the bank including Bank Manager. Having said that, that generation used to maintain human relations with all the people with whom they meet on a daily/monthly basis. Even for that matter, the vegetable vendors, bankers, grocery store managers, people working in hospitals etc. This was the time when there was an implicit Customer relationship which is being maintained by every business/firms in a very interactive way.

After industrial revolution 3.0 [1], people's mindsets have changed, priorities are different, how people connect with each other is entirely different and the expectations of the customers reached to a different level as the customers are more knowledgeable, they have access to any information they want digitally and people have become much more smarter and advanced in their thinking. With industrial revolution 4.0 [2], firms/businesses need to think differently in order to meet the expectations of the current generation of population.

It is the generation where people look for solutions which can help achieve their wants and needs much faster than the earlier generation would expect. Here is where, IT plays a much bigger role to help achieve the target solution required to keep the customers happy. Businesses/Firms, either small or big need to really understand who their target customers are in order to serve them better. CRM solutions will help realize the firms targets if implemented in a rightful manner. It is not necessary that firms implement CRM solutions which are expensive but with Industrial revolution 4.0, there are multiple different ways where firms can come up with innovative solutions to understand customers wants/needs, help achieve them and also continue the journey along with the customer during the life cycle of the product including helping them leverage new upcoming features of the product. For the sake of discussion, imagine you are an owner of a Pizza shop. Now to improve your sales, you will need to understand some basic trends in what type of pizzas are being sold more during certain weather conditions or gaming season like NFL/Soccer or holiday season like Christmas, Thanks giving etc. This trending data can be leveraged to understand the demographic data of majority of customers and if there are any outliers, if so can we leverage those outliers etc. This trending data can be captured using modern CRM solutions and apply artificial intelligence on the historical data, so that we can come up with some patterns. Some of the Qualitative data analysis research methods like content or narrative analysis or grounded theory based on the use cases to be experimented. Not every business can afford to apply AI on their systems as they are more costly as of now (may be in future they become commoditized). In case of smaller firms, they can build smart solutions like Mobile Apps or request customer to fill a small survey (three to five questions max) or have feedback link on their site or request customer to answer couple of questions during payment of their order, which will help these firms to capture all the customer information they need. In some cases, quantitative research methods like Descriptive Statistical analysis using percentages, frequency could also

be very helpful in simple analysis and applying AI models to generate consensus. In scenarios where we need supervised learning based AI models, we could leverage inferential analysis using Regression models to determine future predictions.

In-case of large firms, there are lot of ways to capture customer analytics data using big data solutions, which will help gather all the log information, trending info, recent order information and demographic information for the firms to do prediction AI modeling or un-supervised AI modeling. Firms can also adopt phase wise approach by implementing Chat-Bots which will capture initial customer data, then process that data to apply AI on top of it to predict what kind of car is suitable for a particular customer based on the input they provide in chat bots. Some of the revolutionary solutions that firms can think of are using Artificial Intelligence (AI), Chat-bots (Robotic process automations), Mobile apps to serve customer better and social networking web pages like face-book pages and twitter handles, etc.

## **2.1 Types of customers**

In early 90s, when we go to buy a TV from an electronic store, the way the customer is treated is entirely different from the way customer is treated in current generation. Earlier, the wants of the customer were simple considering the TV whether it is color/black and white, whether the TV is of good brand and price plays a major role. Consider the same scenario in 2019, when we go to a digital store to buy a TV, customer is very knowledgeable in terms of his requirements such as size, clarity, colors, internet connectivity, no of ports it supports, no of apps it supports, etc. The wants of the customer has changed drastically but the way firms maintain the relationship with the customer I believe needs lot of change. The same salesman will showcase the different TVs and if asked he will provide details on the specifications and that's it. The reason I bring this example is to list down different types of Customers and how the CRM changes with these types.

I believe there are three types of Customers in general: (1) Legacy Customer, (2) Hybrid Customer, (3) Innovative Customer. Legacy Customers are those people who would love to stick to their age old value systems which they believe strongly. These customers, in spite of new products in the market, they would want to stick their value system and look for products/services which fit their need.

## **2.2 Legacy customer**

Customers who are of generation before 1970s, these customers do not tend to change themselves along with the current generation. Their value system prefers human connect and relationships are stronger. For example, if a customer in this segment visits a showroom to buy a TV, his criteria to buy would be entirely different in the sense that it could be as simple as good clarity, bigger, cheaper and very user friendly. These properties are good enough to take a decision. For this segment of users, price plays a major role in decision making and also post sales servicing as well. These are very loyal customers and we cannot afford to lose them.

## **2.3 Hybrid customer**

These type of customers fall in between 1970s and 1980s. The challenge with these types of customers is that they want to follow older generation in certain aspects and new generation in certain aspects. This is where it becomes challenging to serve these types of customers. Need to carefully handle these types of customers as these are loyal customers and ready to adopt new technologies as per the trend. Customers in this segment look for value for money, pricing and some adoption of



new features. For firms, these customers can be targeted to improve the sales and there-by increasing the revenue. If businesses can maintain good trusted relationship with these customers, then they will become return and loyal customers and go a long association with the firms.

## **2.4 Innovative customer**

The customers in this segment belong to Millennials. This generation users are very advanced, tech savvy and with high expectations in terms of any product they buy. Businesses/firms will have tough time understanding these users as their priorities change all the time, they needs and wants are dynamic in nature. For example, consider a scenario where a millennial visits a showroom to buy a Flat TV. Businesses have to think about innovative ways to develop trust and relationship with these customers. Millennials like quick responses, heavy feature load, discounts and one thing to be noticed is these customers do not compromise on the price as long as it is feature rich. It is easier to target these firms as long as we have a proper plan on the launch, provide technical details and provide deals. Think of Redmi, Amazon, or Flipkart deals on ecommerce sites where in the target is toward these millennials.

## **3. Levels of CSAT**

### **3.1 New paradigm in customer relationship management**

I believe that businesses/firms need to relook at the way they position customer for their products. They need to think about what kind of customer problems they are trying to solve and to which customer type instead of building product first and look for customers. This paradigm needs to change and keep customer relationship at its core which fuels the product engine. I understand that most of them already talked about this example of Apple's iPod, etc., but think of an example like Bose, which pioneered speaker systems. The main goal of the company is to provide extraordinary music experience with their products to customers. Irrespective of the price range, if firms are able to give the best experience for their products to the end customers, then sales will improve there by improving customer base. Similarly, customer relationship is a domain in itself. Every business need to have at least one representative who can think about, look into, address customer issues, and also manage customer relationship.

Earlier, businesses used to build products and then used to think about how to position themselves for products. I think the paradigm changed drastically and firms started thinking about customers first and then to solve their day to day problems or enable quick solutions to their mundane tasks, firms started coming up with product ideas. For example, we have started seeing a revolution in terms of the kind of mobile apps that are being built to solve customer problems. We have this app called Shuttl or <http://ride.shuttl.com> which is an App to help employees commute to their offices. The beauty of this app is it thinks about customer's pain points and enabled feature set. One recent example is that, I was traveling using this shuttle service and few folks stopped our bus. Suddenly, two folks from shuttl app got into our bus wearing their companies dresses, started handing over a small gift bag (which consisted of a Diary, nice pen and a pamphlet of offers). They told us that they are handing over this gift to mark their first anniversary of the company. This really blew my mind that how firms are evolving their customer relationship management by coming up with innovative

ideas instead of going with traditional mode of surveys, feedback links, etc. I think all firms need to think something like this and come up with innovative ways to constantly have connection with their customer base. This will not only help firms evolve along with customer but also improve their sales and revenues accordingly. Some of the ideas which firms can implement are using events to touch base customers; it could be holiday season or New Year or company anniversary, etc.

### **3.2 Role of IT in customer relationship**

The Customer information we capture during any product or service buying experience is very important. The reason is that is the fundamental way to know, understand and connect with the consumer of your product or service. IT plays a major role in making or breaking the trust and belief of customer which decides the future business of any product or service. With the IT revolution, there are lots of tools or applications which help capture customer information, analyze and come up with some inferences around whether a particular customer is new, existing, loyal and/or most valuable with respect to the products they consume.

The role of IT has become inherent with any domain. Meaning, during early 80s it used to be that only certain functional areas used to leverage IT to capture, store and update data for example like Banks, Healthcare, etc. After nearly three decades, IT has become an integral part of every domain. For example, IT is used in automobile industry, finance, insurance, food industry, textile, pharmaceutical, oil and natural gas, etc. With IT revolution 4.0, information technology solutions with technologies like IoT, AI, Machine Learning, Big Data, etc., and information is leveraged to automate even certain home appliances like Refrigerators, Microwave Ovens (smart Ovens), Smart Houses, Smart Offices [3], etc.

Some of the other areas that IT is used include sports, for example, soccer players are hooked up with sensors to read information of a football player during the match [4] is being played to analyze his mental and physical ability to deal with the circumstances.

One thing I want to stress is that if we leverage customer information with right set of data models and mathematical models, then definitely we can leverage the reports to predict the customer behavior in terms of whether he will return to buy the same product or not. Firms have to leverage IT with proper machine learning models in order to predict if certain customers will help increase the revenue, if certain demographic users can be converted into new customers based on their behavioral analysis.

## **4. Major pitfalls in CRM implementations**

CRM software if not leveraged the right way, then there is potential for negative impact on the firms rather than positive. Especially, in emerging markets, I personally have noticed so many instances where customer relationship is being misused or abused. For example, in developing nations, it is easier to capture customer information if you come up with some flyer which showcases some festive season sale or discounted prices for some of products, etc. Let us take a hypothetical example of Joe going to a mall and there is this guy showing a flyer which talks about massive discounts on some products in a branded store. With the flyer, is an attached form which users fill to get those discounts?

If you look at above scenario, usually people might feel there is no risk. But if you actually think about this information might land into some of the product companies which try to buy customer information from these firms. These firms

sell this information which they received directly from customer. They might sell this information to companies like Target, Best Buy, Honda, Nike, etc as they know you basic PII data from this exercise. It has been a nightmare in emerging countries because firms keep buying this information from MNC companies and start calling people in order to sell their product or service. Out of nowhere, someone calls you and gives your identity and checks if you are interested in a fitness boot camp, or a plot or a flat.

Information if used at the right place, with right set of people and tools, with right analysis, it would be a powerful tool to increase your sales, revenue, customer satisfaction and most importantly your long term relationship with the customer. Some of the other pitfalls in CRM implementations is some firms keep contacting customers every other week or once a month, some firms do not connect with their new customers to understand their experience in order for them to buy same product next time which makes them a return customer. In few more cases, firms collect information of the customers during product buying experience and come up with some deals like customers will enter into a lucky draw to get a Free Washing Machine and customers will never get to know who is that Winner and his details.

Finally, what I would like to conclude is that CRM implementations need to be very well thought through. I believe that banks, insurance firms, healthcare service providers like diagnostic centers misuse this information at least in emerging markets by bugging customers or overloading the customers with SMS, phone calls, emails, etc. and because of this customer gets frustrated and starts to unsubscribe to these firms in order to reduce this spam or noise.

## **5. Best practices to improve customer relationship management**

While we discussed about major pitfalls in CRM implementations, there are some really great experiences that I personally remember. The first example that I quote is of Fidelity Investments in USA. I love their CRM implementations for example, no matter where you are in the world, the way they greet people, understand customer problem and try to take utmost care to solve their issues.

Some of the best practices include:

- Understand Customer requirements thoroughly.
- Never try to fit your product features with customer requirements in-fact its other way around.
- Build your CRM eco-system in order to help customer with problem solving than converting customers to your brand.
- Always believe that there are enough customers if you come up with a product or service which solves the real problem than short term solutions.
- Never ever frustrate any customer by constantly calling them or by spam calls.
- Always value customer's valuable time and provide solutions accordingly.
- Firms need to mentor their CRM eco system to be great listeners
- Ensure your team in product customer care centers has best behavior and empathy toward customers than meeting their targets.

Make sure the CRM tools [5] or applications you build for your products capture the right information to build new customer base, retain existing customers, address loyal customer problems and gives best customer experience through-out the life cycle of the product or service.

## 6. Conclusions

Finally, I hope this chapter at a high level gives an overview of CRM eco system, their users and different scenarios and how to build an eco-system which helps firms learn from customers, take feedback and make necessary changes to ensure customer satisfaction is achieved, also there by increases the user base for any product or service during its life cycle. I want to keep it simple and not make it complicated with mathematical models, etc., as I believe that there are some fundamental changes required before we even think about implementing mathematical models for AI based CRM implementations which will greatly enhance customer experience and satisfaction.

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## Author details

Bhanu Prakash Nunna  
Wipro Technologies, Hyderabad, Telangana, India

\*Address all correspondence to: [b\\_prakash2000@yahoo.com](mailto:b_prakash2000@yahoo.com)

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## **References**

- [1] The economist web page.  
Available from: <https://www.economist.com/leaders/2012/04/21/the-third-industrial-revolution>
- [2] Forbes.com web page. Available from: <https://www.forbes.com/sites/bernardmarr/2018/09/02/what-is-industry-4-0-heres-a-super-easy-explanation-for-anyone/#73aa2079788a>
- [3] Harvard published article. Available from: <https://hbswk.hbs.edu/item/walmart-s-workforce-of-the-future>
- [4] Web page on product for soccer players. Available from: <https://www.playertek.com/us/playertek/>
- [5] Web page published listing CRM tools. Available from: <https://www.softwaretestinghelp.com/best-crm-software-tools/>