Customer Lifetime Value in telecommunication industry

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Abstract:

No firm would want to waste its resources by pursuing customers who are not likely to be profitable in the future. Now a day marketers have realised the need for a company to be customer oriented. Consequently, for a firm to manage its interactions with its customers on a continuous basis and simultaneously maximise profitability, it is important for the firm to ensure that its Customer Relationship Management programme must emphasise the concept of Customer Lifetime Value (CLV). Understanding this concept helps the marketers to analyse the cost of acquiring, serving and retaining a certain category of customers in the market. This research paper throws light on understanding and measurement of customer lifetime value concept in telecommunication industry. Today, the telecom industry in India is witnessing an aggressive scenario due to fierce competition, advancement in technology and varying customer demand.

Introduction

Customers are the lifeblood of any organization. Like many clichés, this one happens to be true. Without customers, a firm has no revenues, no profits, and therefore no market value. As a result, one can notice a shift from product centric approach and the 4P's of marketing to a customer-centric approach. No marketer can deny that customers are important assets of a company and they think of myriad ways to provide value to them. Firms around the world are pouring ample money into customer oriented programs is evident to the growing importance firms put on managing the interactions with their customers. Marketers are using different aspects of customer analytics that benefit the sales, marketing, and service organizations as they interact with the customers. Some of them are-Customer profiling, Targeted marketing, Personalization, Collaborative filtering, Customer satisfaction, Customer lifetime value, Customer loyalty. It can be noticed that the measurement of individual customer long-range profitability becomes an important issue of attention for marketers these days. Customer Lifetime Value is one of such measures, which can be calculated for any industry, business-to-business or business to consumer. Today this powerful strategy is widely practiced by marketers all over the world, but in India very little work is done on this aspect. The focus of this paper is to describe how the concept of customer lifetime value is important in the marketing field and basic approaches to the measurement of customer lifetime value especially in telecom industry

Customer lifetime Value (CLV)

Customer Lifetime Value is defined as the net present value of the future stream of cash flows a company expects to generate from the customer. It is total value, in monetary terms, of the average customers spanning the entire period that these customers are likely to do business with the firm. Customer lifetime value is a powerful and straightforward measure that synthesizes customer profitability and churn (attrition) risk at individual customer level. For existing customers, customer lifetime value can help companies develop customer loyalty and treatment strategies to maximize customer

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value. For newly acquired customers, customer lifetime value can help companies develop strategies to grow the right customers.

Knowing the lifetime value of customers is crucial as it serves as a benchmark without which marketers have to probe in the dark. By this they can determine how much time, effort and money they can afford to invest to acquire that customer in the first instance. Firms are putting abundant money in various marketing campaigns in expectation of reaping benefits such as increased sales and profit, enhanced corporate image, etc. But they are not sure that the benefits would outweigh the costs or investments. The concept of CLV can help to determine this even before they launch their marketing campaign.

The CLV measure can be used for customer segmentation, which is very pertinent for strategic purposes (reporting, making decisions based on segment results, etc.). It also helps to refocus the marketing efforts i.e. instead of constantly struggling to acquire more and more new customers; marketers can focus on keeping their existing customers longer and selling to them repeatedly. Another advantage can be to create propensities for customers to be interested in a certain product and take action on the customers with the highest propensities. Thus, it provides a means towards targeting to the firm's most valuable customers. As with a limited marketing budget, a company would want to focus its promotional amount on its most valuable customers.

Customer Lifetime Value in telecommunication industry

Liberalization ushered in multiple players and deregulation saw new power-brokers emerging in the telecom industry in India. The growth of cellular telephony, Internet access, WLL (M), and the recent divestment of government stake in VSNL- have all resulted in a telecom market characterized by dynamism and cut-throat competition during the past five years. Intense price wars, lucrative service schemes (like SMS, group messaging, voice mail, caller line identification, GPRS and even multimedia messaging) and rapid technology shifts have made it difficult for operators to differentiate, to attract customers and even harder to retain them. The players know that they have to spend money to make money: capital spent on technical advancements typically enhances efficiency or improves performance. But as markets mature and competition intensifies, the cost of acquiring and serving high-value customers just keeps increasing. In the telecommunications industry, customers are able to choose among multiple service providers and actively exercise their rights of switching from one service provider to another. Customer retention has become a top priority among different players who used to have a firm grip on their client base. In this aggressively competitive market, customers demand tailored products and better services at fewer prices, while service providers constantly focus on acquisitions as their business goals. Therefore, telecommunication companies are forced to come up with new ways to provide value to their customers. They need to change their roles and identities as they explore new and profitable models. Though many service industries are affected by the churn phenomenon the problem is extremely acute in the telecom industry, with customers joining and quitting in short periods. According to research firm Gartner, India's churn rate is somewhere between 3.5 percent to 6 percent per month, one of the highest in the Asia-Pacific region. Considering that the cost of acquiring a new customer is as high as Rs 3,000, the losses are immense. According to one of the official of Bharti Cellular "The cost of acquiring a new customer is more than five times that of retaining an existing customer." Thus, if we calculate a churn of 2 percent a month, an operator is losing 24 percent of its customers every year. For many incumbent operators, retaining highly profitable customers is the number one business pain. Many telecommunications companies deploy retention strategies in synchronizing programs and processes to keep customers longer by providing them with tailored products and services. With retention strategies in place, many companies start to include churn reduction as one of their business goals. With the telecommunications market getting more and more mature, telecommunications companies do not satisfy themselves with predicting customer churn; they instead start viewing customers in terms of customer lifetime value. Not only do the telecommunications companies distinguish between which customers stay longer and which ones stay shorter, they also distinguish between which customers are highly profitable and which ones are low profitable or not profitable. Customer lifetime value is therefore developed to satisfy telecommunications companies

need to evaluate their customer value. Without using CLV, telecommunication organisations encounter a number of problems (viz. low- or non-profit-making clients, high turnover and low loyalty, low response rate to direct marketing, difficulty in predicting ROI or allocating budgets) that inhibit their profitability and minimise their ability to retain customers. Measurement of Customer lifetime value can be used as a key to help services providers to overcome these issues.

Measurement of Customer Life time Value

Following information are needed to figure out the CLV of an average customer in telecommunication industry:

Survival/Churn- Churn is the action that a customer's telecommunications service is cancelled. The churn can be of two types i.e. service-provider initiated churn and customer initiated churn. An example of service-provider initiated churn is a customer's account being closed because of payment default. Customer initiated churn is more complicated and reasons behind vary from customer to customer. Customer survival is the opposite of customer churn.

Churn rate- The percentage of customers who churn in a particular time period.

Attrition Curve: Attrition curve indicates how many customers become inactive as a percent of total base every year. Attrition curve may decay at a steady rate or may be "kinked" – higher in some initial period, then gradually stabilising.

Active- Active is a customer status. Customers whose service being involuntarily terminated and are in collection stage are not in "active" status.

Margin-The annual revenue that customers generate minus the operating expenses a company incurs in serving them.

Retention rate- The percentage of customers expected to keep doing business with the company.

Discount rate - The value of future earnings expressed in today's money value, which is typically the current market rate of interest.

Direct Cost: Includes merchandising, operating and fixed costs.

Selling Costs: Includes the costs of advertising and promotion, and cost of maintaining a marketing database system.

The calculation of customer lifetime value (CLV) varies across industries. In telecommunications industry, customer monthly/yearly margin and customer survival curve are the two major components of customer lifetime value.

The customer lifetime value is the net present value of customers calculated profit over a certain number of months. There are several models and formulas which can be used to calculate customer lifetime value. Some of these are given below:

Survival Analysis

$$CLV = MM \times S^{T}_{i=1} (p_i / (1 + r/12)^{i-1})$$

Where *MM* is the monthly margin for the last three months for existing customers, or the last month's monthly margin for newly acquired customer. *MM* is either calculated from accounting models or estimated through a set of regression models. *T* is the number of months in consideration to calculate customer lifetime value; it could be 24, 36, or some other number that makes the most business sense. *r* is the discount rate. p_i is the series of customer survival probabilities (customer survival curve) from month 1 through Month *T*, where $p1 = 1$. p_i is estimated through customer survival model.

Another model for CLV measurement is **Customer Lifetime Value Model**

$$CLV = \left[GC * \sum_{i=0}^{n} \frac{r^i}{(1+d)^i} \right] - \left[M * \sum \frac{r^{i-1}}{(1+d)^{i-5}} \right]$$

Where,

GC = Yearly Gross Contribution margin, revenues - cost of sales

M = Relevant promotional costs of the customer
n = Expected customer lifetime (years, or other

time unit)
r = Yearly retention rate
d = Discount rate (%, firm specific)

Problems of CLV measurements

Although the theory of CLV and how it is managed seems to be simple i.e. delivering value to the customers so that they'll remain loyal and become increasingly valuable to your company. But in practice, it's not so simple. Market forces change, new competitors arrive on the scene, and existing ones offer tempting new products or pricing. And, over time, customer needs and preferences change. While measuring CLV, marketers sometimes face problems like lack of data, no availability of data as the company is new one, difficulty in determining which customers are dead, choosing a formula.

Even, there is no clarity about what the lifetime of a consumer is - it can be age, working life, product life cycle, etc. Estimating the value through studying the past is also not precise. Assuming purchase probabilities into the future is also not easy. Moreover, carrying out this exercise for each and every individual customer is a long and tedious process. Hence, if carried out at an aggregate group level, questions about who should actually be the constituents of the group play a significant role.

The intrinsic danger of over focusing on customer lifetime value is that companies will invest in programs which try to wring profits from only the most active, heaviest spending customers. This neglects opportunities not only from customers who can be cultivated and nurtured but also former customers who could represent attractive profits, once recovered. The result of such an emphasis will, inevitably, be a steady increase in CLV from these customers, but, at the same time, a steadily decreasing pool of customers and ever-declining overall company profit.

Conclusion:

The telecom industry in India is advancing like never before, but not all is blissful for the telecom service providers. Cut throat competition and demanding customers are pushing telecom companies against a granite wall. In light of these issues in the telecom market, what telecom firms need is highly reliable measures to gain a better understanding of the variables which influence customer churn which in turn can help them to manage their customers profitably. The CLV measure enables the telecommunication company to understand how much they should spend on a customer and what customers they should target depend, in part, on how much individual customers are worth to the firm. Thus, by knowing the lifetime value of each customer can help a company get better returns on its marketing investments.

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