**Introduction:**

Customer churn refers to when the customer ends his relationship with a company. We substantially improve the bottom line, when we improve the customer retention. The goal of every business is to reduce the customer churn. The prevention of the customer churn represents a huge additional potential revenue source for every online business. With proper knowledge, customer churn can be eliminated. The retention experts must be able to predict the churn rate. The churn prediction modeling methods quantify the risk of the customer churn rate. Incentives should be provided to avoid the customer churn. The customer base is divided into demographic segments. All the businesses in the market have to deal with churn. Customer churn influences policy decisions. The more profitable ones are the top customers. The sign of a mature industry is the way Customer churn is handled. The proper knowledge has been accumulated by the providers about what drives the customers to switch. To calculate the recurring revenue we divide the monthly recurring revenue with the revenue from existing customer(Brian Rogers, 2012).

According to Teemu Mutanen, 2009 Revenue churn is a great way to understand the financial health of the customer base. The wireless data market is expected to attract 38 million subscribers. The industry has moved to a retention orientation. To maintain the high customer acquisition rate is the priority. For good marketing, Customer value analysis plays an important role. To predict the customer churn, the statistical methods are very useful. The logistic regression is used for analyzing customer churn. The customer churn is receiving attention in many sectors of the industry. The customer churn rate is important in the customer lifetime value context. In businesses today, the mass marketing approach cannot succeed. The customers staying with the company for a long time characterizes the personal banking sector. There can be huge loss because of the customer churn. Based on the logistic regression the churning customers are forecasted. The net value of the customer over his lifetime is usually defined as the customer life time value. To estimate the customer lifetime value, the present and future income is measured. The marketing efforts influences the customer life time value. The focus is on the customers who are leaving. The customers who are going to churn are detected by the business sector and customer relationship. The focus of the customer churn is whether those customers are worth retaining. The customer retention rate and loyalty closely determine the customer churn. The customer who is not regularly switching from one company to other belongs to the personal retail banking sector. On the basis of continuous and/or categorical variables a discrete outcome can be predicted by the logistic regression.

The Multinomial logistic regression is used to handle more than two Classes. The customer analysis is done by the logistic regression. In Logistic regression, the dependent variable is usually dichotomous. The results of the logistic regression using a threshold value are divided Into two groups. Usually the threshold value of 0.5 separates customers who are going to churn to customers who are not going to churn. During the last five years, the subscribers doubled for every two years. The wireless voice market is expected to hit 189 in the US. Acquisition orientation is moved to retention orientation in the industry. To predict the churn rate of subscribers in the wireless industry, a study based on predictive modeling using data mining is done. The marketing costs involved and the lost revenue, both are affected by the customer churn. The prediction of a potential customer who is going to leave the business represents a huge potential revenue source. (Teemu Mutanen, 2009)

In order to stop the customers from leaving the business one has to predict the potential customers going to churn and employ marketing retention strategies. The precise customer behaviors and attributes are studied for prediction purpose. The statistical and data mining methods help in the customer churn prediction. The loss of existing customers is known as gross attrition. The propensity of risk to churn is assessed by the predictive analytics software. Customer retention is important in most of the financial services. Partial customer churn is the process, in which the less profitable members leave the firm. US and Canada banks have higher churn rates than Europe. The customer satisfaction is indicated by the churn. Even though the customer satisfaction deteriorates, the churn can improve. One of the elements of a company is churn. The demographic characteristics are one of the factors on which the churn model is developed. To enhance customer retention the research on customer attrition is used. Research on customer churn provides tools for improving customer retention. Customer churn is used to study efficiency and competitivity. The enormous amount of data is used to make predictions of the customer churn. The service of Marketing departments is to detect soon about the customers going to abandon, know the value of the customer loss and practice retention plans (Brian Rogers,2012).

While gaining new customers, a business incurs more charges than retaining the existing ones. The division of the customer base into specific ways such as age, gender, interests is customer segmentation. Client segmentation includes procedures like effective communication among business units. Customer loyalty and retention are improved by the customer segmentation. Staying ahead of the competitors is also an advantage of the customer segmentation. Customer segmentation helps in assessing which customer base is more important. The division of the potential customers into groups is known as customer segmentation. The three main approaches of Market segmentation are A priori segmentation, Needs based segmentation and value based segmentation. The market knowledge is used to find which customer segments are profitable. For the customer segmentation research process, developing variables and hypothesis is important for a variety of reasons. The company’s stage market Conditions contribute to the goals of customer segmentation(Gary et al., 2017)

Transferring the Business to the competitor is churn prediction. Analyzing customer interaction helps improve the accuracy of churn prediction. The cost of customer acquisition is greater. The major task of the churn analysis is to retain valuable customers. The wireless telecom sector has been the fastest growing business during the last five years. In the wireless services if one customer would shift to another carrier, one new customer would line up. Predicting the churn likelihood is an important step. To draw the conclusions from large amounts of data, the statistical techniques are used. Now a days, it is more easier and transient to switch from the competitor companies. Customer churn indicates the customer to cease from doing a business. Customer churn Prediction helps companies to take different retention measures for churners and non churners [Eriksson&Vaghutt, 2000].

Customer churn is one of the issues in the telecom industry. Customer churn is one of the difficult problems faced by the telecom industry. Customer churn models help in detecting customers who are planning to leave the service provider. Retaining the customers is always an easy option. It takes Six times more to attract new customers than retaining the old customers. Attracting new customers includes publicity and discounts. A loyal customer generates high revenues and is less sensitive to competitor prices. The good customers provide a word of mouth marketing by referring to relatives, friends and other acquaintances. Customers leaving the company is considered as a loss. The small steps in retaining the customers helps in generating high revenues and profits. The popular measure for lost customers is customer churn. The steps should be taken to identify the reasons to churn and to improve the customer retention [Amal M. Almana et al., May 2014, pp.165-171].

High competition and saturated markets characterize the business environment. Companies continuously derive revenue from the long term relationships with their customers. Retained customers generate more revenue than the new customers. The new customers are associated with high attrition rate. Customer churn is becoming a serious problem between the Internet service providers and in industries like telecommunications. It is a challenging task to retain the subscribers for the company to stay in the market. Decision tree based algorithms are used to determine churn ranking. Genetic algorithms produce accurate predictions, but do not determine the likelihood associated with the predictions. Campaigns are organized to retain the potential churners. Neural networks and Bayesian networks are used to predict customer churn behavior [Niccolo et al., 2007].

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