Customer Churn or Attrition for Business Enterprises.

- What is customer churn?

Customer attrition, also known as customer churn, customer turnover, or customer defection, is

the loss of clients or customers.

Banks, telephone service companies, Internet service providers, pay TV companies, insurance

firms, and alarm monitoring services, often use customer attrition analysis and customer attrition rates as one of their key business metrics (along with cash flow, EBITDA, etc.) because

the cost of retaining an existing customer is far less than acquiring a new one.[1] Companies from these sectors often have customer service branches which attempt to win back defecting

clients, because recovered long-term customers can be worth much more to a company than

newly recruited clients.

- What are the causes?

reasons why customers churn:

- You're attracting the wrong customers
- Your customers aren't achieving their desired outcomes
- Your customer support needs work
- Your customers think your competitors can do a better job
- Your product has bugs customers believe you can't fix
- Your customers no longer see the value in your product
- Your customers think your product's too expensive (or too cheap)

- Methods of Predicting customer churn in companies

Customer churn analysis can be accomplished by fitting statistical models to historical data and trying to find a pattern in customers that may result in churn. Forward-thinking organizations are leveraging artificial intelligence (AI) and machine learning to forecast future trends and behaviors and identify previously hidden indicators that help to predict churn.

There are four major steps in the process:

- Data gathering and preparation
- Building the predictive model
- Testing and validation of the model on real customers
- Continually updating the model as the process repeats itself and the churn rate reduces

While simple in theory, the realities involved with achieving this proactive retention goal are extremely challenging.

- What data are useful for customer churn prediction?

- Length of time a customer has been with the company
- Number of products/services a customer uses
- How often a customer interacts with the company
- Frequency of purchase
- Amount of money a customer spends with the company
- Customer demographics (location, age, gender, etc)
- Whether the customer is satisfied with the company's products or services
- Customer tenure (number of months subscribed)
- Type of product/service
- Customer engagement (online activity, social media activity, etc.)
- Purchase history: The history of a customer's purchases can be analyzed to see if there are any
 patterns that indicate they are at risk of churning. For example, if a customer always buys the
 same product every year, and then stops buying it, that could be an indication that they are
 about to churn