PHASE-1

CUSTOMER CHURN PREDICTION

PROBLEM STATEMENT UNDERSTANDING: Customer churn prediction is a crucial task for businesses aiming to retain their customer base. The problem involves using historical customer data to build predictive models that can forecast which customers are likely to stop using a product or service in the near future.

Common Prediction are :

1)Data collection

2)Model selection

3) Monitoring and Maintenance

DESIGN AND THINKING::

1)ANALYSIS OBJECTIVES::

Identification: Identify customers at risk of churning to proactively address their concerns and retain them.

Factor Analysis:. Understand the primary factors influencing churn, enabling targeted strategies to mitigate attrition.

2)DATA COLLECTION :

To collect customer data for churn prediction, leverage customer databases, transaction records, surveys, and web analytics, amalgamating both internal and external sources for a holistic understanding of customer behavior and potential churn factors.

3) VISUALISATION STRATEGY:

We are going to use IBM Cognos to create interactive dashboards and reports displaying churn factors like customer demographics, usage patterns, and satisfaction scores, alongside retention rate trends, enabling stakeholders to make data-driven decisions effectively.

4) PREDICTIVE MODELLING:

Employ machine learning algorithms like logistic regression, random forests, or gradient boosting, incorporating features such as customer demographics, purchase history, engagement metrics, and customer satisfaction scores for accurate customer churn predictions.

SOLUTION :

We will first go for the collection of gathering diverse customer data from inside (internal)and outside(external) sources whichever we get.Then creation of meaningful features like demographics , behaviour etc.. selection of the model is done further example :random forest.Training and testing is done.Evaluating the model based on accuracy and precision.implementing for real time predictions.Now the main factor regularly updating the model and analyzing new data.Translate predictions into retention strategies and targeted marketing.