

CUSTOMER CHURN PREDICTION

-PHASE 1

PROBLEM DEFINITION

The project aims to employ IBM Cognos to forecast customer churn and to empower businesses to mitigate customer attrition by comprehending the patterns and reasons behind customer departures.

DESIGN THINKING

Analysis Objectives:

To achieve the project deliverables, the following steps will be taken:

- Identify the key factors contributing to churn. This will be done by analysing customer CRM data, usage data and customer surveys.
- Predict churn risk for individuals. This will be done using a predictive modelling algorithm, such as logistic regression or neural network.
- Segment customers-based on their churn risk. This will be done by clustering customers with similar churn risk profiles.
- Develop targeted interventions to reduce churn. This will be done by identifying and addressing the specific needs of customers who are at high risk of churning.

Data Collection

Customer data will be collected from the following sources:

- Customer CRM system
- Usage data from customer – faced applications.
- Customer surveys

The data will be cleaned and preprocessed to remove outliers, impute missing values and convert categorical variables to numerical variables

Visualization Strategies

- Bar charts and Line charts to visualize various trends over time.
- Pie charts and Donut charts to show customer segmentation on various factors.
- Heatmaps to present correlations among various factors affecting Customer Churn.

Predictive Modeling

Two predictive modelling algorithms will be evaluated: logistic regression and neural network. The algorithm that performs best on the training data will be used to predict churn risk for new customers.