CUSTOMER CHURN PREDICTION

Project Title:

Customer Churn Prediction.

Problem Definition:

The problem is to develop a predictive model that can accurately identify and forecast customer churn within our organization. Churn is defined as the scenario where a customer discontinues their engagement or subscription with our products or services. The primary objective is to proactively detect potential churners and take appropriate actions to retain them.

Design Thinking:

Creating a customer churn prediction project typically involves several key steps and considerations.

1. Project Objective:

- Define the main objective of your project, which is likely to predict customer churn. Be specific about what you want to achieve.

2. Data Collection:

- Gather historical customer data, including demographics, transaction history, customer interactions, and churn labels (whether a customer churned or not).

3. Data Preprocessing:

- Clean the data by handling missing values, outliers, and ensuring data consistency.

- Perform feature engineering to create relevant features for your churn prediction model.

4. Exploratory Data Analysis (EDA):

Analise and visualize the data to gain insights into customer behaviour and churn patterns.

5. Data Splitting:

- Split your dataset into training, validation, and test sets to evaluate your model's performance effectively.

6. Model Selection:

- Choose appropriate machine learning or deep learning algorithms for churn prediction. Common choices include logistic regression, decision trees, random forests, and neural networks.

7. Model Evaluation:

- Evaluate the model's performance on the validation set using metrics like accuracy, precision, recall, F1-score, and ROC AUC.

8. Feature Importance:

- Determine which features have the most impact on churn prediction. This can help in understanding the driving factors behind churn.

Remember that the success of your churn prediction project depends on the quality of your data, the choice of modeling techniques, and the integration of predictions into your business processes. Adapt your approach based on the specific needs and constraints of your organization.

Project Reference:

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