

## Project Synopsis

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- **Title**

➤ Prediction of Customer Churn and Strategy to Retain Customers for an E Commerce Company.

- **Executive Summary (200 words)**

➤ Current market in India is a competitive market, customer churn poses a significant challenge for E-commerce companies. This project aims to develop a churn prediction model for an E-commerce company to identify potential churners and provide tailored strategies to retain them. By analysing customer behaviour and transaction data, the model will predict which accounts are at risk of churning, enabling the company to take proactive measures. The key focus will be on minimizing revenue loss due to customer churn while maximizing customer retention through targeted campaigns.

- **Objectives and Scope**

➤ The objectives of this research include:

1. Develop a predictive model to identify customers at risk of churning.
2. Provide personalized retention strategies to minimize customer churn.
3. Differentiate the project solution by integrating advanced machine learning techniques for accurate predictions and targeted campaigns.

- **Methodology (500 words)**

➤ The methodology will involve:

- **Data cleaning techniques:** Handling missing values, outliers, and data normalization.
- **Exploratory Data Analysis (EDA):** Understanding patterns, correlations, and customer behaviour insights.

- **Machine learning algorithms:** Utilizing supervised learning algorithms such as logistic regression, decision trees, random forests and gradient boosting machines for churn prediction.
- **Feature engineering:** Creating new features to enhance model performance.
- **Evaluation metrics:** Using metrics like accuracy, precision, recall, and F1-score to assess model performance.
- **Type of Research:** Empirical research involving the dataset provided.
- **Data Collection Methods:** Primary data collection from the given dataset.

- **Preliminary Findings & Expected Results (200 words)**

➤ By Understanding the problem statement, we can come to a conclusion that there are no models to predict customer churn. However, the expected results from our model include higher accuracy in identifying potential churners, leading to more effective retention strategies. By leveraging advanced machine learning techniques, we anticipate a significant reduction in customer churn rates and increased customer loyalty.