**CHURN PREDICTION**

**Project Execution Plan**

Problem Statement

The retailer seeks to lower customer attrition and boost customer retention rates. To accomplish this, the business must recognise the consumers who are most likely to leave and take aggressive steps to keep them. In order to identify customers who are very likely to churn, the goal of this project is to develop a churn prediction model utilising consumer habit and visualize it in a way which is plausible to the retailer.

Collection and Preparation of Data:

The next step is to identify the relevant data sources and collect the data needed to build the churn prediction model. In this case, the data sources could include,

* Purchase history data
* Browsing behaviour data
* Demographic data.

Once the data is collected, it needs to be prepared for analysis. This involves

1. Cleaning the data,
2. Transforming it into a format suitable for analysis, and
3. Integrating the data from different sources.

A data preparation tool like Alteryx can be used to help with this process.

Interpretation Of Data

Once the data is prepared, the next step is to explore the data to gain insights into customer behaviour and identify patterns that could help predict churn. This involves using statistical techniques to analyze the data, such as calculating the correlation between different variables or running regression models. Data visualization techniques can also be used to help make sense of the data, such as creating scatter plots or heat maps. The goal is to identify key factors that are driving customer churn and use these insights to build a predictive model.

Build the Churn Prediction Model

The next step is to use machine learning algorithms to build a churn prediction model. There are various algorithms that can be used for this, including decision trees, logistic regression, and random forests. Alteryx has a range of predictive analytics tools that can be used to build these models, including the Predictive Analytics tool, the Decision Tree tool, or the Logistic Regression tool. The goal is to build a model that accurately predicts which customers are most likely to churn.

Evaluation Of the Model

Once the churn prediction model is built, it needs to be evaluated to ensure that it is accurate and effective. This involves testing the model on a separate dataset to see how well it performs. Metrics such as accuracy, precision, recall, and F1 score can be used to evaluate the performance of the model. Alteryx tools like the Model Comparison tool or Confusion Matrix tool can be used to evaluate the models and compare their performance.

Present the results

The final step is to present the results of the churn prediction model to stakeholders in a clear and compelling way. This involves visualizing the outcomes of the model using a visualization tool like Power BI or Tableau. The goal is to communicate the insights gained from the data and the model in a way that is easy to understand and actionable for the business. Presenting the results in a clear and engaging way can help stakeholders make informed decisions about how to reduce customer churn and improve customer retention rates.