Work Experience Project

Project X

Contents

Table 1

PROJECT TITLE	**Survival Analysis**		
Company Name	**HBS Bank**		
Industry Type	**Financial Services**	**Start date**	**9/3/2024**
Project Manager	**Benjamin Oboh** **Pairview Advisory Team**	**End date**	**31/3/2024**
		Project No.	**X**

1.1. Business Question

In the context of customer churn, survival analysis is a method used to analyze the time until customers stop doing business with a company. Instead of just looking at whether a customer churned or not, survival analysis allows businesses to examine the duration or survival time of customers before they churn. This method considers the timing of churn events and allows for the estimation of probabilities of customers remaining active over time.

HBS Bank is a fast growing bank which has customers in various countries like France, Spain and Germany. A new manager was introduced specifically to combat the high rate of customer churn which the bank has been experiencing for the past few years. This new manager appoints you to build a survival analysis model which will not only tell us the probability of a customer churning within a specific period of time but will also help to identify those variables which contribute to the high rate of customer turnover. This will enable us to make adjustments such as our marketing strategy, target audience e.t.c.

The specific objectives include:

1.2. Goals

1. Exploratory data analysis
2. Identify the rate at which customer's churn.
3. Identify survival probability of entire population using the Kaplan-Meier Curve.
4. Identify survival probability of entire population based on account type.
5. Identify what variables are statistically significant in predicting customer churn using a cox proportional hazards model.
6. Make recommendations based on your findings.

1.3. Data Set

Check folder for dataset

Note: This is an open-ended question as consultants are allowed to introduce new exploratory ideas that will improve Store base's decision making process.