Business Requirement Document (BRD)

Title: Customer Churn Analysis and Retention Strategies for a Bank

1. Introduction

The purpose of this Business Requirements Document (BRD) is to outline the scope and objectives of a business analysis project focused on customer churn analysis and developing retention strategies for a bank. The analysis will leverage a dataset containing various customer attributes and churn indicators to identify factors influencing customer attrition. By understanding these factors, the bank can implement targeted measures to reduce customer churn and improve customer retention rates.

2. Project Overview

2.1 Objectives

The primary objectives of this project are as follows:

- Analyze customer churn patterns and identify key factors contributing to customer attrition.

- Investigate the impact of customer demographics, credit scores, tenure, account balance, and other relevant variables on churn rates.

- Determine if gender, geography, or other customer attributes play a significant role in customer churn.

- Develop predictive models to forecast customer churn and provide actionable insights for the bank.

- Recommend and implement data-driven retention strategies and loyalty programs to reduce customer churn and improve customer satisfaction.

2.2 Project Stakeholders

The key stakeholders involved in this project are:

- Business Analysts: Responsible for data analysis, modeling, and providing insights to drive retention strategies.

- Bank Management: Decision-makers who will utilize the analysis results to develop and implement retention initiatives.

- IT Department: Provides necessary technical support for data acquisition, storage, and analysis.

3. Data Description

The dataset to be used for analysis contains the following attributes:

- RowNumber: Unique record identifier with no impact on the output.

- CustomerId: Randomly generated values with no effect on customer churn.

- Surname: Customer's surname with no impact on the decision to leave the bank.

- CreditScore: Numerical value indicating the customer's credit score, affecting churn probability.

- Geography: Customer's location, potentially influencing churn rates.

- Gender: Investigate whether gender plays a role in customer churn.

- Age: Age of the customer, relevant as older customers are less likely to leave.

- Tenure: Number of years the customer has been a client, indicating loyalty.

- Balance: Account balance as an indicator of customer churn probability.

- NumOfProducts: Number of products purchased by the customer through the bank.

- HasCrCard: Denotes if the customer has a credit card, affecting churn probability.

- IsActiveMember: Indicates whether the customer is active, influencing churn rates.

- EstimatedSalary: Salary estimation of the customer, affecting churn probability.

- Exited: Binary value indicating if the customer left the bank.

- Complain: Indicates if the customer had a complaint.

- Satisfaction Score: Score provided by the customer for complaint resolution.

- Card Type: Type of card held by the customer.

- Points Earned: Points earned by the customer for using the credit card.

4. Analysis and Deliverables

4.1 Data Analysis

- Perform exploratory data analysis (EDA) to understand the distribution, relationships, and potential correlations between variables.

- Identify key factors contributing to customer churn using statistical analysis and data visualization techniques.

- Develop predictive models, such as logistic regression or machine learning algorithms, to forecast customer churn probabilities.

4.2 Retention Strategies

- Based on the analysis results, recommend targeted retention strategies to reduce customer churn.

- Develop loyalty programs, personalized offers, and retention campaigns tailored to different customer segments.

- Collaborate with marketing and customer service departments to implement and monitor the effectiveness of these strategies.

5. Project Timeline and Resources

5.1 Timeline

The project will be conducted over the following timeline:

- Data collection and preprocessing: 2 Days
- Exploratory data analysis: 2 Days
- Model development and evaluation: 3 Days
- Retention strategy formulation: 2 Days
- Implementation and monitoring: Ongoing

5.2 Resources

To successfully complete this project, the following resources will be required:

- Data analyst(s) with expertise in statistical analysis and machine learning techniques.
- Access to the bank's customer churn dataset.
- Collaboration with IT and data engineering teams for data acquisition and storage.
- Stakeholder meetings and regular updates to ensure alignment and informed decision-making.

6. Constraints and Risks

6.1 Constraints

- Availability and quality of the dataset may impact the accuracy and reliability of the analysis.
- Compliance with data privacy regulations and ensuring the security of customer information.

6.2 Risks

- Limited availability of historical customer data.
- Inaccurate or incomplete data that may affect the analysis outcomes.
- Misinterpretation of the analysis results leading to ineffective retention strategies.

7. Conclusion

This BRD outlines a business analysis project focused on customer churn analysis and retention strategies for a bank. By understanding the factors contributing to customer attrition, the bank aims to develop targeted measures and loyalty programs to improve customer retention rates. The project

will involve data analysis, model development, and collaboration with various stakeholders to achieve the desired outcomes.