Bank Customer Churn Analysis Dashboard

Power BI – Project Documentation

1. Introduction

This document provides an overview of the Bank Customer Churn (Exit) Analysis Dashboard developed using Power BI. The dashboard analyzes customer demographics, churn behavior, and risk segments using an Excel-based dataset. It is designed to support business decision-making through clear, interactive visuals.

2. Project Objectives

• Analyze customer exit patterns
• Identify high-risk customer segments
• Understand demographic and financial drivers of churn
• Build an interactive Power BI dashboard with drilldowns & segmentation

3. Data Preparation & Modeling

Data cleaning was performed using **Power Query**, including formatting date fields, removing errors, and standardizing values. Custom segmentation groups were created for parameters such as Age, Credit Score, Salary, and Account Balance.

A Date Table was added for time intelligence, and DAX measures were developed for exit analysis, including:
• Exit Count
• Monthly Exit Count
• Active–Exit Ratio
• High-Risk Exit Count
• Gender-wise Exit Distribution

4. Dashboard Structure

Page 1 – Customer Overview

• Total customers, active vs inactive
• Gender, age group & geography distribution
• Credit score & product holding breakdown

Page 2 – Churn Analysis

• Total Exit Customers
• Monthly Exit Count & trends
• Active–Exit Ratio
• High-Risk Exits (Poor/Fair credit)
• Male vs Female exits
• Product-wise exit comparison
• Decomposition Tree for churn drivers

5. Key Insights

• Customers with Poor/Fair credit show significantly higher churn
• Exit patterns vary by age group, salary range & balance group
• Monthly exits reveal seasonal movement and risk spikes
• Gender-based exit patterns show noticeable differences
• Decomposition Tree identifies strongest churn predictors

6. Conclusion

This project demonstrates proficiency in Power BI, DAX, and analytical storytelling. The dashboard provides clear visibility into churn behavior using professionally designed visuals, segmentation models, and KPI measures. It reflects end-to-end BI development skills useful for real business scenarios.

7. Tools Used

• Power BI
• Power Query
• DAX
• Microsoft Excel