Executive Summary: Bank Churn Analysis

Overview

Customer churn is a critical issue in the banking sector, impacting revenue, customer acquisition costs, and brand reputation. This analysis focuses on identifying patterns and factors contributing to customer churn using **exploratory data analysis** (EDA). Insights derived from this study can help banks develop targeted strategies to **reduce attrition and enhance customer retention**.

Key Findings

1. Customer Churn Rate

- The overall churn rate is 20.4%, meaning one in five customers exits the bank.
- The **remaining 79.6% of customers are retained**, which is relatively stable but could be improved.
- A 20% churn rate suggests that customer dissatisfaction and competition from other financial institutions may be influencing exits.

2. Factors Influencing Churn

A. Customer Complaints and Churn

- A significant number of customers who complained have exited the bank (2034 cases).
- In contrast, **only 4 customers who complained stayed**, highlighting that complaints are a **strong predictor of churn**.
- This indicates **poor complaint resolution strategies** that may be frustrating customers, leading them to switch to competitors.

B. Bank Balance and Churn

• The bank balance distribution follows a normal pattern, meaning that customers across different balance levels churn at a relatively even rate.

• This suggests churn is not primarily driven by account balance levels but by other factors such as service quality, interest rates, or product offerings.

C. Geographic Analysis: Country-wise Churn Rate

- Germany and France have the highest churn rates, meaning these regions require immediate attention and targeted interventions.
- The UK has the lowest churn rate, possibly due to better customer satisfaction, local policies, or banking regulations favoring customer retention.

3. Actionable Insights and Recommendations

A. Improve Customer Support and Complaint Resolution

- Since complaints strongly correlate with churn, the bank must **enhance its complaint** resolution process.
- **Investing in proactive customer service**, faster resolution times, and personalized responses can **boost customer confidence**.

B. Targeted Retention Strategies for High-Risk Regions

- Germany and France require focused customer engagement programs to address churn.
- Strategies such as personalized banking offers, better loyalty programs, and region-specific service enhancements could help retain customers.

C. Further Analysis to Identify Additional Churn Drivers

- Although the current findings highlight geographic factors and complaints, other parameters such as customer tenure, transaction history, and account activity levels should be analyzed to gain deeper insights.
- Predictive modeling using machine learning could further enhance the ability to identify at-risk customers before they leave.

Conclusion

This analysis reveals that **customer complaints**, **regional differences**, **and service satisfaction** are key drivers of churn. By **improving customer experience**, **addressing high-risk regions**, **and adopting data-driven retention strategies**, the bank can significantly reduce churn and improve long-term customer loyalty.