## **Bank Customer Churn Analysis Report**

#### **Problem Statement**

A bank is experiencing a high rate of customer churn and seeks to understand the factors contributing to this issue. The objective is to analyze customer data to:

- Determine the churn rate
- Identify trends based on demographics, geography, and account features
- Visualize churn patterns using interactive charts
- Provide actionable insights for retention strategies

## **Key Insights and Visualizations**

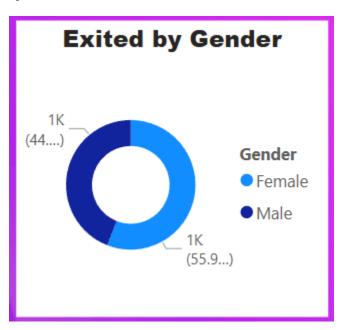
#### 1. Churn Rate Overview

Churn Rate: 20.37% of the customers have exited (2,037 out of  $\sim 10,000$ ). This metric gives a quick summary of how many customers the bank is losing.

38.92	76.49K	650.53	5.01	100.09K
Avg of Age	Avg of Balance	Avg CreditScore	Avg Tenure	Avg Salary
2037	7055	5151	10.00K	1.53
Total Exited	# HasCrCard	# IsActive		Avg NO. Prod

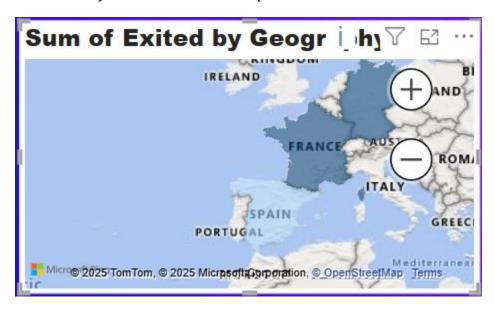
2. Exited Customers by Gender

Slightly more females exited compared to males. Helps in identifying if there's a gender-specific churn trend.



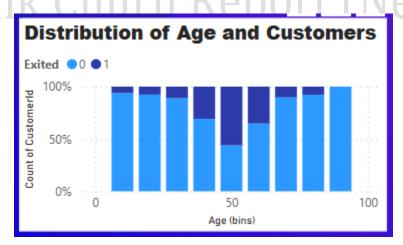
### 3. Exited Customers by Geography

Customers are grouped by regions like France, Germany, and Spain. Highest churn appears from Germany as inferred from the map and slicers.



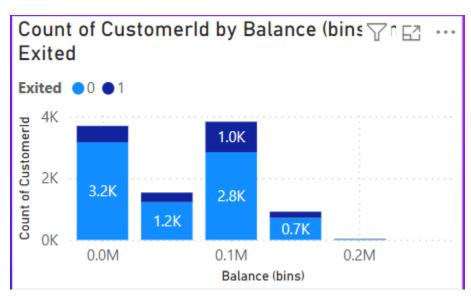
## 4. Distribution of Age and Churned Customers

Customers aged between 40–60 show higher exit rates. Younger and older age brackets show lower churn, possibly due to lower product involvement.



#### 5. Customer Churn by Account Balance

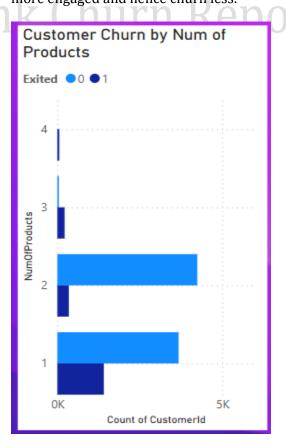
Customers with very low or moderate balances show higher exit rates. High balance customers tend to be more loyal, indicating financial stake influences retention.



### 6. Customer Churn by Number of Products

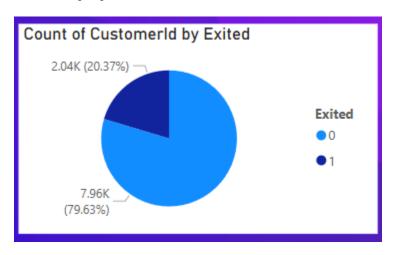
Most churn occurs in customers with 1 or 2 products. Customers with more products are more engaged and hence churn less.

Customer Churn by Num of



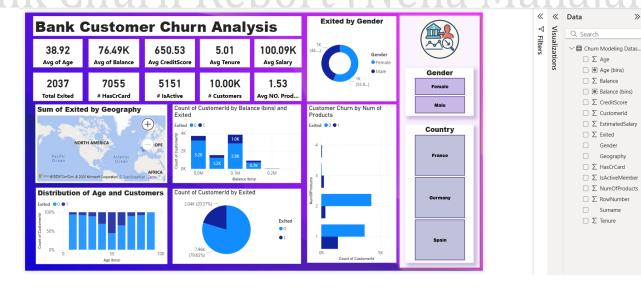
### 7. Count of Customers by Exited

Pie chart shows over 7,960 customers remained, while 2,037 exited. This clearly visualizes the churn proportion.



#### **Final Dashboard View**

Here's the full Power BI dashboard combining all visuals and metrics:



#### **Conclusion**

This analysis highlights several key churn indicators:

- Age, balance, and number of products play significant roles in customer churn.
- Customers from Germany and those with fewer products are more likely to churn.
- Strategies to reduce churn could include:
  - Offering bundled products or incentives for multi-product usage
  - Personalized engagement for customers with low balances
  - Focused retention campaigns for at-risk age groups (40–60 years)

By understanding these drivers, the bank can proactively address churn and improve customer satisfaction and loyalty.

# Bank Churn Report (Neha Mahajan)