

Power BI Project - Customer Churn Analysis



Created by:
Rutvik Trivedi

Problem Statement

Despite efforts to provide quality services, the bank is experiencing a concerning rate of customer churn. Understanding the factors influencing churn is critical for implementing targeted retention strategies.

The objective of this analysis is to identify key drivers of customer churn within the banking services and develop actionable insights to reduce churn rates.

By exploring demographic, financial, and behavioral aspects, the aim is to provide strategic recommendations that will enhance customer retention and overall satisfaction by analyzing the dataset.

*Customer **Churn Rate***

Process of analyzing and understanding why your existing customers are leaving the product.

- key metric for businesses looking to scale.
- Businesses can evaluate this metric annually, monthly, weekly, or daily.



***Why** Customer Churn Rate?*

- To improve customer Retention
- To enhance customer outreach
- To Optimize product
- To Identify friction points

Data Analysis **Steps:**

Data Connection



Data Preparation



Data Modeling and Analysis

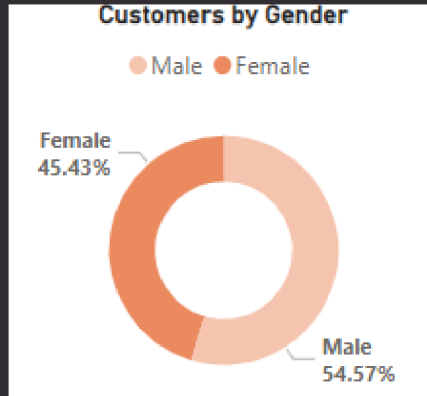


Data Visualization



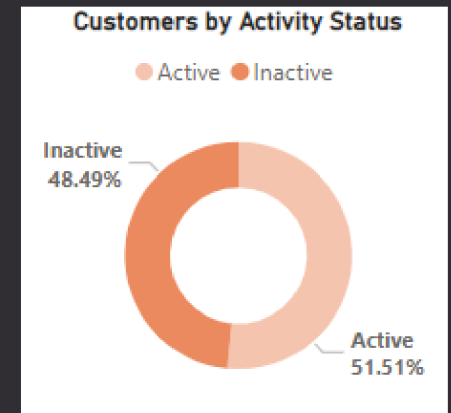
Data Reporting

Insights

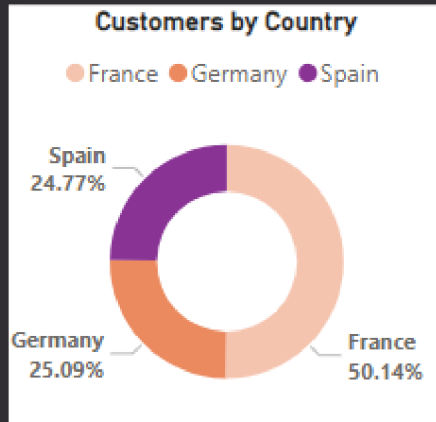


- Customers for Male (5457) is higher than Female (4543).
- Male accounted for 54.57% of Customers.

- Customers for Active (5151) is higher than Inactive (4849).
- Active accounted for 51.51% of Customers.

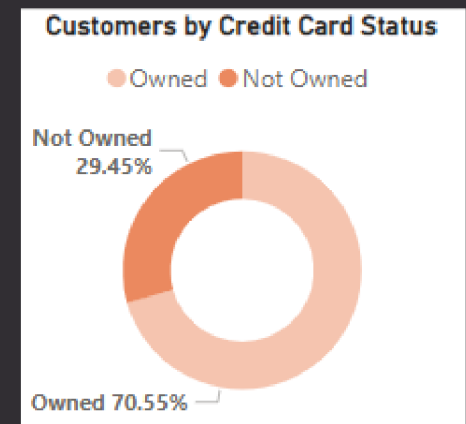


Insights



- France has the highest Customers at 5014, followed by Germany at 2509 and Spain at 2477.
- France accounted for 50.14% of Customers.

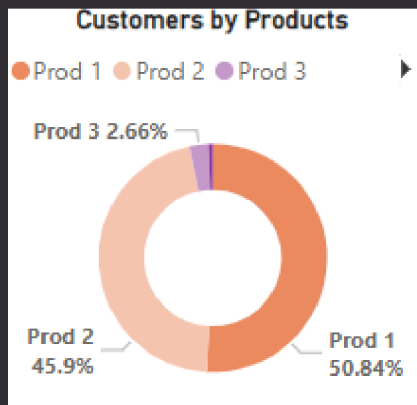
- Customers for Owned (7055) was higher than Not Owned (2945).
- Owned accounted for 70.55% of Customers.



Insights

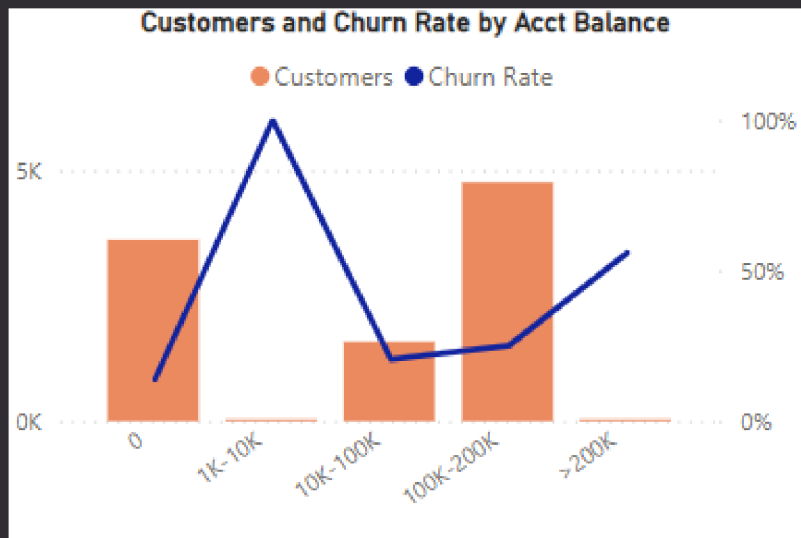
10K • *Total Customers*

20.4% • *Churn Rate*



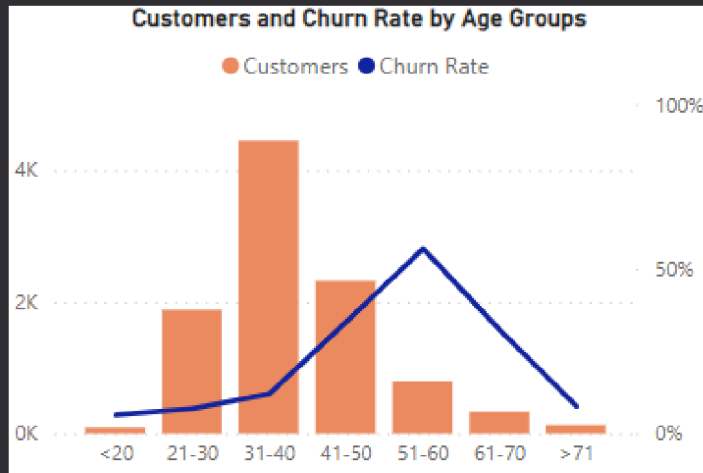
- Prod 1 had the highest Customers at 5084, followed by Prod 2, Prod 3, and Prod 4.
- Prod 1 accounted for 50.84% of Customers.

Insights



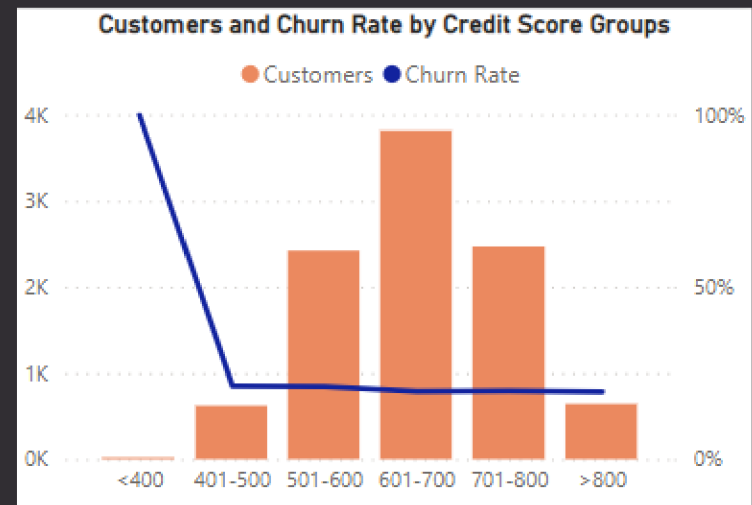
- At 4765, 100K-200K had the highest Customers and was 476,400.00% higher than 1K-10K, which had the lowest Customers at 1.
- Customers and total Churn Rate are negatively correlated with each other.
- 100K-200K accounted for 47.65% of Customers.
- Customers and Churn Rate diverged the most when the Acct Balance was 100K-200K, when Customers were 4765 higher than Churn Rate.

Insights



- At 4451, 31-40 had the highest Customers and was 4,901.12% higher than <20, which had the lowest Customers at 89.
- 31-40 accounted for 44.51% of Customers.
- Customers and Churn Rate diverged the most when the Age Groups was 31-40, when Customers were 4451 higher than Churn Rate.

- At 3818, 601-700 had the highest Customers and was 19,994.74% higher than <400, which had the lowest Customers at 19.
- Customers and total Churn Rate are negatively correlated with each other.
- 601-700 accounted for 38.18% of Customers.
- Customers and Churn Rate diverged the most when the Credit Score Groups was 601-700, when Customers were 3818 higher than Churn Rate.



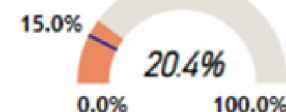
PowerBI Dashboard

CUSTOMER CHURN ANALYSIS

Bank Customer Data

10K

Customers

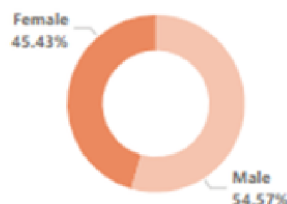


Churn Status

All

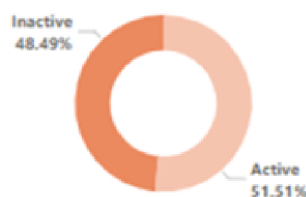
Customers by Gender

Male Female



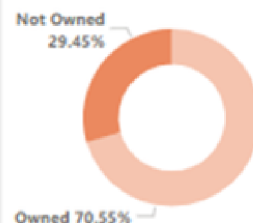
Customers by Activity Status

Active Inactive



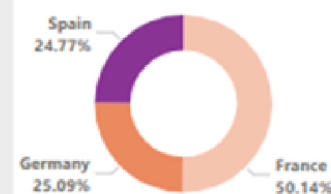
Customers by Credit Card Status

Owned Not Owned



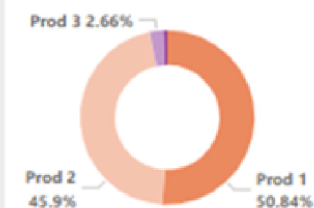
Customers by Country

France Germany Spain



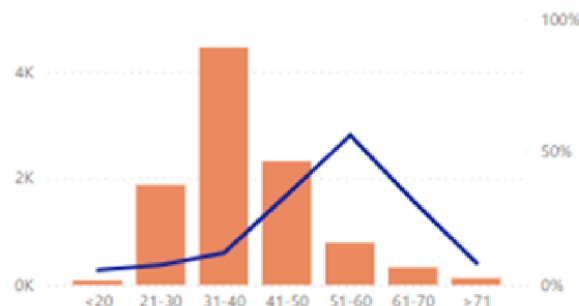
Customers by Products

Prod 1 Prod 2 Prod 3



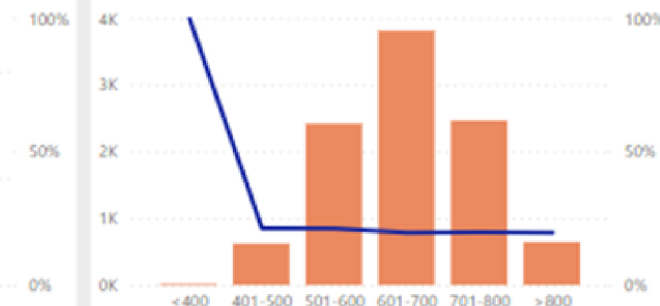
Customers and Churn Rate by Age Groups

Customers Churn Rate



Customers and Churn Rate by Credit Score Groups

Customers Churn Rate



Customers and Churn Rate by Acct Balance

Customers Churn Rate



Recommendations

1. **Targeted Marketing Strategies:** Leveraging the insights on the highest customer segments (e.g., Male, Active, France) to design targeted marketing campaigns that resonate with the preferences of these groups.
2. **Enhance Product Portfolio:** Given that Product 1 is the most popular, consider expanding and optimizing offerings within this category. Investigate the factors contributing to its popularity and apply those insights to other products.
3. **Customer Engagement Programs:** Implement engagement programs, loyalty rewards, or exclusive promotions to increase customer satisfaction and loyalty, especially within the Owned category where the majority of customers reside.
4. **Churn Rate Mitigation:** Identify pain points leading to the highest churn rates, particularly in the 100K-200K account balance range. Addressing issues specific to this segment may contribute significantly to reducing overall churn.
5. **Age-Specific Strategies:** Develop age-specific strategies, targeting the 31-40 age group where the majority of customers lie. Understand their needs, preferences, and pain points to enhance their overall banking experience.
6. **Credit Score Improvement Programs:** Launch initiatives or educational programs to help customers improve credit scores, especially in the 601-700 range. Improved credit scores may positively impact customer satisfaction and loyalty.



**THANK
YOU**