Microsoft | Power BI

Customer churn analysis

View in Power BI

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Customers churn analysis

10K	5151	4849	7055	2945	7963	2037
Total customer	active customer	Inactive customer	Credit Card holders	Noncredit card holder	Retain customers	Exit customer

Country
All

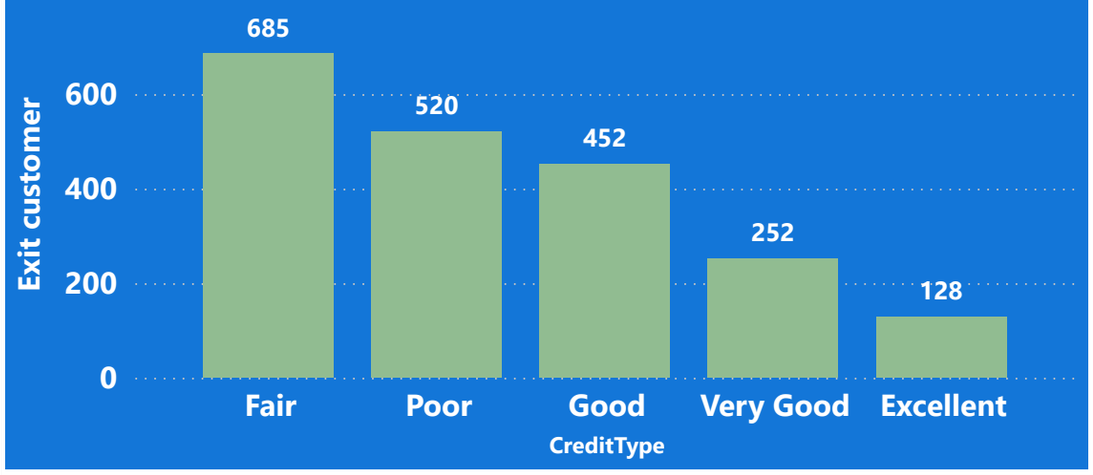
Year
All

month name
All

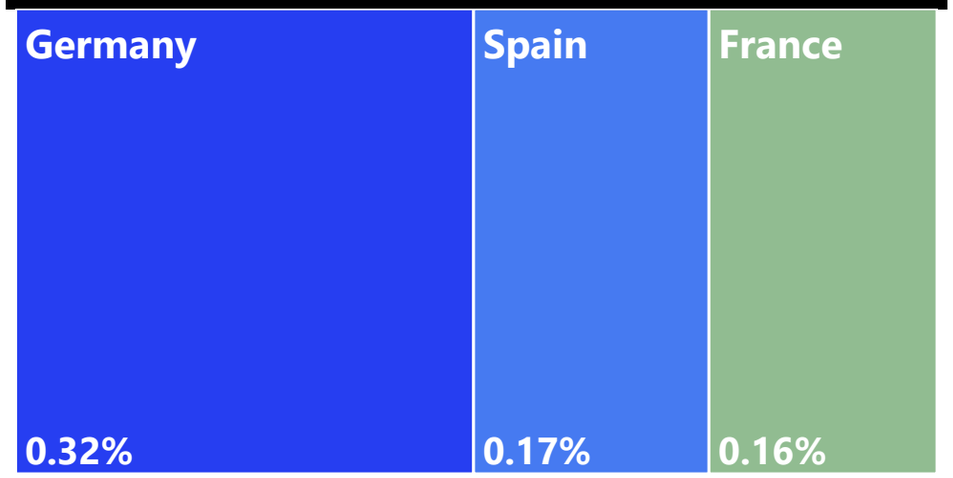
ActiveCategory
All

ExitCategory
All

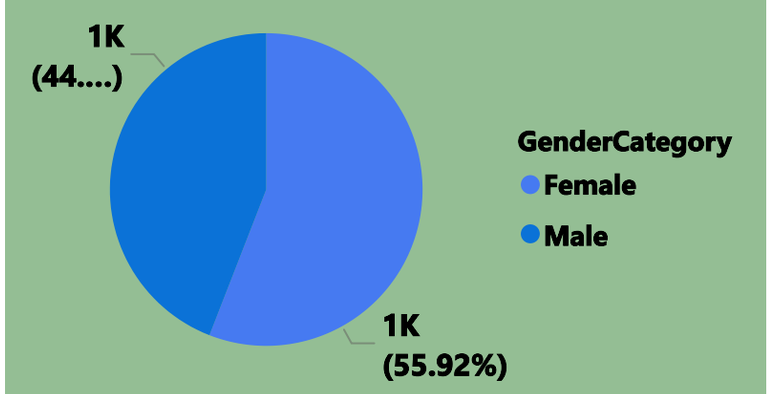
Exit customer by CreditType



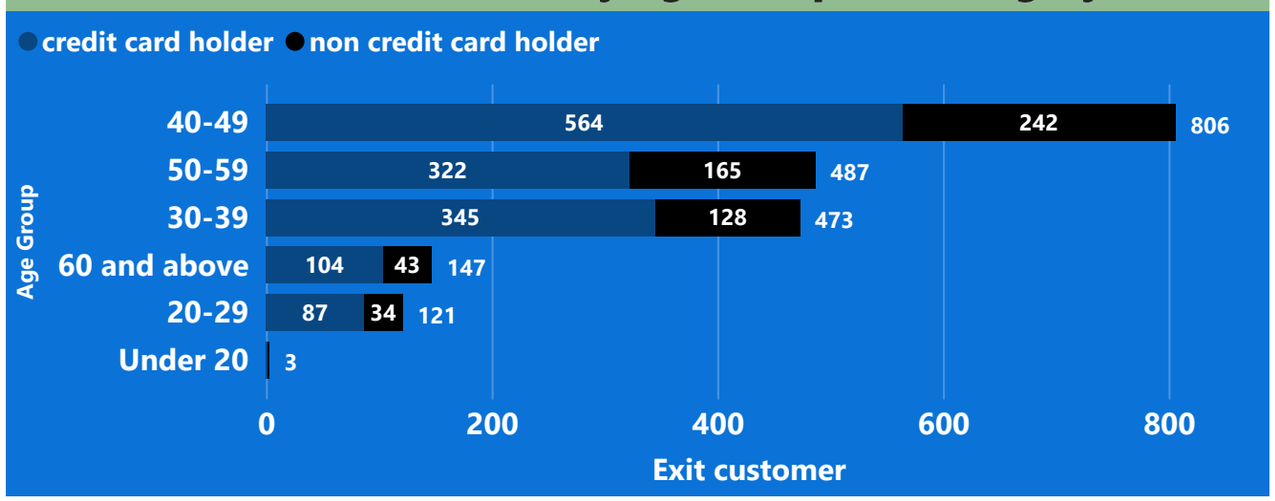
Churn rate by GeographyLocation



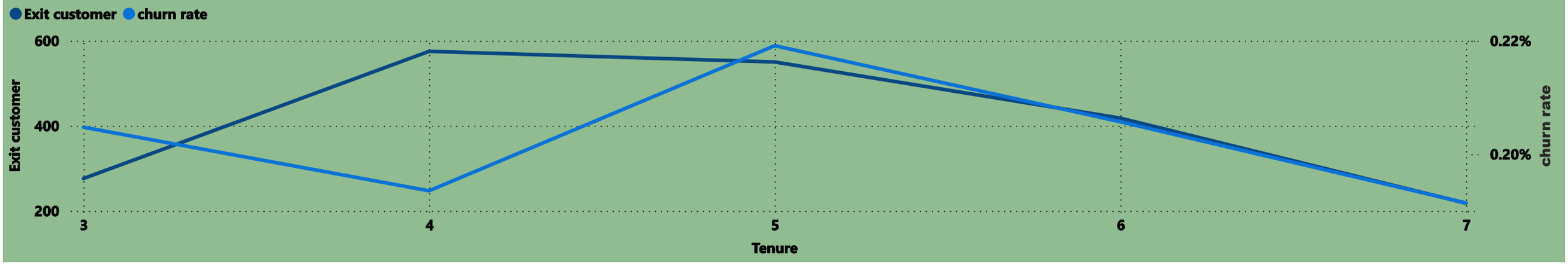
Exit customer by GenderCategory



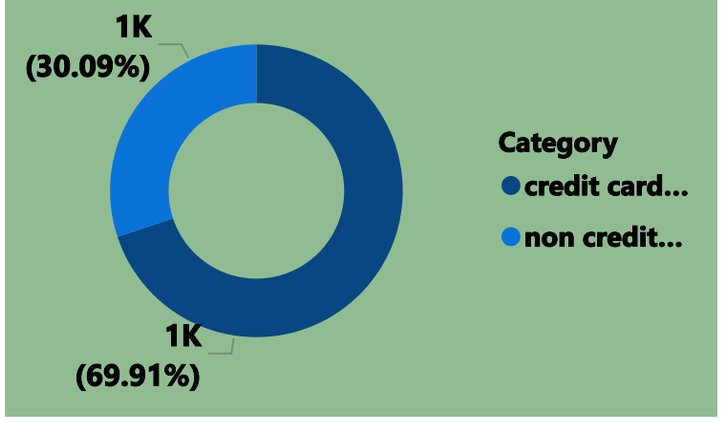
Exit customer and churn rate by Age Group and Category



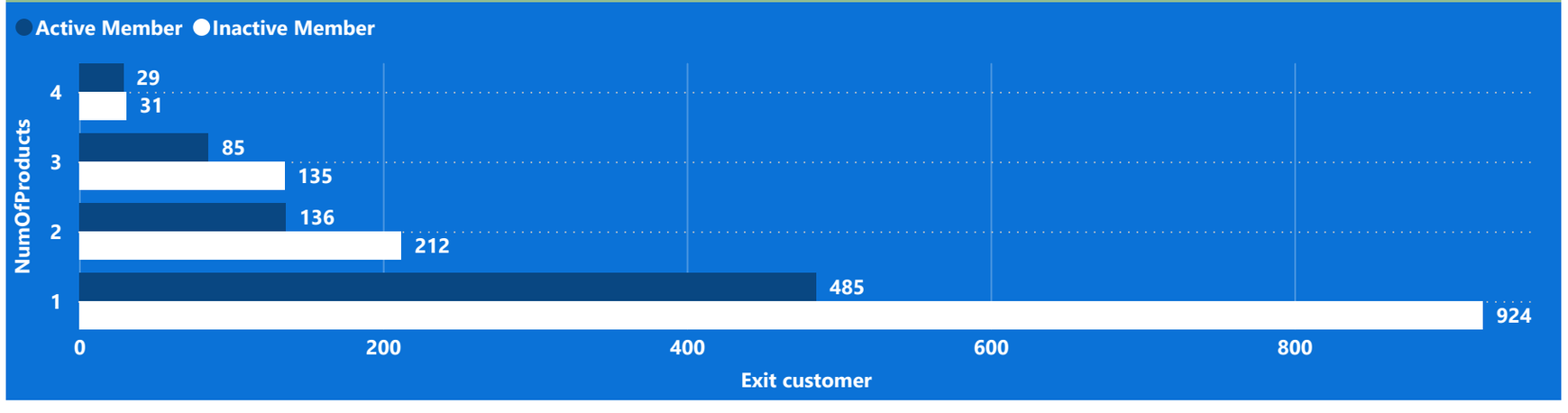
Exit customer and churn rate by Tenure



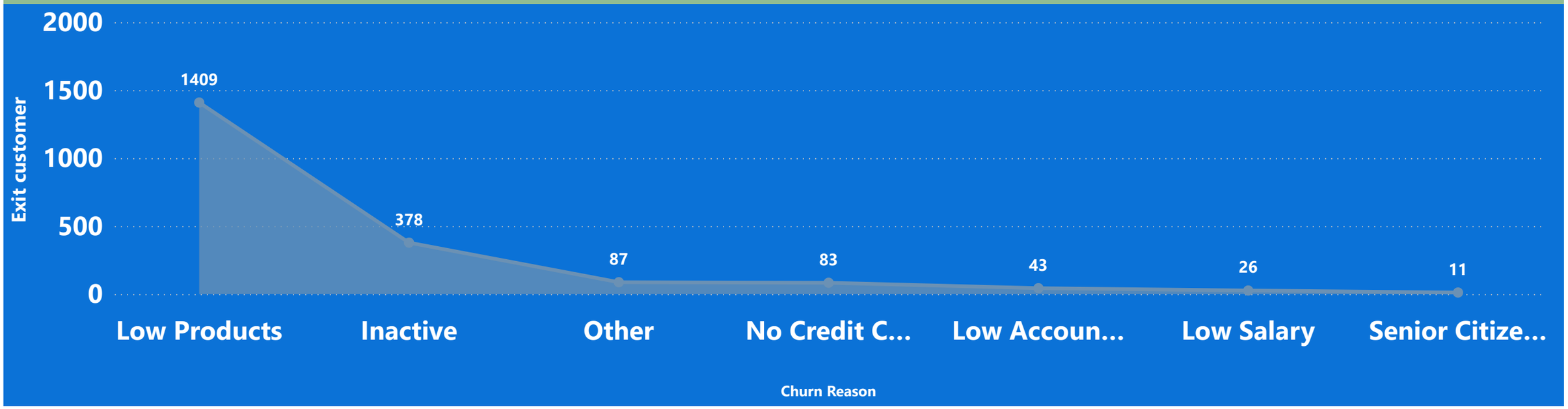
Exit customer by Category



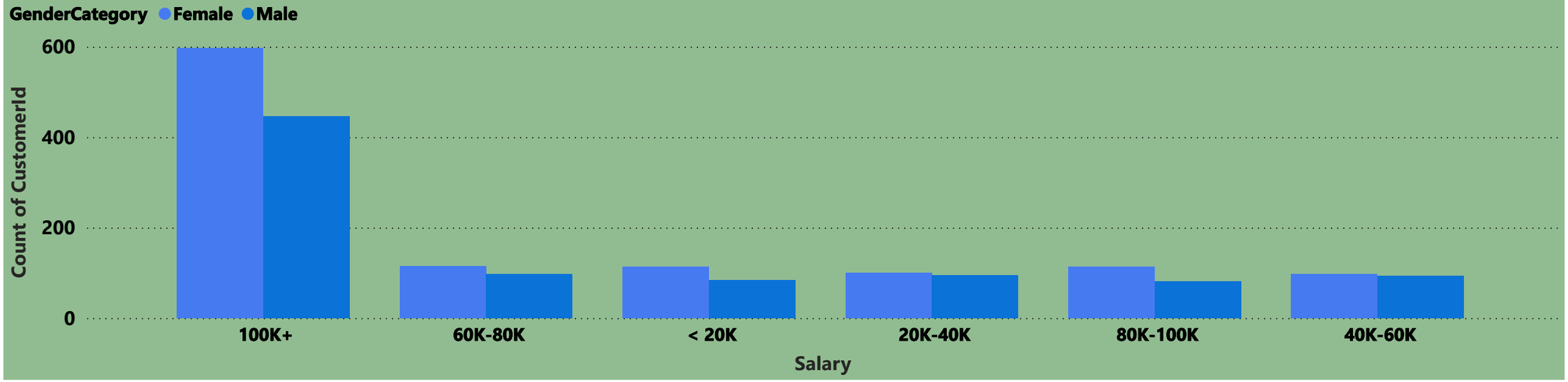
Exit customer by NumOfProducts and ActiveCategory



Exit customer and churn rate by Churn Reason



Count of CustomerId by Salary and GenderCategory



Bussiness objective

- Analyze customer data to determine the primary reasons for customer churn, including demographics, credit ratings, and engagement levels

- Develop targeted strategies to lower churn rates, focusing on high-risk segments like customers with fair credit ratings and certain age groups.

- Encourage customers to adopt multiple products through cross-selling and bundling strategies, increasing engagement and reducing churn.

- Implement specific retention strategies in regions with higher churn rates, such as Germany, to tackle local challenges and improve customer retention.

Solution approach

- A few measure were created to calculate the KPIs as shown below

Churn rate:	Exit customers / Total customers * 100
Total customers:	COUNT (customers _id)
Active customers :	(COUNT(Customer_ID) WHERE Status = 'Active')
Inactive customers :	(COUNT(Customer_ID) WHERE Status = 'Inactive')
Credit card holder :	(COUNT(Customer_ID) WHERE Has_Credit_Card = 'Yes')
Non-CrCard holder :	(COUNT(Customer_ID) WHERE Has_Credit_Card = 'No')
Exit customers :	(COUNT(Customer_ID) WHERE Status = 'Exited')
Retain customers :	(COUNT(Customer_ID) WHERE Status = 'Retain')

Solution approach

Create a new column of (Age group) for visualization

Formatting | Properties

```
Age Group = SWITCH(
    TRUE(),
    'Bank_Churn (2)'[Age] < 20, "Under 20",
    'Bank_Churn (2)'[Age] >= 20 && 'Bank_Churn (2)'[Age] < 30, "20-29",
    'Bank_Churn (2)'[Age] >= 30 && 'Bank_Churn (2)'[Age]< 40, "30-39",
    'Bank_Churn (2)'[Age] >= 40 && 'Bank_Churn (2)'[Age] < 50, "40-49",
    'Bank_Churn (2)'[Age] >= 50 && 'Bank_Churn (2)'[Age] < 60, "50-59",
    'Bank_Churn (2)'[Age] >= 60, "60 and above",
    "unknown"
```

Create a new column of (Credit type) using switch

```
CreditType =
SWITCH(
    TRUE(),
    [CreditScore] >= 800 && [CreditScore] <= 850, "Excellent",
    [CreditScore] >= 740 && [CreditScore] <= 799, "Very Good",
    [CreditScore] >= 670 && [CreditScore] <= 739, "Good",
    [CreditScore] >= 580 && [CreditScore] <= 669, "Fair",
    [CreditScore] >= 300 && [CreditScore] <= 579, "Poor",
    "Unknown"
```

Features of the dashboard

- **The following 7 visuals were provided**

- **Exit Customers by Credit Type =** Fair & Poor credit types have the highest exit custome with 685 & 520 exits respectively, while Excellent credit types have the lowest at 128

- **Churn Rate by Geography =** Germany has the highest churn rate at 0.32%, followed by Spain at 0.17%, and France at 0.16%.

- **Exit Customers by Gender =** Female customers make up 55.92% of exits, while male customers account for 44.08%.

- **Exit by Age Group & category =** The 40-49 age group has the highest exits,with credit holders significantly more likely to churn than non-credit card holders across all age group .

Features of the dashboard

- **Exit by Num of Products and Active Status =** Customers with only 1 product and Inactive members have the highest exits, indicating lower product engagement correlate with higher churn.

- **Exit Customers by Salary and Gender =** Customers earning less than 20K have the highest exits, with female exits consistently higher across all salary ranges.

- **Exit and Churn Rate by Churn Reason =** Low products (1,409 exits) and inactivity (1,183 exits) are the primary churn reasons, highlighting product engagement and and activity as key retention factors.

Bussiness outcomes

- The following are some important businesses insights derived from churn report
  - Focus on retaining customers aged 40-49,keeping credit card holders in this age group happy with special offers and programs.
  - Improve and promote credit card benefits to encourage more customers to stay.
  - Make the first , second year experience better to reduce early customer drop-offs.
  - Offer deals and services to get customers using more bank products and reduce churn from low product usage.

Bussiness outcomes

- Run campaigns to bring back the 4,849 inactive customers.
- Pay special attention to high-income customers, especially women, to keep them from leaving.
- Germany has the highest churn rate. Focus on improving services there to keep customers happy.
- Offer financial advice and services to customers with "Fair" credit to help them stay with the bank.

Thank you