# Bank Customer Churn Analysis

**Objective :**

The objective of this analysis is to discover various factors contributing to increased customer churn rate at the bank, and provide the business users with these insights which they can use to make informed decisions and strategize on how to improve customer retention and reduce churn rate.

1) Total Customers Of Bank

```sql
SELECT count(*) AS Total_Customers
FROM Churn_modelling;
```


2) Total Active Customers

```sql
SELECT COUNT(*) AS Active_Customers
FROM churn_modelling
WHERE Activity_Status = "Active";
```

3) Total Inactive customers

```
SELECT COUNT(*) AS Inactive_Customers
FROM churn_modelling
WHERE Activity_Status = "Inactive";
```

| Inactive Customers |
| --- |
| 4849 |

4) Total credit card owned customers

```
SELECT COUNT(*) AS Credit_Card_Holders
FROM churn_modelling
WHERE Credit_Card_Status = "Owned";
```

| Credit Card owned |
| --- |
| 7055 |

5) Total Non credit card owned customer

```
SELECT COUNT(*) AS Non_Credit_Card_Holders
FROM churn_modelling
WHERE Credit_Card_Status = "Not Owned";
```

| Non Credit Card Owned Customer |
| --- |
| 2945 |

6) Total Churn Customers

```sql
SELECT COUNT(*) AS Churn_Customers
FROM churn_modelling
WHERE Exit_Status = "Exited";
```

| Churn Customers |
| --- |
| 2037 |

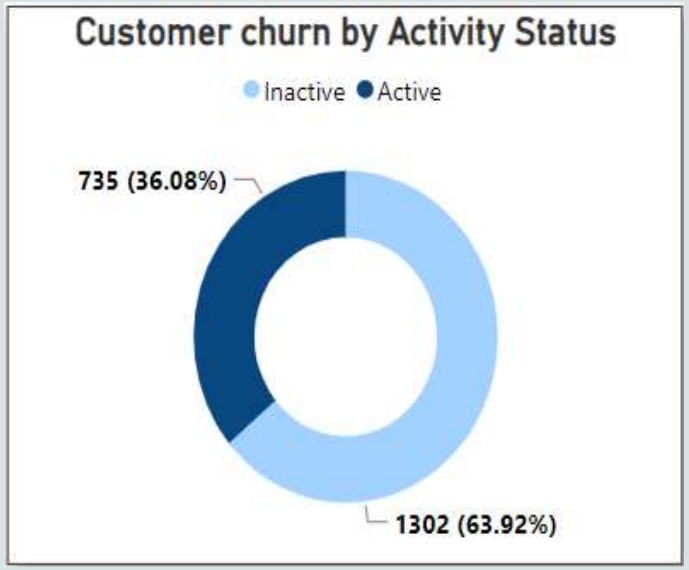
7)The overall churn rate of  bank's customers

```sql
SELECT
    COUNT(*) AS TotalCustomers,
    SUM(CASE WHEN Exit_Status = 'Exited' THEN 1 ELSE 0 END) AS ChurnedCustomers,
    concat(Round((SUM(CASE WHEN Exit_Status = 'Exited' THEN 1 ELSE 0 END) / COUNT(*)) * 100,2),"%") AS Churn_Rate
FROM
    churn_modelling;
```

| Customers churn Rate |
| --- |
| 20.37% |

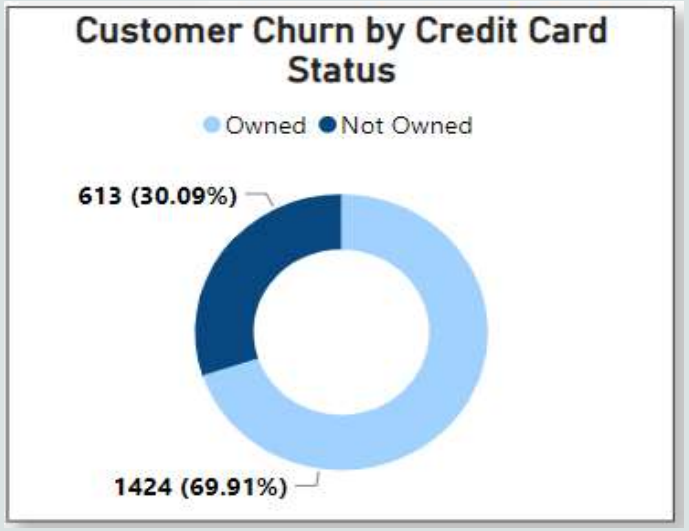
8) Customer churn with respect to whether the customer is an active member or not

```
Select
      Activity_Status,
      count(customerID) AS Exit_customer_count
From churn_modelling
Where Exit_status ="Exited"
Group By Activity_Status
Order By Exit_customer_count DESC;
```



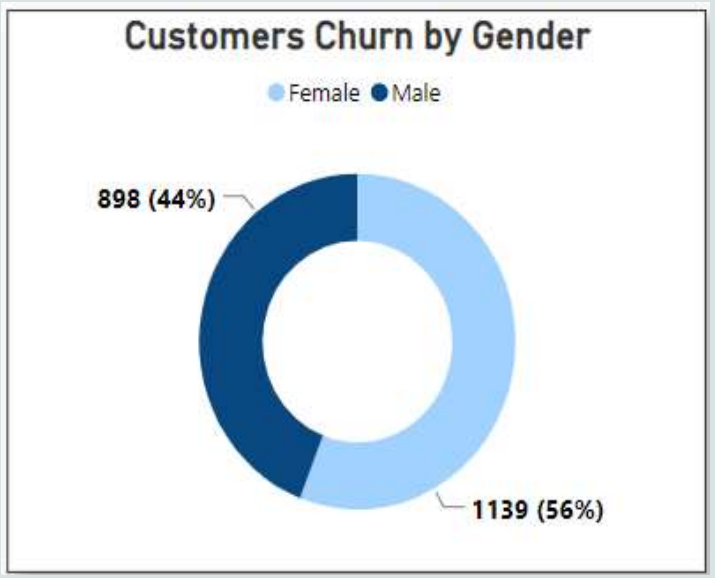

9) Customer churn with respect to credit score status

```
Select
      credit_card_Status,
      Count(customerID) AS Exit_customer_Count
From churn_modelling
Where exit_status = "Exited"
Group By credit_card_Status
Order By Exit_customer_Count DESC;
```



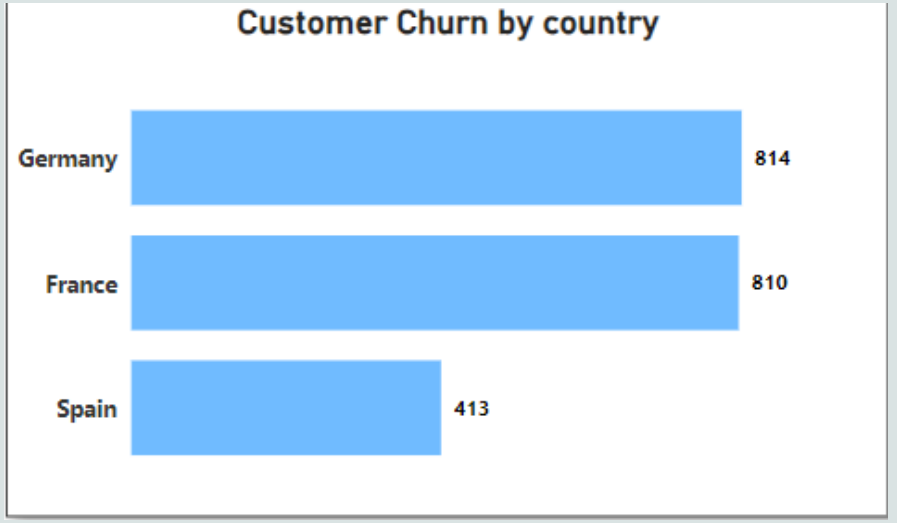
10) Customer churn with respect to Gender

```sql
Select
      Gender,
      count(customerID) AS Exit_customer_count
From churn_modelling
Where Exit_status = "Exited"
Group By Gender
Order by Exit_customer_count DESC;
```



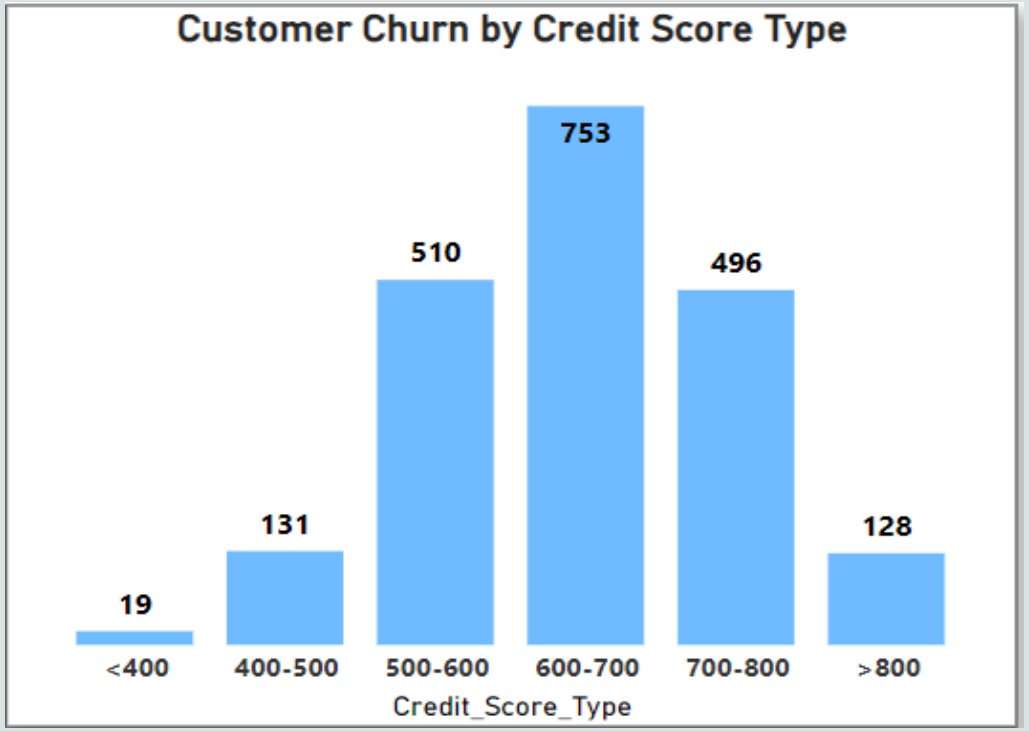

11) Customer churn with respect to country

```sql
Select
      Geography,
      Count(CustomerID) AS exit_customer_count
From churn_modelling
Where Exit_Status = "Exited"
Group By Geography
Order By exit_customer_count DESC;
```



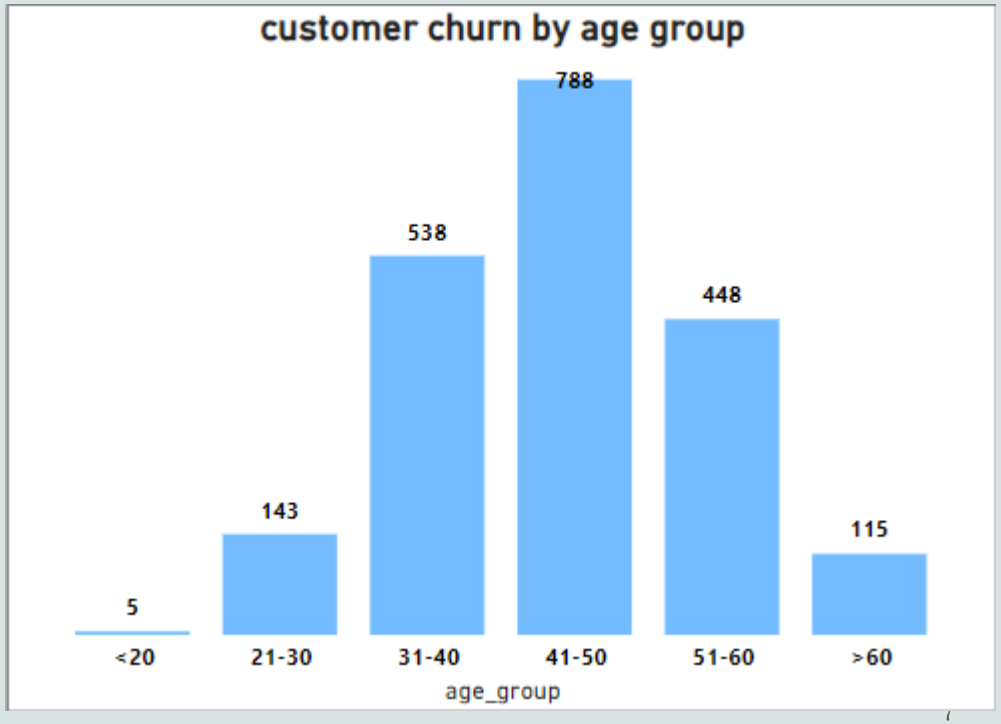
# 12) Customer Churn With respect to credit score type

```sql
Select
      case
          when creditScore >= 800 Then ">800"
          when creditScore < 800 And creditScore >=700 then "700-800"
          when creditScore < 700 and creditScore >=600 then "600-700"
          when creditScore < 600 and creditScore >=500 Then "500-600"
          when creditScore < 500 and creditScore >=400 then "400-500"
          Else "<400"
          End AS Credit_Score_Type,
          Count(customerID) AS Exited_customer_count
From churn_modelling
Where exit_status = "Exited"
Group By Credit_Score_Type
Order By Exited_customer_count DESC;
```



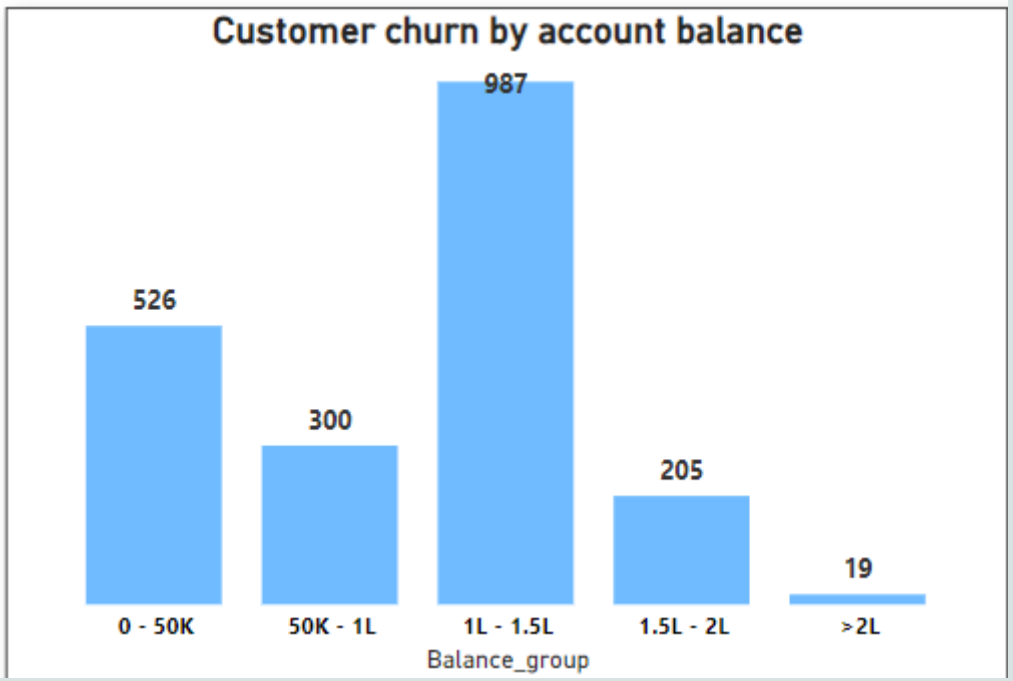
13) customer churn with respect to age group

```sql
Select
      CASE
            WHEN age <=20 Then "<20"
            WHEN age >= 21 AND age <= 30 THEN '21-30'
            WHEN age >= 31 AND age <= 40 THEN '31-40'
            WHEN age >= 41 AND age <= 50 THEN '41-50'
            WHEN age >= 51 AND age <= 60 THEN '51-60'
            ELSE '>60'
      END AS age_group,
      Count(customerID) AS Exit_customer_count
From churn_modelling
where Exit_Status = "Exited"
Group by Age_group
Order by Exit_customer_count DESC;
```



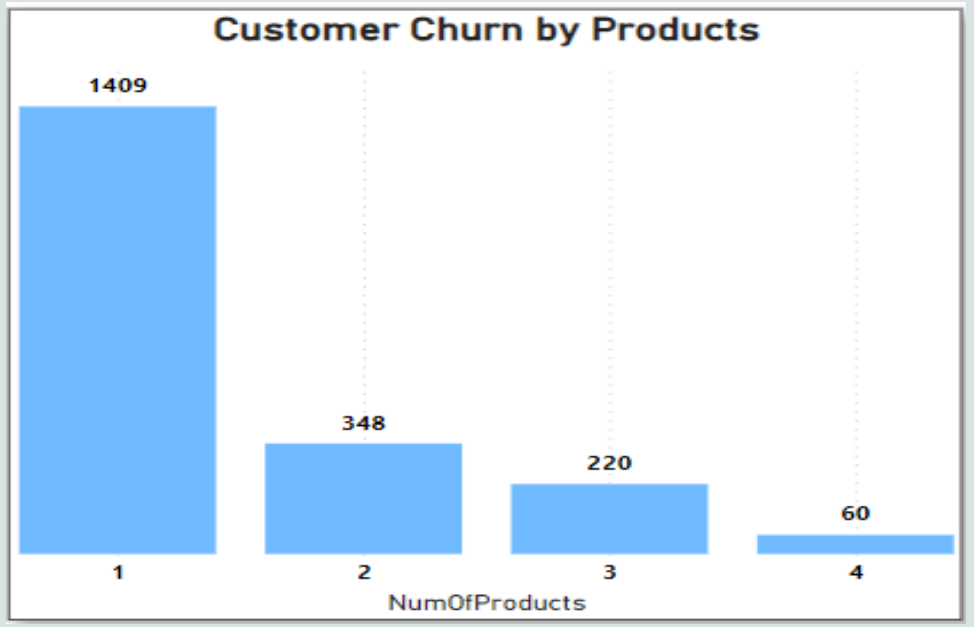
14) Customer churn with respect to account balance

```sql
Select
        Case
            when balance >= 0 And balance < 50000 Then "0 - 50K"
            when balance >= 50000 And balance < 100000 Then "50K - 1L"
            when balance >= 100000 And balance < 150000 Then "1L - 1.5L"
            When balance >=150000 And balance < 200000 Then "1.5L - 2L"
            Else ">2L"
        End AS Balance_group,
        count(customerID) As Exited_customer_count
From churn_modelling
where Exit_status = "Exited"
Group by balance_group
ORDER By Exited_customer_count DESC;
```



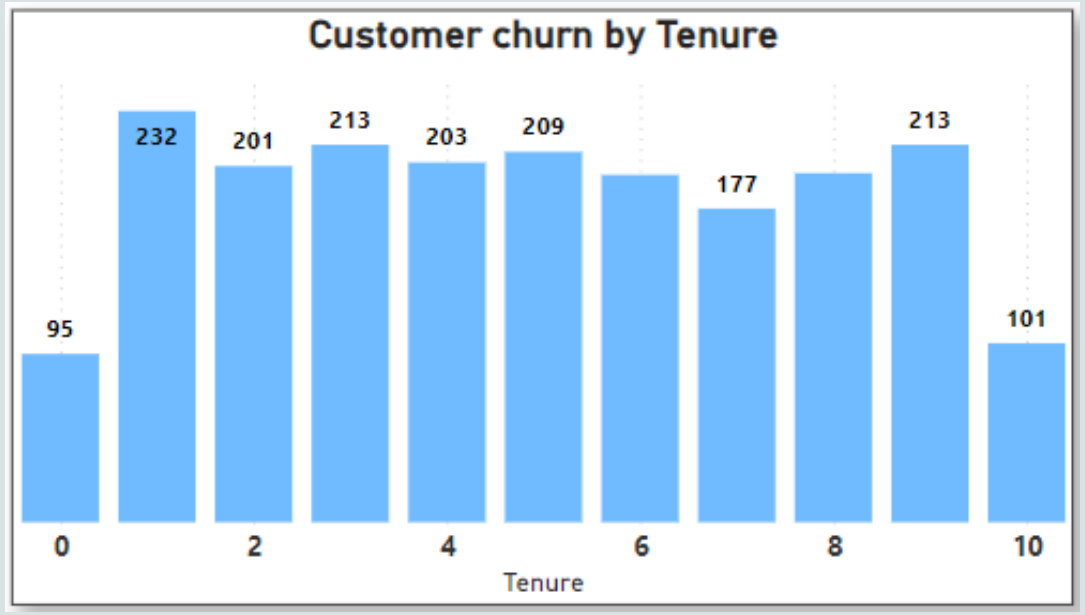
15) Customer churn with respect to Number of products

```sql
Select
      NumOfProducts,
      count(customerID) AS Exit_customer_count
From Churn_modelling
Where Exit_status = "Exited"
Group By NumOfProducts
Order by Exit_customer_count Desc;
```




16) Customer churn with respect to Tenure

```sql
Select
      Tenure,
      Count(customerID) AS Exit_customer_count
From churn_modelling
Where Exit_status = "Exited"
Group By Tenure
Order by Exit_Customer_count DESC;
```



# Thank you