

# Churn Modeling Dataset

"Churning" is a term used in personal finance to describe a strategy where individuals **repeatedly open and close credit cards** to earn multiple sign-up bonuses, such as **cash back, points**. It is a method used by **consumers**, not a financial institution itself.

## Dataset Overview

- We have 14 columns Choose an item.
- The Balance was either 0 or an amount.
- The Has Credit Card column was either 1 or 0 i.e., Yes or No in general.
- The Is Active Member column was also had either 1 or 0.
- The Exited column also has either 1 or 0.
- The Tenure was between 1-10 years.
- Every Customer had an estimated salary.
- We have 10,000 rows.
- In the 10,000 rows, few customers names were not clear e.g., Y?, L?, K?, Y?an, H?, Hs?
- The dataset was almost clean, except the customer surnames.

## KPI's List

1. Number of Customers?  
→ We had 10,000 total number of customers, we used CustomerId column.
2. Number of Unique/Distinct Customer?  
→ We had 10,000 unique customers and we used CustomerId column.
3. How many products in total?  
→ We had 15,302 total products and we used NoOfProducts column.
4. How many unique products were there?  
→ We had 10 unique products in total and we used NoOfProducts column.
5. What was the highest credit score?  
→ 850 was the highest credit score among the customer and we used CreditScore column.
6. What was the lowest credit score?  
→ 350 was the lowest credit score.
7. What was the average credit score?  
→ 650.5288 was the average credit score and we used CreditScore column.
8. How many unique geographical locations we had?  
→ We had 3 unique locations i.e., France, Germany and Spain, we used Geography column.
9. What was the Highest Tenure?  
→ 10 years was the highest and we used Tenure column.
10. What was the Lowest Tenure?  
→ 0 was the lowest.
11. What was the average Tenure?  
→ 5.01 was the average tenure duration.
12. What was the highest age among our customers?  
→ 92 was the highest aged customer
13. Who were the oldest customer with highest age?  
→ Rogova and T'ien were two customers with highest age i.e., 92 years.
14. What was the lowest age among our customers?  
→ 18 was lowest age.
15. Who were the youngest customers?  
→ We had 22 youngest customers with age group of 18 years.
16. What was the average age group?  
→ 38.92 was the average age.
17. How many customers we had in the average age group?  
→ We had 423 average age grouped customers, the age group was rounded off and it was 39 years old.
18. How many unique age groups we had?  
→ 70 unique age groups.
19. Which gender has the highest credit score and who was it?  
→ Medland was the customer and he was a Male with the highest credit score 850.
20. Which gender has the lowest credit score and who was it?  
→ Lin was the customer and she was a Female with the lowest credit score 350.
21. Which gender had the average credit score and what was the average credit score?  
→ Female customer has the average credit score and the average score was 650.83.

22. How many customers had the highest credit score and their names.  
→ 233 customers credit score was highest i.e., 23.3% of our customers have high credit score.
23. How many customers are active?  
→ 5151 customers are active.
24. How many customers are not active?  
→ 4849 customers are not active.
25. How many customers are credit card holders?  
→ 7055 customers hold a credit card.
26. How many customers are not a credit card holder?  
→ 2945 customers don't have a credit card.
27. How many Male and Female customers have a credit card?  
→ 3863 Male & 3192 Female customers have a credit card.
28. How many Male and Female customers doesn't have a credit card?  
→ 1594 Male & 1351 Female customers don't have a credit card.
29. Which Locations have active credit card holders.  
→ France has 1826 customers, Spain has 908 customers, Germany has 873 customers. Used Geography, IsActiveMember and HasCrCard columns.
30. How many customers have exited?  
→ 2037 have exited.
31. How many customers have not exited?  
→ 7963 have not exited.
32. Which Locations have highest credit score?  
→ All the three locations had a customer who had the highest credit score.
33. What was the average estimated salary of the customers?  
→ 1,00,090.23 was the average estimated salary of the customers.
34. What was the average estimated salary of customers based on gender?  
→ Female customers average estimated salary was 1,00,601.54 and Male customers was 99,664.57.
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