# Customer Churn Analysis

Studies suggest that acquiring a first-time customer can cost between 5 and 25 times as much as retaining an existing one which is why you would find loyalty programs, cards and memberships, offers, schemes being offered to you left, right and centre

I just finished a project which aims to analyse customer churn in the financial sector, focusing on understanding the factors contributing to customer exits.

Key Insights

- **Churn Rate**: 20% of customers are churned, while 80% remain loyal.
- **Credit Score Distribution**: The average credit score of churned customers shows a left-skewed histogram with a mean of 650.
- **Geographical Analysis**: France has the highest churn rate, followed by Germany and Spain.

Geography Distribution of Churned Customers
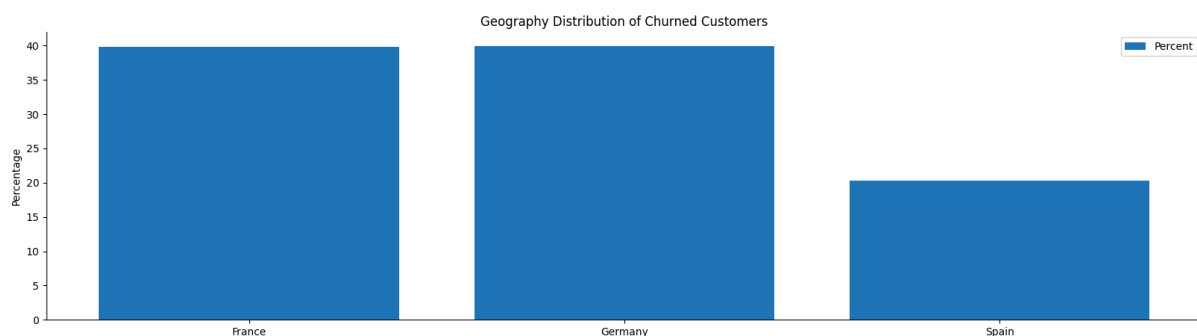
- **Demographic Trends:**
  - French females exhibit the highest churn rates, particularly those aged 35-55.
  - Customers with a tenure of 9-10 years are most likely to churn in France.
  - Male customers have a churn rate of 43% within the age range of 40-45.

- **Customer Segmentation**:
    - The majority of churned customers (tenure 9-10 years) have an Average (40.44%) or Good (32.35%) credit score, indicating a higher churn risk among typically low-risk customers.
    - Long-tenured customers with only one product are more prone to churn, suggesting a need for product upgrades or diversification.
- **Feature Correlation**: Age and account balance show the strongest correlation with churn, while other factors demonstrate weak or negative correlations.
- **Churn Rates Over Time**: In the first 4 years, customers with a poor credit score experience a churn rate of 46%, which increases to 63% by the 6th year.
- **Member Engagement**: Inactive members show a 13% churn rate, indicating a need for engagement through schemes or new product offerings.

Project Link :- [Link](#)