**Bank Customer Churn Prediction Report**

This report analyzes the "Bank Customer Churn Prediction" dataset to understand the factors that influence customer churn in a bank. The dataset contains the following fields: customer\_id, credit score, country, gender, age, tenure, balance, products number, credit card, active member, estimated salary, and churn.

**Data Overview**

The dataset consists of 10,000 records of bank customers. Each record contains the following information:

* Customer ID: A unique identifier for each customer.
* Credit score: The credit score of the customer.
* Country: The country where the customer is located.
* Gender: The gender of the customer.
* Age: The age of the customer.
* Tenure: The number of years the customer has been with the bank.
* Balance: The account balance of the customer.
* Products number: The number of bank products the customer has.
* Credit card: Whether the customer has a credit card (1 for yes, 0 for no).
* Active member: Whether the customer is an active member (1 for yes, 0 for no).
* Estimated salary: The estimated salary of the customer.
* Churn: Whether the customer has churned (1 for yes, 0 for no).

**Key Findings**

1. The dataset includes customers from three countries: France, Spain, and Germany.

2. The gender distribution is relatively balanced, with a slightly higher number of male customers.

3. The average age of the customers is around 39 years.

4. The average credit score is approximately 650.

5. The average tenure of customers is about 5 years.

6. The average account balance is around $76,000.

7. The majority of customers have one or two bank products.

8. Around 70% of customers have a credit card, and 51% are active members.

9. The average estimated salary of customers is about $100,000.

10. The churn rate in the dataset is approximately 20%.

**Conclusion**

The analysis of the "Bank Customer Churn Prediction" dataset provides valuable insights into the factors that may influence customer churn in a bank. Further analysis, such as predictive modeling, can be performed to develop strategies for customer retention and business growth.

**Churn Rate**

Churn Rate by Country

The figure above shows the churn rate by country, indicating that customers in Germany have the highest churn rate, followed by customers in Spain and France.