

Descriptive Analysis

Descriptive analysis is a statistical method used to summarize and describe the key features of a dataset or sample. It involves organizing, summarizing, and presenting data in a meaningful way to facilitate understanding and interpretation.

1. France is the major customer base of the Bank which accounts for more than 60% of the total customer count followed by Spain and Germany which have 23% and 17% respectively.
2. The bank is well diversified in terms of gender distribution with 60% males and 40% females. The majority of the customers are between 15-45 years of age group.
3. Bank has currently 55% of active customers with an average tenure of 5.02 years and the average tenure of inactive customers is 5.08 years. The churn rate for the bank is 21.12%.
4. Overall across all the countries, 74.22% of the total active customers have credit cards.
5. Overall across all the countries, approximately 83% of the bank's customers have credit score ratings ranging from fair to exceptional category which is a positive indicator for future cash flows and reduced bad debts.

Prescriptive Analysis:

Prescriptive analysis involves identifying the best course of action or decision based on data analysis and optimization techniques. It aims to provide actionable recommendations for decision-making.

1. The percentage of inactive customers at 40% approx.. is quite high according to the market standards which is both a challenge and an opportunity for the bank to engage back the inactive customers and expand its profitability. The primary target for the bank should be people among the age group between 15-45 years of age across all the countries and it should devise strategies like reactivation incentives, financial wellness programs, personalized communication etc to entice and increase the participation and activation of inactive customers.
2. Concerning the credit card sales among active customers, the bank has still 25% market left to increase its credit card sales among its active customer segment which will positively impact its bottom line in the financial statements. Specifically, the bank should target the customers who have their salary more than the average salary of their respective countries. This includes 24% females in France from the age group of 30-45, In Germany 25% of females from the age group 15-60 and 24 males from the age group 30-45. Finally in Spain, females from the age group 45-60 and males from the age group 15-30 and 45-60.
3. The majority of the bank's customers have credit rating scores in the category of fair to exceptional and only 16.77% of them have poor credit rating scores. It is a good indication for the bank as it will protect their inflows and would result in less default. Furthermore, the bank should identify the customers with poor credit scores and should devise certain measures such as mortgage of securities, improved risk assessment, etc. to further reduce their customer's default possibility.