

## Problem Statement for ANOVA Concept

Title: Assessing the Impact of Customer Service Channels on Customer Satisfaction in Retail Banking

### Problem Statement:

In the retail banking sector, customer satisfaction is important. This study aims to investigate whether there are significant differences in customer satisfaction scores among three customer service channels: in-branch assistance, online support, and telephone support.

The analysis will help identify the most effective customer service channel for enhancing overall satisfaction among banking customers.

Title: Analyzing the Effectiveness of Marketing Strategies on Customer Acquisition in Online Banking

### Problem Statement:

With the increasing reliance on online banking services, this study seeks to assess the effectiveness of different marketing strategies employed by a bank to acquire new customers. The research will focus on comparing the mean customer acquisition rates associated with online advertisements, social media campaigns, and email marketing. The findings will guide marketing efforts in the digital space.

Title: Examining the Influence of Interest Rate Variations on Loan Approval Times in Commercial Banking

### Problem Statement:

In the dynamic landscape of commercial banking, interest rates play a crucial role in loan approval processes. This study aims to determine whether there are significant differences in the mean loan approval times across various interest rate categories. Understanding the impact of interest rate fluctuations on loan processing times will enable banks to streamline their operations and enhance customer experience.

Title: Investigating the Effect of Financial Education Programs on Credit Card Utilization Behavior

**Problem Statement:**

With the goal of promoting responsible financial behavior, this study explores the impact of financial education programs on credit card utilization behavior. By comparing mean credit card usage across customers who participated in financial education programs and those who did not, the research aims to identify the effectiveness of such initiatives in influencing responsible financial habits.

**Title: Assessing the Impact of Technological Innovations on Fraud Detection Rates in Mobile Banking**

**Problem Statement:**

Mobile banking platforms are continuously evolving with technological advancements. This study investigates whether there are significant differences in fraud detection rates among three generations of anti-fraud technologies: rule-based systems, machine learning algorithms, and artificial intelligence models. The analysis will inform banks on the most effective technology for preventing fraudulent activities in mobile banking transactions.