

ANALYZING CUSTOMER SATISFACTION DATA FOR A NATIONAL BANK USING SPSS

1. Background and Problem Statement

A nationalized bank in India collected customer satisfaction survey data from 2,000 respondents across five metro cities. The survey focused on service delivery, ATM availability, mobile banking, branch experience, and grievance redressal. Although the bank had gathered a large amount of structured data, they lacked the capability to analyze it meaningfully. The goal was to extract actionable insights for customer retention and digital adoption using SPSS.

2. Objectives

- To examine the level of customer satisfaction across service areas
- To identify key drivers of overall satisfaction
- To perform demographic segmentation and explore satisfaction by age, gender, and income
- To assess the relationship between mobile banking usage and satisfaction
- To generate a visual, SPSS-supported report for top management

3. Methodology

3.1 Data Preparation in SPSS

- Format: Imported Excel sheet into SPSS (.sav)
- Variables: 30 questions rated on 1–5 Likert scale
- Created composite variables: "Digital Experience", "Branch Service", and "Resolution Handling"
- Recoded missing values and applied value labels for better readability

3.2 Analysis Performed

- Descriptive statistics (mean, std. dev., frequencies)
- One-Way ANOVA to test variation in satisfaction across age groups
- Independent sample t-tests for gender-based differences
- Chi-square tests to assess relationship between mobile app usage and income

- Linear regression with overall satisfaction as dependent variable

4. Results

- Mean overall satisfaction score: 3.8/5 (SD = 0.76)
- Mobile banking satisfaction (M = 4.1) was highest rated
- ANOVA showed significant difference in satisfaction by age ($p < 0.05$); 18–30 age group was least satisfied with branch services
- Regression $R^2 = 0.47$; key predictors were mobile banking ($\beta = 0.32$, $p < 0.001$) and grievance resolution ($\beta = 0.29$, $p < 0.001$)
- Chi-square test showed significant association between income and mobile app usage ($p < 0.01$)

5. Interpretation and Insights

- Digital services, particularly mobile banking, play a strong role in shaping overall satisfaction
- Younger customers are more critical of in-branch experiences, indicating a need to modernize branch operations
- Income level predicts mobile app usage, which can help target app promotion

6. Deliverables

- SPSS output file (.spv) with syntax, descriptive statistics, and model summaries
- Cleaned and labeled .sav file
- PowerPoint report with key graphs, tables, and interpretation
- Executive summary in Word (APA style)

7. Stakeholder Relevance

Academic:

Suitable for courses in customer analytics, statistical methods, and SPSS data handling

Corporate:

Directly applicable to service-oriented organizations seeking to improve experience through data-driven feedback analysis

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