

Exploring Customer Satisfaction in Indian Banking Through Artificial Intelligence: Insights, Trends, and Global Parallels

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Abstract:

This report analyzes customer satisfaction with AI-based banking services in India, examining survey data from 60 respondents across SBI, HDFC, Axis, and PNB. The study investigates customer perceptions of chatbots, voice assistants, predictive alerts, and AI-driven personal finance recommendations, focusing on factors influencing satisfaction and preferences for AI versus human interaction. The analysis reveals potential trends, including higher satisfaction with chatbots, a preference for human interaction for complex needs, and the importance of digital comfort in AI adoption. However, the small sample size necessitates cautious interpretation, emphasizing the need for future research with larger datasets. The report concludes by offering recommendations for banks and policymakers to promote responsible AI innovation in the Indian banking sector.

Keywords: AI in banking, Customer Satisfaction, Indian Banking, Digital Transformation, AI Adoption, FinTech.

Introduction

The Indian banking sector is undergoing a digital transformation driven by AI. The report analyzes how customers perceive AI services in SBI, HDFC, Axis, and PNB, offering valuable guidance for banks and decision-makers. Understanding customer perceptions is crucial for optimizing AI strategies, building trust, and promoting responsible adoption.

Objective of the Study

- To measure customer satisfaction with AI-based services in Indian banks.
- To identify the most and least satisfying AI tools.
- To evaluate whether AI should replace or complement human customer service.
- To compare Indian customer attitudes with global digital banking trends (limited by data).
- To determine the impact of AI efficiency, trust, and ease of use on customer satisfaction (limited by data).
- To identify strategies for better AI integration in Indian banking.

Hypotheses of the Study

- Perceived AI efficiency has a positive impact on customer satisfaction.
- Human support is preferred over AI for complex banking tasks (e.g., loan applications, fraud resolution).
- Trust in AI has a positive impact on customer satisfaction.

Research Methodology

- **Research Design:** Descriptive and analytical, using a survey method.
- **Data Collection:** A questionnaire was distributed, with responses to Likert scale questions and open-ended questions.
- **Sampling:** Stratified random sampling across age, gender, and usage levels was attempted, but resulted in uneven groupings as a result of a small sample size. The final sample included 41 customers from SBI, HDFC, Axis, PNB, and other.
- **Data Analysis:** Descriptive statistics, cross-tabulation (limited due to sample size), and thematic analysis of open-ended responses were conducted.

Profile (Based on Data from Table 4.1) The sample comprised:

- 73.2% aged 18-30 years
- 58.5% Female
- 39.0% Students
- 26.8% SBI customers, 19.5% HDFC customers, 39% Axis/PNB customers, 14.6% Others.

(Limited generalizability due to the small, skewed sample).

Comparative Analysis of Key Parameters

Table 4.2: AI Tool Satisfaction (Number of Responses)

AI Tool	Satisfied (4 or 5)	Neutral (3)	Dissatisfied (1 or 2)
Chatbots	27	10	1
Voice Assistants	9	10	5
Predictive Alerts	16	4	2
AI Personal Finance Recommendations	10	4	1

Interpretation:

- *Chatbots:* Most respondents said the chatbot was fine, though further improvements can be made to satisfy

- *Voice Assistants:* Most respondents did not use them. Further, respondents had a large range of reactions
- Predictive alerts are high ranked, with roughly half having positive reactions. Some had strong negative reactions.

Table 4.4: Preference Analysis: Proportions

Banking Need	AI Preference (%)	Human Preference (%)	No Preference (%)
Balance Inquiry	63.4%	22.0%	7.3%
Transaction History	53.7%	36.6%	0%
Updating Contact Info	51.2%	36.6%	0%
Reporting Fraud	31.7%	51.2%	0%
Loan Application Advice	17.1%	68.3%	0%
Dispute Resolution	17.1%	58.5%	0%
Investment Advice	26.8%	46.3%	0%

Interpretation:

- A preference is found in cases of basic enquiries for AI use.
- Preference is for human assistance for complex tasks such as fraud cases.

Conclusion:

The research gives an early look into how satisfied customers are with the use of AI in Indian banking. Key findings suggest:

- High satisfaction with chatbots and predictive alerts may make them strong choices.
- Voice assistants require improvement.
- Human interaction is preferred for complex banking needs.
- Digital literacy influences AI adoption.

However, the small dataset limits the generalizability of these conclusions.

Recommendations:

- **Practical Suggestions for Banks:**

- Focus on improving the accuracy and reliability of voice assistants.
- Implement robust data privacy and security measures.
- Offer personalized customer service and ensure human agents are available for complex issues.

- **Areas for Future Research:**

- Larger, more representative sample size.
- Investigation of rural banking and AI adoption.
- Longitudinal studies on the impact of AI on customer loyalty.

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