

Revolutionizing Personalized Banking Through AI: An Empirical Study of Customer Satisfaction in SBI, Puducherry

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ABSTRACT

This study investigates how artificial intelligence (AI) affects personalized banking services, with a focus on the leading public sector bank (SBI) at Puducherry. It assesses the current state of personal banking and looks into the integration of AI solutions. The study's goal is to better understand customer opinions, preferences, and concerns about AI-enabled banking services, while also taking into account technical infrastructure, regulations, and ethics. Through surveys and data analysis, the study discovers that AI improves banking app efficiency by providing tailored services, providing practical insights for financial institutions to strategically deploy AI for better customer service. The analysis was carried out using statistical tools such as the percentage method, correlation, and one-way ANOVA. The findings reveal that customers are generally satisfied with AI-powered banking services, particularly in terms of banking app performance, fraud detection, chatbot assistance, and AI-driven investment advice. AI-enabled personalization has positively influenced customer satisfaction, while certain features such as personalized recommendations and financial forecasting require further enhancement. The study also identifies significant differences in customer satisfaction across age groups and periods of association with the bank. Furthermore, a strong positive relationship was found between the effectiveness of AI-powered banking services and customer satisfaction with personalized banking experiences. The results demonstrate that AI has significantly improved banking efficiency and customer engagement by delivering tailored services. The study provides valuable insights for financial institutions seeking to strategically implement AI technologies to enhance service quality, strengthen customer relationships, and achieve sustainable competitive advantage in the evolving banking sector.

Key words: Artificial Intelligence (AI), Banking Technology, Service Personalization, Customer Experience, Financial Innovation, AI-Driven Banking Services

INTRODUCTION

AI, or Artificial Intelligence, is a broad and multidisciplinary field of computer science that focuses on creating systems and machines capable of performing tasks that typically require human intelligence. These tasks include reasoning, problem-solving, learning, perception, language understanding, and decision-making. AI seeks to replicate, simulate, or mimic human intelligence in machines to enable them to perform these tasks autonomously and, in some cases, more efficiently than humans. The concept of Artificial Intelligence (AI) in banking services revolves around the application of advanced computational algorithms and machine learning techniques to various aspects of the banking industry. AI is used to enhance and streamline operations, improve customer experiences, and enable better decision-making.

AI Powered Initiatives by The Bank:

The following are the AI-powered initiatives implemented by the bank to enhance customer satisfaction and provide personalized services:

1. *AI Chat bots*: The bank implemented AI-powered chat bots to enhance customer service by providing real-time assistance, answering queries, and addressing banking-related issues 24/7.
2. *Fraud Detection and Security*: AI-based algorithms were employed by the Bank to detect and prevent fraudulent activities in real time, ensuring enhanced security for customers' transactions and accounts.

3. *Personalized Loan Offers*: The Bank uses AI to assess customer credit profiles and offer personalized loan options with customized interest rates and repayment terms.
4. *Investment Advisory*: AI-driven robo-advisory services were explored by the Bank to provide investment recommendations tailored to individual customer risk profiles and financial goals.
5. *Predictive Analytics*: The Bank utilized AI and data analytics to gain insights into customer behavior, allowing them to predict customer needs and preferences and offer personalized banking services accordingly.

REVIEW OF LITERATURE

1. M. Thisarani and S.Fernando (2021). The role of Artificial Intelligence (AI) has become an essential resource for large banks dealing with regulatory changes, new Anti-Money Laundering (AML) obligations, and vulnerable fraud-prone clients, according to this study. Also, reports on how cyber security has become a hot topic as a result of traditional security failures and concerns about how companies use personal data collected from clients or regular users. The most obvious reason why cybersecurity is important in banking transactions is to protect client assets while maintaining a high level of data privacy. The primary approaches in front-office conventional banking, such as AI chatbots, smart virtual assistants, and biometric user authentication, have been discovered to address security challenges and boost field prosperity.
2. Subrata & Agarwal, Rajiv & Das, Gourab & Dhinakaran, D. & Vijai, C.. (2021). In this study, Mobile banking has become the industry buzzword. Customers' attitudes toward mobile banking have been studied. A self-administered questionnaire was created and distributed to the respondents. Only 267 usable questionnaires were returned out of the 350 total. SPSS was used to test the collected data. Demographic profiles and awareness of mobile banking, time required, trust, convenience, ease of use, security, and advantage. Percentage analysis and chi-square tests were used to analyze the data. In addition, it investigates customer awareness, mobile banking products and services, and customer perception of mobile banking.
3. P. Tayal, N. Rastogi, T. K. Ahuja, S.Tyagi, K. Joshi and Y. M. Mohialden (2022). This study examines the use of AI in the banking sector within the context of Industry 4.0, highlighting the potential benefits and challenges associated with its implementation. AI can improve banking operations and enhance customer experience, but there are concerns about data privacy, security, and job security. Overall, there is a growing need for banks to explore and implement AI-based solutions to remain competitive in a digital world.
4. N. Mehndiratta, G. Arora and R. Bathla (2023). This research paper examines the use of AI in various areas of the banking industry, drawing on case studies and research papers. It concludes that AI-enabled technologies have the potential to improve decision-making, reduce fraud risk, and enhance customer experience. The study provides examples of AI implementations across different banking domains, including risk assessment, credit approval process, investment/portfolio management, fraud detection, personalized financial advisory services, and automated customer support. The paper also explores how AI can be used in claims management, wealth management, and loan and credit management, with a focus on the development of AI-based credit scoring models and loan underwriting systems. While there are challenges associated with the use of AI in banking, the potential for transformation change is significant.
5. SALEEM, S., & Mathew, S. M. (2022). According to this study, Artificial intelligence (AI) is widely recognized as one of the most important digital transformation enablers across various industries. It has the potential to make businesses more innovative, adaptable, and productive than ever before. AI is already being employed to enhance productivity and competitiveness, driving digital transformation in various organizations. Indian banks are leveraging AI to modernize their operations in numerous areas such as accounting, revenue, agreements, and cybersecurity. This case study is based on SBI-SIA's virtual assistant, explains recent developments and the emergence of virtual banking, and highlights modern banking systems' trends.
6. Fares, O. H., Butt, I., & Lee, S. H. M. (2022). This study provides a holistic and systematic review of the literature on the utilization of artificial intelligence (AI) in the banking sector since 2005. In this study, the authors examined 44 articles through a systematic literature review approach and conducted a thematic and content analysis on them. This review identifies research themes demonstrating the utilization of AI in banking, develops and classifies sub-themes of past research, and uses thematic findings coupled with prior research to propose an AI banking service framework that bridges the gap between academic research and industry knowledge.

7. Umamaheswari, S. & Valarmathi, A. (2023). This research article highlights that banks, despite dealing with diverse clients, still rely on outdated systems. Failing to embrace modern trends like Virtual Assistants and Artificial Intelligence, banks miss out on opportunities to transform their business models, reduce repetitive tasks, prevent fraud, and make informed decisions. The article underscores the impact of AI implementation in banking procedures, emphasizing the need for banks to follow the lead of other industries in modernizing processes.
8. Paramesha, M., Rane, N., & Rane, J. (2024). This research offers a thorough overview of the current research on artificial intelligence, machine learning, deep learning, and blockchain applications in the financial and banking industries, emphasizing the notable influence these technologies have had on spurring innovation and enhancing operational effectiveness. The research landscape is defined by key themes and trends through a detailed analysis of keyword co-occurrence and clusters in the study. The results highlight the important role of artificial intelligence in improving decision-making abilities, promoting innovation in financial markets, creating sophisticated trading strategies, and maintaining strong cybersecurity measures. Support vector machines and neural networks are more frequently utilized in predictive modeling, fraud detection, and portfolio management.
9. Polireddi, N. S. A. (2024). An effective role of artificial intelligence and machine learning in banking sector. *Measurement: Sensors*, 33, 101135. This research focuses on the Financial institutions having a tool at their disposal in the form of artificial intelligence (AI) and machine learning (ML) to meet the rising demand from customers for better, safer, and more convenient methods to manage their money. Artificial intelligence also helps the financial sector streamline and improve processes including financial risk management, quantified trading, and investment decision-making. Consequently, solutions based on automation are predicted to revolutionize the way individuals receive financial services.
10. Bastan, M., Hasani, N., Salimi, B., Ghazizadeh, A., & Hamid, M. (2024). This research provides the significance of incorporating AI in the banking, the present study scrutinizes the features of AI-Banking and explores different challenges facing its implementation. Accordingly, the challenges and their evaluation criteria are ranked using the Best-Worst Method (BWM), and the efficiency of the proposed solutions to address these challenges is assessed using the Data Envelopment Analysis (DEA) method. Following this, a Bi-Objective mathematical model is proposed with the aim of minimizing the cost of implementing the solutions and maximizing their effectiveness, leading to the selection of the most suitable solution for address each challenge.
11. Onyshchenko, O., Ternovska, V., & Kovalov, V. (2025). ARTIFICIAL INTELLIGENCE IN BANKING: MODERN MODELS AND IMPLEMENTATION CHALLENGES. *Social Development: Economic and Legal Issues*, (12). The article substantiates the relevance of the use of artificial intelligence in the banking sector in the context of rapid digitalization, the growth of online transactions and the strengthening of cyber threats. The purpose of the study is to analyze modern AI models used to detect fraud, manage risks and improve the security of financial transactions, as well as to compare the practices of their implementation in the USA, Great Britain, EU countries and Ukraine. The conclusions emphasize that the effective development of intelligent banking systems is possible if technical modernization, increased regulatory support and the implementation of transparent self-learning models are combined.
12. Meena, R., Mishra, A. K., & Raut, R. K. (2025). Strategic insights: mapping the terrain of artificial intelligence (AI) in banking through mixed method approach. *VINE Journal of Information and Knowledge Management Systems*, 55(5), 1192-1222. The purpose of this paper is to supplement and update previously published articles about artificial intelligence (AI) instruments and operations in banking sectors with the following objectives in mind: to understand the role of AI in banking sectors; to explore the themes and context in this area based on keywords, co-citations and co-words; and to identify future research direction by evaluating the trend and direction of previous research.
13. Gairola, S., & Joshi, R. (2026). This research proposes to provide a complete evaluation of the prospects and challenges of AI in finance, along with providing recommendations for future studies. Artificial Intelligence is revolutionizing the banking and financial services sector through improved efficiency, data analytics, and innovative customer experience. AI is being used in several applications within the financial services sector such as algorithmic trading, credit scoring, compliance, and fraud detection. The current study emphasizes the opportunities offered by artificial intelligence to the financial sector while simultaneously discussing the associated challenges such as data security, ethics, algorithmic bias, and legal uncertainty. It also pertains to future topics, which include XAI, AI for sustainable finance, RegTech improvements, and hybrid human-AI collaboration.
14. Kathiarayan, V., Pathmanathan, P. R., & Karanam, V.(2026). This article investigates the intersection of artificial

intelligence (AI) and the dynamic capabilities framework, focusing specifically on how AI-driven tools reshape an organization's ability to sense, seize, and transform in response to shifting market conditions. The discussion concludes with theoretical extensions to the dynamic capabilities framework and practical guidance for Malaysian managers and policymakers navigating this transition.

15. Parker, S., Kelly, H., & Ley, K. (2026). This study emphasizes the importance of balancing predictive accuracy with interpretability, particularly in auditing, banking supervision, and enterprise risk management contexts. By linking model outputs to explainable financial risk factors, the proposed approach supports transparent fraud screening and reduces dependence on black-box prediction. The article contributes to the literature by presenting a practical framework for explainable fraud risk assessment that can be adapted to financial reporting, credit evaluation, and supply-chain finance scenarios.

16. Anderson, M., Collins, J., Mitchell, R., Thompson, E., & Esther, D.(2026). The study examines how hybrid models enhance predictive accuracy, reduce false positives, improve anomaly detection, and support resilient decision-making in financial institutions. Through a comprehensive methodological framework, the paper analyzes the operational capabilities of hybrid AI models across banking, investment management, fraud prevention, and cybersecurity domains. The results indicate that hybrid AI systems significantly outperform conventional standalone models by combining adaptive intelligence, contextual awareness, and multi-layered learning mechanisms. The discussion further highlights the practical implications, technical challenges, and future prospects of integrating hybrid AI into secure financial ecosystems. The study concludes that hybrid AI systems represent a critical advancement for intelligent financial forecasting and proactive cybersecurity defense in the digital economy.

17. Sayari, M. K. M. S. K. (2016) This study examines customer perceptions of AI chatbots and human agents by analyzing the strengths, weaknesses, and overall effectiveness of both service approaches. The study explores how speed, responsiveness, empathy, communication quality, trust, and emotional connection influence customer satisfaction in technology-mediated interactions. It also investigates customer preferences regarding automated and human-assisted support systems and evaluates the growing importance of hybrid customer service models that combine AI efficiency with human emotional intelligence.

18. Muhammad, M. F., Ullah, Z., & Mujtaba, G. (2026). This study examines the effect of AI-based risk management systems on fraud detection effectiveness through the mediating roles of data analytics capability and organizational learning capability in the banking sector. Grounded in the Resource-Based View (RBV) theory, the study adopts a quantitative explanatory research design using a cross-sectional survey approach. Data were collected from 350 banking professionals, including risk managers, compliance officers, and IT specialists, through a structured questionnaire. The collected data were analyzed using SPSS and SmartPLS 4 through Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings reveal that AI-based risk management systems significantly enhance data analytics capability, organizational learning capability, and fraud detection effectiveness.

19. Tuge, N. B., & Msweli, N. T. (2026) This systematic literature review investigates the critical implementation gap between the technical promise of Explainable Artificial Intelligence (XAI) and its operational deployment within the banking sector. While the existing literature extensively documents XAI's potential to enhance transparency, regulatory compliance, and trust, significant barriers prevent its effective integration into banking workflows. This review offers a critical synthesis that moves beyond cataloging XAI techniques to diagnose implementation failures and propose a pathway to bridge the gap between XAI research and banking practice. We conclude that XAI must evolve from a technical add-on to an embedded organizational capability, necessitating structural changes in how banks approach AI governance, stakeholder communication, and ethical oversight.

OBJECTIVES OF THE STUDY

The objectives of the research study is to examine the impact of AI-powered personalized banking services on customer satisfaction across different demographic groups and to analyze the relationship between the effectiveness of AI-driven banking services and customer satisfaction with personalized banking experiences.

RESEARCH METHODOLOGY

The study focusing on a leading public sector bank located at Puducherry, involves a comprehensive approach.

Beginning with an extensive literature review on AI's impact in banking, the study defines its problem and sets objectives, primarily aiming to assess AI's effectiveness in improving personalized services. A suitable research design is chosen, incorporating data collection methods such as survey. The sample size was 123 and the method of sample collection used in the study was simple random sampling. Collected data is then analyzed using statistical tools and software. Results are presented and discussed in relation to objectives and existing literature, leading to conclusive findings and recommendations for the bank. The study acknowledges limitations and suggests avenues for future research, contributing to a transparent and robust research methodology.

Customer demographics were analyzed with percentage analysis and the findings were listed. Customer satisfaction was measured on the AI-powered features like Personalized Recommendations; Fraud Detection and Prevention; Chatbots for Customer Support; Financial Forecasting and Budgeting and Customized Investment Advice and analyzed through hypothesis testing.

HYPOTHESES FRAMED AND TESTED:

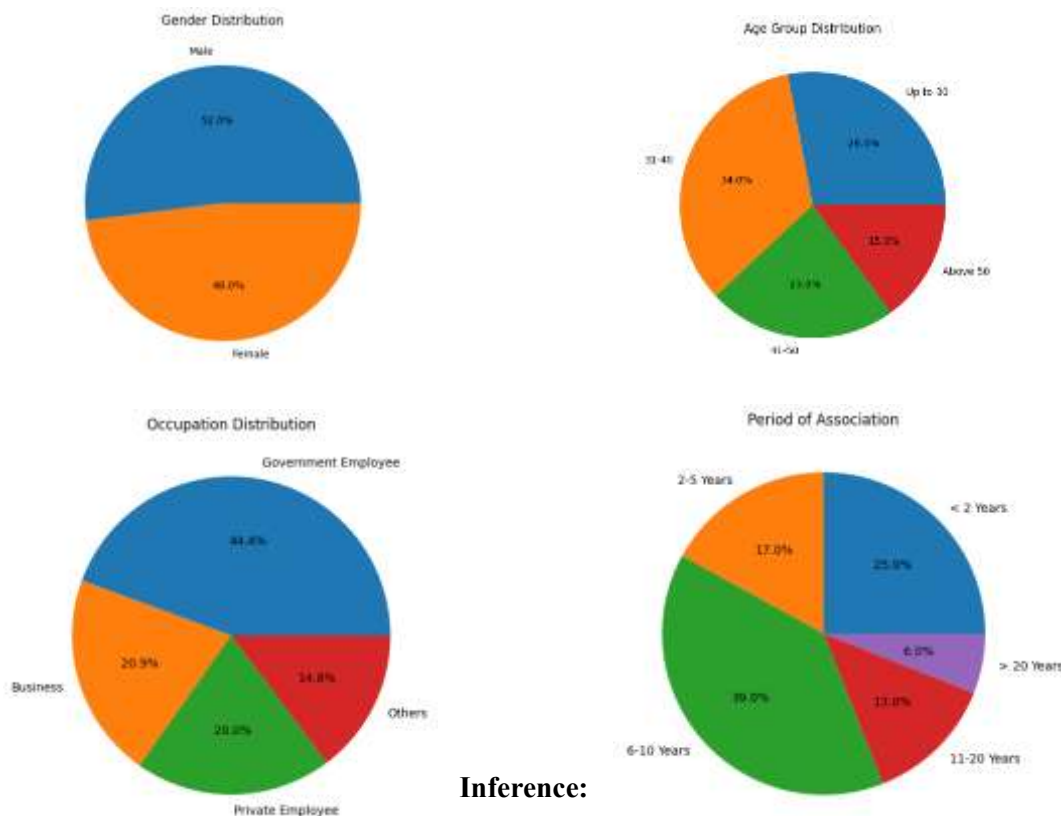
H1: There is no significant difference between the age groups of customers with respect to the satisfaction level of customers towards the AI powered features.

H2: There is no significant difference between the period of association of customers with the bank with respect to the satisfaction level of customers towards the AI powered features.

H3: There is no significant relationship between the effectiveness of AI powered banking services and customer satisfaction towards the level of personalization offered in banking services

DATA ANALYSIS AND INTERPRETATIONS

DEMOGRAPHIC FACTORS PERCENTAGE ANALYSIS:



Inference:

- The research unveiled that 34% of respondents fall under the age group of 31 - 40 years; 28% of the respondents are in the age group of Up to 30 years; 23% of the respondents fall between 41&50 and the remaining 15% are in the Above 50 category.
- From the study it was found that 52% are male and 48% are female.

- Out of the 123 respondents, 41.5% are Government employees, 19.5% are doing business, 18.7% are private employees and the remaining 13.8% fall in 'Others' category.
- Regarding the period of association, 39% of the respondents are associated with the bank for the past 6 - 10 years as customers; 25% are associated for the period of Less than 2 years; 17% are associated for 2-5 years; 13% are associated for 11-20 years and the remaining 6% are associated for more than 20 years.

CUSTOMER PERCEPTION AND SATISFACTION ANALYSIS

FACTORS	Highly satisfied	Satisfied	Neutral	Dissatisfied	Highly dissatisfied
Functionality of AI apps	8%	44.7%	23.6%	13.8%	9%
Level of personalization	14.6%	35%	25.2%	14.6%	10.6%
AI driven solution	13.8%	29.3%	26%	21.1%	9.8%
Personalized recommendation	8.9%	22%	28.5%	23.6	17.1
Fraud detection and prevention	18.7%	23.6%	39%	16.3%	2.4%
Chat bots for customer support	17.9%	35.8%	25.2%	18.7%	2%
Financial forecasting and budgeting	9%	20.3%	39%	23.6%	8.1%
Customized investment advice	7.3%	48%	26%	14.6%	4%

Inference:

- The study identified that 44.7% of the are satisfied with performance and functionality of banking app embedded with AI models.
- As the study outlined 35% respondents are satisfied with the level of personalization offered in banking services since the implementation of AI in SBI.
- The study disclosed that 29% are satisfied with the overall customer service provided by SBI since the adoption of AI-driven solutions.
- The investigation brought forth that 28.5% are neutral, 23.6% are dissatisfied, 22% are satisfied with personalized recommendation of AI in SBI.
- As inferred from the study 39% are neutral, 23.6% are satisfied, 18.7% are Highly satisfied with fraud detection and prevention of AI in SBI.
- The study shed light on 35.8% are satisfied, 25.2% are neutral, 18.7% are dissatisfied with chat bot customer support of AI.
- The study identified that 39 %are neutral, 23.6% are dissatisfied, 20.3% are satisfied with forecasting and predict budgeting of AI.
- The study validated that 48% respondents are satisfied, 26% are neutral, 14.6% are dissatisfied with investment advice of AI in SBI.

Hypotheses Testing using ANOVA

1. Analysis between the Age Group of the respondents and the satisfaction level of customers towards the AI Powered Features.

Null Hypothesis (H0): There is no significant difference between the age groups of customers with respect to the satisfaction level of customers towards the AI powered features.

AGE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	119.476	4	29.869	405.756	.000
Within Groups	8.686	118	.074		
Total	128.163	122			

HOMOGENEOUS

PERSONALIZED RECOMMENDATIO N	N	Subset for alpha = 0.05			
		1	2	3	4
Highly Satisfied	11	1.00			
Satisfied	27	1.11			
Neutral	35		2.00		
Dissatisfied	29			2.86	
Highly Dissatisfied	21				3.86
Sig.		.188	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Inference:

The SPSS generated value $0 < .001$ is lesser than the significance value 0.05, the null hypothesis is rejected. Hence there is a significant difference between the age groups of customers with respect to the satisfaction level of customers towards the AI powered features.

2. Analysis between the period of association of the respondents and the satisfaction level of customers towards the AI Powered Features.

Null Hypothesis (H₀): There is no significant difference between the period of association of customers with the bank with respect to the satisfaction level of customers towards the AI powered features.

CUSTOMER PERIOD OF ASSOCIATION

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	146.049	4	36.512	214.202	.000
Within Groups	20.114	118	.170		
Total	166.163	122			

HOMOGENEOUS

Satisfaction Level of Customers Towards the AI Powered Features	N	Subset for alpha = 0.05				
		1	2	3	4	5
Highly Satisfied	11	1.00				
Satisfied	27		1.26			
Neutral	35			2.60		
Dissatisfied	29				3.07	
Highly Dissatisfied	21					4.33
Sig.		1.000	1.000	1.000	1.000	1.000

Inference:

The SPSS generated value <0.001 is lesser than significance value 0.05, the null hypothesis is rejected. There is a significant difference between the period of association of customers with the bank with respect to the satisfaction level of customers towards the AI powered features.

3. CORRELATION ANALYSIS

Analyzing the relationship between the effectiveness of AI powered banking services and customer satisfaction towards the level of personalization offered in banking services

Null Hypothesis (H₀): There is no significant relationship between the effectiveness of AI powered banking services and customer satisfaction towards the level of personalization offered in banking services.

Correlations

		EFFECTIVENESS OF AI POWERED BANKING SERVICES	SATISFACTION TOWARDS PERSONALIZATION
EFFECTIVENESS OF AI-POWERED BANKING SERVICES	PearsonCorrelation	1	.975**
	Sig.(2-tailed)		.000
	N	123	123
SATISFACTION TOWARDS PERSONALIZATION	PearsonCorrelation	.975**	1
	Sig.(2-tailed)	.000	
	N	123	123

**Correlation is significant at the 0.01 level (2-tailed).

Inference:

Since the SPSS generated value <0.001 is lesser than the significance value 0.05, the null hypothesis is rejected. Hence, there is significant relationship between the effectiveness of AI powered banking services and customer satisfaction towards the personalization offered in banking services. As 'r' value is 0.975, it is evident that there is a strong positive correlation exists among the variables.

KEY FINDINGS

From Customer Perception and Satisfaction Analysis:

- Customers are largely satisfied with the performance and functionality of SBI's AI-powered banking app.
- AI-enabled personalization has positively influenced customer satisfaction in banking services.

- AI adoption has moderately improved the overall customer service experience.
- AI-based personalized recommendations require improvement to enhance customer acceptance.
- AI-powered fraud detection and prevention is perceived as an effective banking feature.
- AI chatbot support effectively assists customers and contributes to satisfaction.
- AI-based forecasting and budgeting features have not gained strong customer acceptance.
- AI-driven investment advice is among the most successful AI applications in SBI.
- Many customers remain neutral towards AI features, indicating a need for greater awareness and usage.
- Overall, AI implementation in SBI has generated a favorable customer response.
- Customer age significantly influences satisfaction with AI-powered banking features.
- The duration of a customer's relationship with SBI significantly affects satisfaction with AI services.
- The effectiveness of AI-powered services strongly influences customer satisfaction with personalized banking services

From Hypotheses Testing

- Customer age significantly influences satisfaction with AI-powered banking features, indicating that satisfaction levels vary across different age groups.
- The duration of a customer's association with the bank has a significant impact on satisfaction towards AI-powered services, suggesting that long-term and newer customers perceive AI features differently.
- There is a statistically significant relationship between the effectiveness of AI-powered banking services and customer satisfaction with personalized banking services.
- A very strong positive correlation ($r = 0.975$) exists between AI service effectiveness and satisfaction with personalization, implying that improvements in AI effectiveness substantially enhance customers' perception of personalized banking experiences.
- The rejection of all null hypotheses confirms that demographic and relationship factors (age and period of association) play an important role in shaping customer satisfaction towards AI-enabled banking services.
- The findings highlight personalization as a critical outcome of effective AI implementation, making it a key driver of customer satisfaction in the banking sector.
- The strong statistical evidence ($p < 0.001$) demonstrates that AI-powered banking features have a meaningful and measurable impact on customer perceptions and satisfaction.

SUGGESTIONS

- From the study it is known that AI enhancing the personalized banking services. Hence, explore how AI can facilitate more granular customer segmentation at SBI, leading to personalized product offerings and targeted marketing strategies based on individual preferences and behaviors.
- According to the study 23% respondents are not satisfied with personalize recommendation, The SBI may consider about the development of personalized user interfaces for digital banking platforms. These interfaces can be tailored to individual customer preferences.
- As established by the study 25.2% are not aware of AI- powered services offered by SBI for personalized banking, SBI may think about the establishment of partnerships with educational institutions to include AI in financial literacy programs. Target students and young adults to build awareness early in their banking journey.
- From the study it's found that in fraud detection 16% respondents are dissatisfied so bank might think about the development of systems that can learn and adapt to new fraud patterns, providing an extra layer of security for personalized banking services.

CONCLUSION

In conclusion, this study has illuminated the profound impact of Artificial Intelligence (AI) on the enhancement of personalized banking services, with a focused investigation into the State Bank of India (SBI) in Pondicherry. The findings underscore the transformative potential of AI technologies, including machine learning, natural language processing, and data analytics, in reshaping the landscape of customer experiences within the banking sector. Through a comprehensive exploration of AI adoption at the SBI Pondicherry branch, this research has identified the key benefits, challenges, and implications associated with leveraging AI for tailoring services to individual customer needs. The insights gained from customer perceptions and satisfaction levels offer valuable guidance for financial institutions seeking to navigate the evolving dynamics of the digital banking era. As AI continues to evolve, this study provides a timely contribution to the ongoing discourse on optimizing personalized banking services, emphasizing the need for a strategic and customer-centric approach in harnessing the full potential of AI for the benefit of both financial institutions and their clientele.

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