



CUSTOMER AWARENESS TOWARDS USAGE OF CHATBOTS IN BANKING SECTOR

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Abstract

The modern banking business is made up of a network of financial organizations that have been granted state licenses to provide banking services. The main services provided are for storing, transferring, extending credit against, and managing the risks associated with various types of wealth. Banks can use artificial intelligence to manage record-level, high-speed data and gain useful insights. Additionally, technologies like digital payments, AI bots, and biometric fraud detection systems contribute to high-quality services for a larger consumer base. Hence the study conducted on the topic "Customer Satisfaction towards usage of Chatbots in Banking Sector". The study is based on primary data and the secondary data is collected through various books, journals and websites. The sample size of the questionnaire was limited to 605 respondents. The tools used to analyze the data were Simple Percentage Analysis and Chi-square Analysis. It is concluded that service expectation is the most influencing factor and highest predictor in determining the overall customer satisfaction in delivering quality service through chatbot technology.

Keywords: Artificial Intelligence (AI), Technology, Banks, Customers, Chatbots.

I. INTRODUCTION

Banks make it far easier for a complex economy to conduct the wide range of transactions that take place in the goods, labour, and financial capital markets. They play an important role in the payment system, which allows an economy to trade goods and services for money or other financial assets. They are a financial intermediary, or a company that acts as a link between a saver who deposits money in a bank and a borrower who obtains a loan from the bank. Banking is classified as a tertiary industry. These are responsible for providing support services to primary and secondary industries, as well as trade-related operations. The modern banking business is made up of a network of financial organizations that have been granted state licenses to provide banking services. The main services provided are for storing, transferring, extending credit against, and managing the risks associated with various types of wealth.

Artificial Intelligence

Artificial Intelligence (AI) has existed for quite some time. The study of creating "intelligent machines," robots that could replicate the cognitive capacities of the human mind, such as learning and problem-solving, was originally envisaged in 1955 as a branch of Computer Science. In comparison to what the internet did over the last two decades, AI is projected to have a massive impact on almost every industry sector. Across the globe, organizations and governments are spending billions of dollars to fund AI research and pilot initiatives aimed at tackling real-world challenges that existing technology cannot solve.

Drivers of Artificial Intelligence Disruption in Banking

Data has become the most important asset in a financial services organization, thanks to the availability of technology like AI. Banks are more aware than ever of the innovative and cost-effective solutions AI brings, and they recognize that asset size, while significant, will no longer be enough to develop a successful business on its own. Instead, the ability of BFSI organizations to leverage technology to harness the power of their data to produce new and customized goods and services is now judged by their success. The below are the drivers of AI disruption in banking:

- Big data
- Infrastructure Availability
- Regulatory Requirements
- Competition

Objectives of the Study

- To analyze the demographic profile and Self-service technology among the customers.
- To examine the level of customer awareness in using Chatbots service.

Limitation of the Study

The respondents were restricted to only banking service through chatbots.

Scope of the Study

As companies aim to acquire a competitive advantage and meet evolving client needs, digital transformation has impacted practically every industry. The banking industry has also realized the game-changing effects that creative technological disruptors such as Artificial Intelligence (AI) can have on its online and mobile banking models, and has worked quickly to enhance their consumer interaction platforms. Chatbots have become an important part of digital self-service solutions in this area. Chatbots in banking can aid consumers with activities like money transfers and account balance checks by guiding them through their actions using a conversational interface. Chatbots can let user's access banking information and FAQs from any page on a bank's website, while also offering personalized information by using customer data to deliver automated recommendations and tips.

Research Methodology

Methodology is the route to solve the research problem systematically. Here descriptive research method has been applied involving quantitative methods.

Source of Data

This study has used both primary and secondary data.

Primary Data

Primary data were collected from banking customers and for this purpose, the questionnaire is prepared in the sufficient manners and the data were collected, analyzed and tabulated systematically.

Secondary Data

Secondary data were collected from books, magazines, journals and websites, etc.

Sampling Methods

The researcher used simple random sampling, because of multi cluster customers in banking sector.

Sampling Size

The sample size is 605 responses from the selected from urban areas in Coimbatore district of Tamil Nadu.

II. REVIEW OF LITERATURE

Adam et.al., 2021, Live chat interfaces are becoming more and more popular as a way for many e-commerce businesses to provide real-time customer service. Today, conversational software agents, also called chatbots, are often used instead of human chat service agents. These systems are made to talk to people using natural language and are often based on artificial intelligence (AI). AI-based chatbots are used a lot because they can save money and time. However, they don't always meet customer expectations, which could make people less likely to do what the chatbot asks.

Mudofi & Yuspin, 2022, Technology is a big reason why the financial sector is so productive. Including the use of AI or AI that makes work in the financial sector faster and more efficient. PT. Bank Central Asia also used AI by making a chatbot called VIRA. Even though this VIRA has a lot of benefits, it also has a drawback: you can't access your account with a pin. Instead, you need your card number and an OTP code.

III. ANALYSIS AND INTERPRETATION

Simple Percentage Analysis

Gender-wise classification of Chatbots Technology Users

Gender is one of the key demographic variables to understand the usage of the chatbots technology to avail the banking services. The following table describes the gender-based classification of the respondents.

Gender	Frequency	Percentage
Male	383	63.3
Female	222	36.7
Total	605	100

As per the above table indicate that majority of the respondents are male (63.3 %) among the total of 605 respondents and rest of them are female (36.7%).

Awareness among the Customers using Chatbot Technology

The Awareness of the technology are grouped into "Aware", and "Not Aware". The following table describes Awareness-based distribution of the respondents.

Awareness	Frequency	Percentage
Aware	482	79.7
Not Aware	123	20.3
Total	605	100.0

The table denote that the awareness among the customers using the chatbots technology in availing the various banking services. There are 79.7% of the respondents who are very much aware about this chatbots technology.

Chi-Square Test

Monthly Income & Awareness on Chatbots Technology

Particulars	Level of Awareness on Chatbot Technology				Chi square	Sig value	Significant
	Low	Moderate	High	Total			
Below Rs.50,000	55	106	50	211	235.85	0.000*	Association
	26.1%	50.2%	23.7%	100.0%			
Rs.51,000 to 1,00,000	56	102	53	211			
	26.5%	48.3%	25.1%	100.0%			
Rs. 1,01,000 to	20	41	32	93			

1,50,000	21.5%	44.1%	34.4%	100.0%		
Rs. 1,51,000 to 2,00,000	11	24	11	46		
	23.9%	52.2%	23.9%	100.0%		
Above Rs.2,00,000	18	17	9	44		
	40.9%	38.6%	20.5%	100.0%		
Total	160	290	155	605		
	26.4%	47.9%	25.6%	100.0%		

Hence it can be observed that there is a strong association between the monthly income and awareness on Usage of Chatbot Technology with Chi-square (235.85), statistically significant at 1 per cent. Hence, null hypothesis is rejected and alternative accepted.

IV. FINDINGS, SUGGESTIONS AND CONCLUSION

Findings:

- ❖ The key findings state that 63.3 % of the respondents are male.
- ❖ The 79.7 % of the respondents are well aware of this chatbots technology at the time availing the banking services
- ❖ The key findings state that majority of the respondents have moderate level of awareness on the usage of the Chatbots technology in availing various banking services when associated with monthly and highest number of respondents earning less than Rs.50,000 and between Rs.51,000 – 1,00,000.

Suggestions:

Based on the analysis of study the following suggestions may be recommended to improve the chatbots technology.

- ❖ Language support may be prioritized.
- ❖ Increase the publishing posts, stories and ads.
- ❖ Promote frequently through social media platform.
- ❖ Organize some educational and viral events such as competitions.

Conclusion

The overall analysis reflects that indeed customer expectation, service expectation, service performance, and customer intention predict the customer satisfaction in leading towards availing the banking services through chatbot technology in determining the service quality. It can be inferred that service expectation is the most influencing factor and highest predictor in determining the overall customer satisfaction in delivering quality service through chatbot technology in determining the service quality at the same time the awareness level is good.

References

1. Kothari, C. R. Research Methodology. New Age International Publishers.
2. S.P.Gupta. (2011). Statistical Methods. New Delhi: Sultan Chand and Sons.
3. Mudofi, L. N. H., & Yuspin, W. (2022). Evaluating Quality of Chatbots and Intelligent Conversational Agents of BCA (Vira) Line. *Interdisciplinary Social Studies*, 2(2), 532-542.
4. Adam, M., Wessel, M., & Benlian, A. (2021). AI-based chatbots in customer service and their effects on user compliance. *Electronic Markets*, 31(2), 427-445.
5. <https://www.marketingevolution.com/marketing-essentials/ai-marketing>
6. <https://www.mageplaza.com/blog/ai-marketing-what-why-how.html>.