

Influence of Chat-Bots on the Banking Experience

¹Vishal Tiwari, ²Ankita Tripathi

¹Research Scholar, MCA

Thakur Institute of Management Studies, Career Development & Research (TIMSCDR) Mumbai, India

Vishal.tiwari162087@gmail.com

²Research Scholar, MCA

Thakur Institute of Management Studies, Career Development & Research (TIMSCDR)

Mumbai, India

anktripathi18@gmail.com

Abstract: A banking bot is an artificially intelligent tool developed for banking operations that can comprehend customer questions and give appropriate answers. The primary objective of this project is to create a banking bot utilizing artificially intelligent algorithms that can analyze and comprehend user requests and respond appropriately. If we have any questions about banking, we must visit the bank or call customer service. It takes a lot of time and work, and the bank staff is also very busy to respond to our questions. On the other hand, the customer service representatives don't give us all the information we need. However, the customer service representatives do not provide us with all the information we need. In order to help current and potential customers with their banking issues during work hours and on weekends, it offers 24/7 customer assistance. Better client experiences are the result in the end. Utilizing a bot interface, customers may check their account balance or transaction status. In addition, banks are able to analyze how well the various programmers are being used and gather feedback from a variety of clients.

Keywords –artificial intelligence, banking, chatbot, customer service.

I. INTRODUCTION

The practice of banking has permeated every aspect of daily life. The banking industry is used by almost everyone to carry out their jobs. The bulk of the job is completed by hand. But, in this process there are certain situations when customers face problems. For example, a man going to the bank for opening an account and he finds out that there are different types of accounts as alternatives (savings account, current account, fixed deposit account, etc.), but now he is confused as he came to the bank with one goal i.e. to open an account. To clear the confusion, he asks the bank clerk for that. Now, there are many people who want to communicate with the clerk and thus, there is a queue. Even for a simple question, the person must wait in line! Now that he has a turn, he asks the cashier, but he doesn't understand what the clerk has just explained, so he asks again. There are several issues with this. First of all, despite the fact that there is information available on numerous websites, the person has no idea how to register an account. Perhaps the person is unfamiliar with using the Internet. Second, the individual was perplexed and required standing in line only to ask the clerk about the issue. Thirdly, he had to request a better explanation because he initially misunderstood the clerk's explanation. Consider the difficulty in issuing and maintaining a passbook on a regular basis. Since he must go everytime and wait in line to finish his work. A chatbot is an AI-enabled chat messenger that starts a conversation with a customer and responds to their questions about banking transactions, bill payment, and product and service information. Many prestigious private and nationalized banks have chatbots installed on their websites and mobile applications. This study aims to assess customers' responses to and perceptions of their banking experiences using chatbots. The objective of this study is to discover and examine how customers perceive various Chatbot services.

The following ways that a bank can profit from implementing a chatbot include:

A. Time-saving

Simple financial questions can be quickly answered with automation. Banking chatbots make it simple to automate requests for information on creating a savings or current account, credit card plans, different loans, and



even checking account balances. Customers can use the speech bot instead of scrolling through the website or application to find a certain piece of information. Both bank employees and clients may benefit greatly from this automation in terms of time savings. By using banking chatbots to handle routine problem-solving and easy enquiry resolution, banks have reduced their response times by 60%.

B. Enhanced effectiveness of banking staff

Banks can assist their knowledgeable and dedicated workers in handling the complex and challenging difficulties presented by the clients by automating customer assistance for straightforward and repetitive questions. Dashboard for an omnichannel banking chatbot Customers also feel at ease using self-serve questions because there never a wait and issues are resolved right away. Banks utilizing chatbots have witnessed a 40% boost in operational efficiency, according to Yellow.ai.

C. Customized Service

The information regarding consumers that banking chatbots hold includes names, account information, and even preferred languages. Banks may create a good client experience by utilizing this data to personalize discussions in their preferred language and based on their account information. Customers gain from this functionality by saving time when giving information about their accounts to customer service representatives and by having all of their questions answered without delay in a single session.

D. Lower customer support costs

Due to their massive customer base, banks require a sizable customer care staff. Scalability, a good aspect of AI chatbots for banking, helps with this cause. Banking chatbots may communicate with thousands of consumers at once, in contrast to human representatives. They can help in query resolution using AI technologies and close tickets within no time. However, some queries may need human intervention. Using banking chatbots for scaling customer support can reduce the need for human resources for handling thousands of queries manually. Customers that have complicated questions that chatbots cannot answer can get assistance from custom support operators. With automation, the cost of customer support can be reduced considerably. With the use of AI Chatbots for banking, banks and the financial sector have seen 75% of cost reduction with quality and timely query resolution.

E. Financial Guidance

Banks can employ conversational banking to provide customers with sound financial advice. Banking chatbots have all the information necessary to forecast consumers' spending patterns and assist them in managing their money. With the aid of interactive voice recognition (IVR) and chatbots, banks can use artificial intelligence to give their customers financial advice in natural language.

Numerous Indian banks are using chatbots because of the benefits they offer. The following are some of the common chatbots used by different Indian banks.

a) HDFC Bank's Eva

Banks HDFC Eva (Electronic Virtual Assistant) is the biggest and best A in India. I created a chatbot for banking. The chatbot, which was introduced in 2017, helps businesses serve consumers more effectively and quickly by instantly presenting information when users communicate with it. Customers are spared the inconvenience of having to browse, search, click buttons, and make calls in order to get information. It will soon have the ability to handle banking transactions as well. It can hold conversations with more than 20,000 users at once and has already answered 5 million requests.

b) SBI Bank's SIA

India's largest public sector bank Additionally, SBI introduced its artificial intelligence-based chatbot SIA (SBI Intelligent Assistant) in 2017, which has the capacity to react to 864 million loan-related queries every day. This multilingual chatbot can reply in text or speech in 14 different languages.

c) ICICI Bank's iPa

With a run rate of 1 million interactions each month, the AI-powered iPal chatbot from ICICI Bank has received



6 million responses to date. Interestingly, the figures match the call Centre traffic, according to Madhivanan Balakrishnan, ICICI Bank's Chief Technology Digital Officer. The chatbot, which is still learning, responds immediately to client questions on the website and mobile banking apps. According to ICICI, their mobile banking app, iMobile, is the only one in the nation to provide chatbot services. An industry first feature, the iPal engine on iMobile also handles financial transactions in addition to providing rapid answers to enquiries. Customers can use it to conduct financial operations like bill payment, fund transfers, and recharges.

II. LITERATURE REVIEW

One of the first industries to use chatbots in its operations was the banking sector. Advanced computer programmes called chatbots are made to interact with clients like real people do. As a result, they assist banks in increasing client satisfaction by quickly responding to a variety of their questions. The main public sector provider of banking services in the nation is State Bank of India (SBI). The bank uses artificial intelligence to give efficient financial services. SBI Intelligent Assistant (SIA), a smart chat assistant powered by AI, immediately responds to customer inquiries and assists them with routine banking transactions much like a human would. created by a financial AI platform A chatbot is a system designed to communicate with human users by means of natural language, frequently based on artificial intelligence, according to M. Adam, M. Wessel, and Benlian (2020). S. Sarbabidya and T. Saha explain that chatbots are an emerging, smart, and quickly adoptable technology that shows they are very beneficial in rendering various customer services such as one-to-one conversations and responsive customer service through 24/7/365 availability. In order to assess the possible effects of chatbots on the operation of customer care, Nguyen, Tung (2019) had examined an experiment at a case company for employing chatbots. E. is the name of a different author. In his explanation of the effect chatbots have on customer engagement, Ojapaska (2018) contrasts chatbots with other communication channels that are also utilised to boost consumer engagement. Gupta.

A. and Sharma. D. (2018) provide a comprehensive explanation of client attitudes about chatbots in the Indian banking sector, including the TAM model.

L.N. Michael, 2018, presents insights that are planned and implemented for a virtual assistant for hotel visitors that is built on SMS Chatbots that caters to motivations related to entertainment, social, and relational considerations. Additionally, Petter Bae Brandtzaeg and Asbjorn Folstad explain why people use chatbots in their 2017 paper, which demonstrates how it has aided users in getting fast and effective assistance. These studies have led to the conclusion that for clients to completely appreciate the services, they require full support. It has been seen that it does more than merely answer; instead, it constantly works to better itself. As a result, both the human workload and the quality of customer support are improved. Since then, AI-based client acquisition has become more and more common in a variety of contexts and may provide a lot of time and money-saving opportunities. So it's a good idea to employ chatbots more often. Additionally, it enhances consistency.

III. SURVEY ANALYSIS Conducted a study utilizing the questionnaire

methodology, and the information acquired led to the following conclusions:

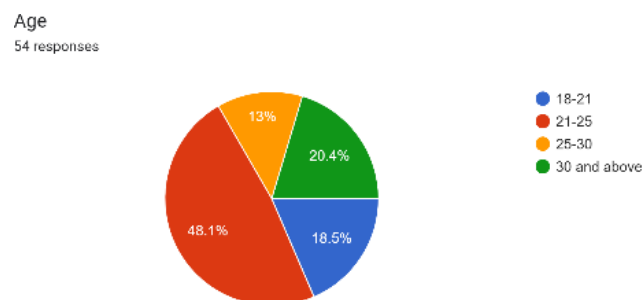


Figure. 1.

Here we can see majority of the peoples are of agebetween 21-25.



Figure. 2.

Here we can see 59.3% are male and 40.7% are female

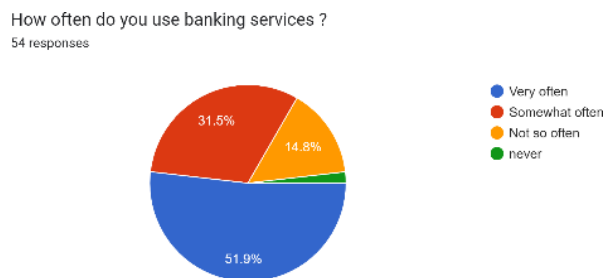


Figure. 3.

when it was asked how often do you use banking services then 51.9% said very often 31.5% said somewhatoften 14.8% said not so often.

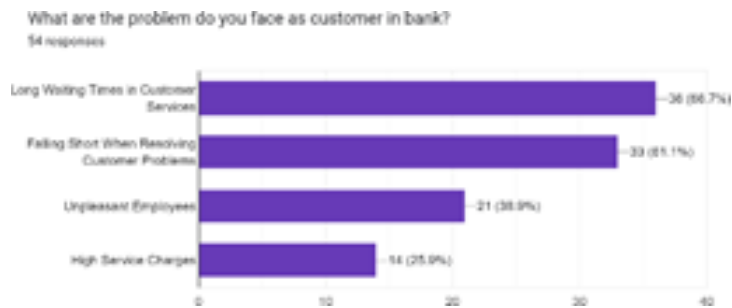


Figure. 4.

When it was asked how often do you face as customer then 66.7% said long waiting time in customer services and 61.1% said falling short when resolving problem 38.9% said unpleasant employee 25.9% said high services charges.

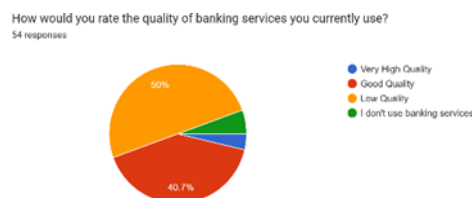


Figure. 5.

When it was asked how would you rate quality of banking services you currently use 50% said low quality and



40.7% said good quality.

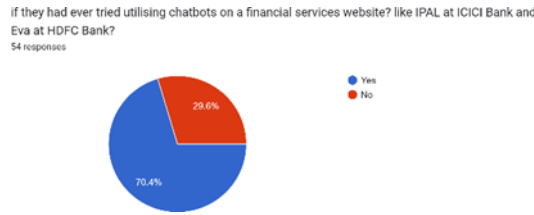


Figure. 6.

70.4% said they tried utilizing chatbots and 29.6% said they not tried using banking chatbots.

If they had ever tried utilizing chatbots on financial services website then 70.4% said yes and 29.6% said no.

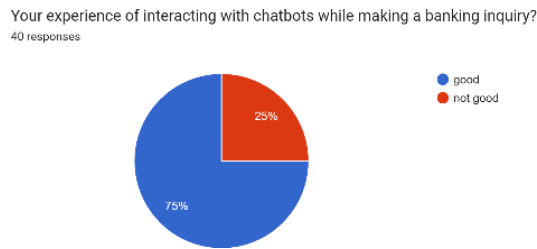


Figure. 7.

When it was asked about your experience of interacting with chatbots while making a banking inquiry then 75% said good and 25% said not good.

When it was asked that do you think chatbots will soon be able to take the position of customer support representative then 50% said maybe and 35% said no and 15% said yes.

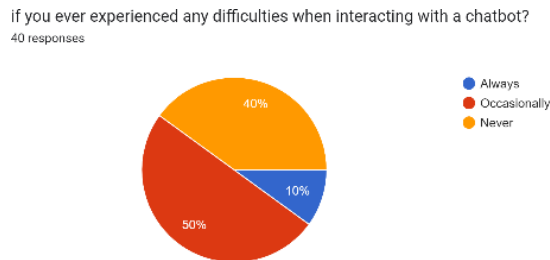


Figure. 8.

50% said occasionally and 40% said never and 10% said always about asking difficulties interacting with chatbot.

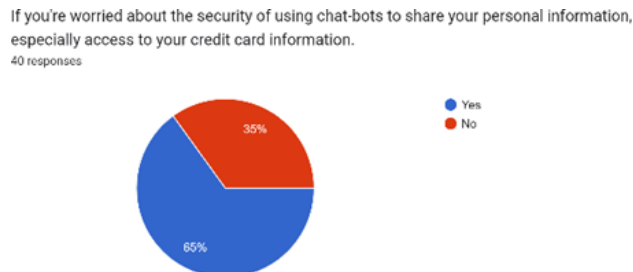


Figure. 9.

65% said yes and 35% said no when it was asked that are you worried about the security of using chatbots to share your personal information.



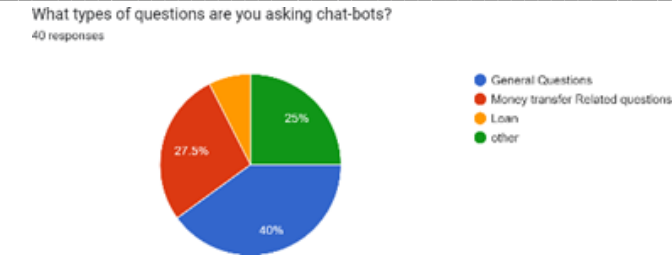


Figure. 10.

When it was asked what type of questions are you asking chatbots the 40% said general questions 27.5% said money transfer related questions.



Figure. 11.

72.5% said yes and 27.5% said no when it was asked that are you at ease of utilizing chatbots to perform some simple activities.

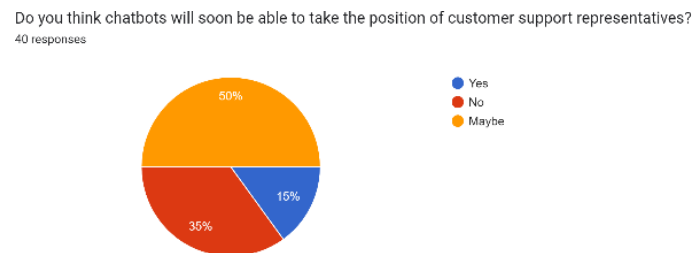


Figure. 12.

IV. CONCLUSION

Any industry's best evaluator is the customer. The current study examines the variables affecting chatbots' impact on the banking industry. An extensive analysis of the literature indicates that chatbots are becoming more prevalent and well-liked. The quality of chatbots is one of the key determinants of their influence. According to our research, banking clients believe chatbots are relatively successful and may eventually replace customer service agents. They are not just aware of them.

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