

# LITERATURE SURVEY ON AI BASED DISCOURSE FOR BANKING INDUSTRY(CHATBOT)

## **Abstract:**

The implementation of chatbot technology is evolving rapidly in the banking industry, yet customer acceptance is behind. The aim of the present paper is to identify the factors that influence consumers' intention to use chatbot technology applied in the banking industry.

Awareness of the service has an effect on perceived ease of use, perceived privacy risk, and it indirectly affects usage intention of banking chatbots through perceived usefulness.

## **Introduction:**

The rise of artificial intelligence (AI) based technology is contributing extensively to this transformation as more and more banks have begun to implement AI-based applications with the aim of deepening customer relationships, providing more personalized offers, detecting and preventing fraud, improving processes for anti-money laundering, and cost saving. Chatbot technology is a system based on AI that communicates with users and performs basic tasks through chat or speech interfaces.

Artificial Intelligence (AI) is reckless growing as the go-to technology for companies across the world to personalize experience for individuals. The technology itself is getting enhanced and smarter day-by-day, allowing more and newer industries to adopt the AI for various applications. Banking sector is becoming one of the first adopters of AI.

## **Problem statement:**

Banking is one the crucial sector, it deals with financial transactions which can be availed by everyone, banks are not able to resolve the queries of customers related to the products or services in satisfactory way in turn hinders the customer satisfaction.

Currently, most banks offer a wide variety of products and services – credit cards, savings accounts, debit cards, financial planning, personal loans, mortgages, etc. Yet many customers are not always aware of all the products offered by the financial company they're doing business with.

Addressing and resolving this issue will highly beneficial for the banks.

## **BANKING AND FINANCE:**

Artificial intelligence (AI) is disrupting diverse industries, but banking is projected to benefit the most out of incorporating AI systems in the next couple of years. The banking industry has started to seriously consider artificial intelligence-based solutions for resolving many traditional banking problems. An AI system can examine millions and billions of data points, and find patterns and trends that people may miss, and even predict future patterns. The need for AI powered solutions in Banking & Finance:

- a) Improve the ability to compete with the peers
- b) Increase the standing as an innovative company
- c) Identify opportunities in data that would be otherwise missed.
- d) Increase workforce productivity

## **Development of chatbots:**

Chatbots refers to a group of computer programs, that are able to interact with humans using natural language such as spoken or written communication. Another term often associated with chatbots is conversational agent (Atwell, 2003). The term "chatbot" was first introduced by Mauldin (1994) within a research paper based on the Turing test in 1994. Alen Turing wrote a paper in 1950, in which he introduce the Turing Test to asses the artificial intelligence capabilities of computers.

Chatbots are human-dialogue systems that are able to receive natural language messages and process them using auditory or textual analysis techniques. Chatbots respond typically with natural language.

## **Artificial neural networks:**

A complex financial institute like a bank has to have a large variety of skills in order to be successful. Core fields are to make financial products available, make proper predictions regarding financial trends, the simulation of investment behaviour, portfolio management, the prediction of bankruptcies and various other topics.

Artificial neural networks (ANN) are algorithms which are able to learn and mimic some of the functionalities of the human brain. The solution used to develop the previously mentioned AI system AlphaGO is based on an artificial neural network.

## **Chatbot technology in the banking industry:**

Chatbots applied in the financial industry can assist customers in managing financial transaction such as reviewing an account, reporting lost cards or making payments, renewing a policy or handling a refund.

Banks will enable much and reliable services which will gain customer loyalty.

It can act as an answering machine and serve the customers continuously throughout a day. It can answer the simple questions of the users of customized banking app and redirect them to the bank's website if necessary. Direct and basic operations including opening or closing the account, transfer of funds, etc. can be done with the help of chat bots.

## **CONCLUSION:**

Robust and rapid processing needs, advent of mobile technology, data availability, and proliferation of opensource software offer AI a huge scope in the banking sector. Though AI has been used in banking for decades, it remained unnoticed. In today's app-driven world, the banking sector eyes on leveraging with the help of mobile app development companies. In all these ways, AI in banking is continuing to transform the industry to provide a greater level of value to their customers, reduce risks, and increase opportunities as the financial engines of our modern economy.