## AI Based discourse for Banking

#### Introduction

Recent technological developments have transformed the way consumers and financial institutions interact with each other (Shaikh and Karjaluoto, 2015). Moreover, the COVID-19 pandemic has led to rapid shift to digital technologies and banks have transitioned to remote sales and provision at a fast pace (McKinsey, 2020). 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

The aim of the current study is to identify those factors that have an influence on consumers' intention to use chatbot technology applied in the banking industry.

Finally, the results are discussed, including the implications for theory and practice, limitations of the study and further possible research directions are outlined, and conclusions are drawn.

## **Objective:**

With our idea we are going to create a bot . The bot should be able to guide a customer to create a bank account and should it be able

to answer the loan queries. Our project is capable of multiple language recognition and speech recognition.

### Literature survey

[1]. The report held in April 2021 The Impact of Chat-Bots on the Banking Experience says that the Indian banking sector plays a crucial role in the economy of our country and is constantly evolving and innovating its services to enable and to serve its customers better and round the clock to the fullest of their capacity. One of the most revolutionizing step in this regard is the introduction and implantation of chatbots that is redefining the banking experience in many ways.

### **Advantages:**

- 1. It assists the Banks Marketing Department.
- 2. It facilitates core Banking Activities.

# **Disadvantages:**

- 1. Lacking in Multilingual.
- **[2].** The report held in 28 April 2021 Banking Bot (B-Bot) .In this paper we present a chatbot which is a banking Chatbot called B-BOT which resolves all the bank related queries. The chatbot's model can be divided into three sections Backend, ML model and Frontend. The main functionality of the chatbot is carried out by Rasa Framework.

## **Advantages:**

1. Use message passing technology for Interaction which gives a better understanding for AI.

### **Disadvantages:**

- 2. Didn't have Speech Recognition.
- [3]. The report held in June 2021. A Review of Chatbots in the Banking Sector Abstract—Chatbot is a software application that listens to a user's query in natural language and responds accordingly. There is rapid adoption of the latest technologies in banking and chatbots are one of them. Answering customer queries and assisting customers with banking transactions are some of the ways in which it's making an impact on the industry.

### **Advantages:**

- 1. To avoid involving navigating through a lot of pages to find the information you need.
- 2. A smart chatbot takes a query from the user in natural language and gives the appropriate response for the same.

## **Disadvantages:**

- 1. Approach requires large amounts of training data and is difficult to train.
- 2. User initiated dialogues are error prone because users can say anything they want.
- [4]. The report held in May 2022 study of applications of Artificial Intelligence in banking and finance sector. 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 and just like other segments, banks are exploring and implementing the technology in various ways.

### **Advantages:**

- 1. Help them track their financial activities.
- 2. Al in finance has automated processes and drastically reduced the cost of serving customers.

## **Our Proposed system Advantages:**

**Multilingual:** Users can switch to their native language and interact with our chatbot.

**Dynamic UI:** Our chatbot will help to navigate to every position and explain what is what.

**Speech Recognition:** Users can give voice commands and request replies from our chatbot.

#### **Conclusion:**

Al is at the centre of a new enterprise to build computational models of intelligence. The main assumption is that intelligence (human or otherwise) can be represented in terms of symbol structures and symbolic operations which can be programmed in digital computer.

## **Reference Papers:**

[1]. The Impact of Chat-Bots on the Banking Experience published at April 2021.

Author: Geeta Narula, Rakhi Narula.

## [2]. Banking Chatbot (B-Bot)

Author: Dr. C. Punitha Devi, Dr. S. Geetha, N. Nagalakshmi, S. Karthiga, V. Suvedha.

Article History: Received: 10 January 2021; Revised: 12 February 2021;

Accepted: 27 March 2021; Published online: 28 April 2021

- [3]. A Review of Chatbots in the Banking Sector published at June 2021 Author: Shashank Bairy R, Rashmi R.
- [4]. A study of applications at Artificial Intelligence in Banking and Finance Sector published at 32 May 2022.

Author: Dr. Lakshkaushik Dattatraya Puri.