

**Ideation Phase  
Literature Survey**

Date	17 September 2022
Team ID	PNT2022TMID30161
Project Name	Project - AI based discourse for Banking Industry
Maximum Marks	

**AI BASED DISCOURSE FOR BANKING INDUSTRY**

**1. CONVERSATION TO AUTOMATION IN BANKING THROUGH  
CHATBOT USING ARTIFICIAL MACHINE INTELLIGENCE LANGUAGE -  
[2020]**

**Authors: Sasha Fathima Suhel, Vinod Kumar Shukla, Sonali Vyas, Ved Prakash Mishra**

Artificial Machine Intelligence may be a terribly sophisticated topic. It involves making machines that are capable of simulating data. This paper examines a number of the most recent AI patterns and activities so provides various theory of amendment in a number of the popular and wide accepted postulates of these days. supported basic A.I. (Artificial Intelligence) structuring and dealing for this, System-Chatbots are created (or chatter bots). The paper shows that A.I is ever rising. As of currently there isn't enough data on A.I. but this paper provides a brand-new thought that addresses machine intelligence and sheds light-weight on the potential of intelligent systems. the increase of chatbots within the finance sector is that the latest unquiet force that has modified the means customers act. within the industry, the introduction of computer science has driven chatbots and altered the face of the interaction between bank and customers. The banking sector plays a crucial role in development into any country. It additionally explores the present usability of chatbot to assess whether or not it will fulfill customers dynamical desires.

**2. AN INTELLIGENT CHATBOT USING DEEP LEARNING WITH  
BIDIRECTIONAL RNN AND ATTENTION MODEL - [2020]**

**Authors: Manyu Dhyani, Rajiv Kumar**

This paper shows the modeling and performance in deep learning computation for an Assistant informal Agent (Chatbot). the use of TensorFlow package library, notably Neural MT (NMT) model. deed information for modeling is one amongst the foremost vital tasks and quite troublesome to preprocess it. The two-way perennial Neural Networks (BRNN) containing attention layers is employed, in order that input sentence with sizable amount of tokens (or sentences with over 20–40 words) may be replied with additional applicable oral communication. The dataset employed in the paper for coaching of model is employed from Reddit. The model is developed to perform English to English translation. the most purpose of this work is to extend the disarray and learning rate of the model and notice cheese Score for translation in same language. The experiments square measure conducted victimization TensorFlow victimization python3.6. The disarray, leaning rate, cheese score and Average time per one thousand steps square measure 56.10, 0.0001, 30.16 and 4.5 severally. One epoch is completed at 23,000 steps. The paper conjointly studies MacBook Air as a system for neural network and deep learning.

### **3. AI-BASED CHATBOTS IN CUSTOMER SERVICE AND THEIR EFFECTS ON USER COMPLIANCE - [2020]**

**Authors: Martin Adam, Michael Wessel, Alexander Benlian**

Communicating with clients through live chat interfaces has become associate progressively common suggests that to supply time period customer service in several e-commerce settings. Today, human chat service agents are oftentimes replaced by informal code agents or chatbots, that are systems designed to speak with human users by suggests that of language usually supported AI (AI). The cost and time saving opportunities triggered a widespread implementation of AI-based chatbots, they still oftentimes fail to fulfill client expectations, probably leading to users being less inclined to fits requests created by the chatbot. Drawing on social response and commitment-consistency theory, we have a tendency to through empirical observation examine through a randomized on-line experiment however verbal humanlike style cues and also the foot-in-the-door technique have an effect on user request compliance. Our results demonstrate that each representational process furthermore because they got to keep consistent considerably increase the probability that users fit a chatbot's

request for service feedback. Moreover, the results show that social presence mediates the impact of humanlike style cues on user compliance.

#### **4. A BANKING CHATBOT SECURITY CONTROL PROCEDURE FOR PROTECTING USER DATA SECURITY AND PRIVACY - [2019]**

**Authors: Sen-Tarnng Lai, Fang-Yie Leu, Jeng-Wei Lin**

The rise of AI has prompted the money business to enter the intelligent money technology (FinTech). Chatbot with AI technologies is a vital member of FinTech. The money trade is actively introducing chatbot to boost the market competitive advantage. several banks and card issuers within the us have introduced or developed chatbots from 2017 to extend user convenience and assist business promotion of monetary establishments. However, chatbot with AI options could infringe client security and private privacy. Security has become a vital issue that Chatbot should listen to. so as to enhance the safety of chatbot, this paper analyzes the safety ways of e-commerce (EC), and combines the AI security principles to set up the Chatbot Security management Procedure (CSCP). CSCP uses security specifications confirmation, specifications implementation, scrutiny activity and improvement manners four stages to observe chatbot. Banking chatbot with CSPS will hold blessings of chatbots, cut back the safety risk, and concretely defend client knowledge security and private privacy.

#### **5. CHATBOT ASSISTED MARKETING IN FINANCIAL SERVICE INDUSTRY - [2019]**

**Authors: Jon T. S. Quah, Y. W. Chua**

The rise of chatbots within the finance sector is that the latest riotous force that has modification the method customers act. The adoption of computer science battery-powered chatbots notably within the banking system has modified the face of communication interface between bank and customers. This paper explores the effectiveness of this use of chatbot in banking system. The banking sector plays a major role in economy. It conjointly investigates this chatbot practicality to work out if it will meet the dynamical expectation of shoppers.

## **6. TOWARD A CHATBOT FOR FINANCIAL SUSTAINABILITY - [2021]**

**Authors: Sewoong Hwang, Jonghyuk Kim**

This study examines technology effectiveness for business demand during which computer science (AI) is applied within the money sector. It summarizes previous studies on chatbot and client service and investigates theories on acceptance attitudes for innovative technologies. By setting variables, the study examines bank revenue methodologically and assesses the impact of client service and chatbot on bank revenues through client age classification. The results indicate that new product-oriented funds or housing subscription savings are additional appropriate for purchase through client service than through chatbot. However, services for existing product through chatbot absolutely have an effect on bank's profits. once classified by age, purchases by the bulk cohort within the channel absolutely have an effect on bank profits. Finally, there's an inclination to method tiny banking transactions through the chatbot system, that saves dealings and management prices, absolutely poignant profits. Through empirical analysis, we have a tendency to initial examine the result of associate degree AI-based chatbot system enforced to strengthen money soundness and counsel policy alternatives. Second, we have a tendency to use banking knowledge to extend the study's real-life relevance and prove that issues in client service will be resolved through a chatbot system. Finally, we have a tendency to investigate however resistance to technology will be reduced and with efficiency accommodated.