

Ideation Phase Literature Survey

Date	19 September 2022
Team ID	PNT2022TMID48085
Project Name	AI BASED DISCOURSE FOR BANKING INDUSTRY

Literature Survey:

S.No	Title	Author	Abstract
1.	Banking With A Chatbot – A StudyOn Technology Acceptance	Mónika-Anetta ^{X1} Ibolya ^{X2} Zsuzsa ^{X3} Babeş-Bolyai ^{X4}	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. The measurement development and hypotheses were based on the technology acceptance model extended with compatibility, customers' perceived privacy risk and awareness of the service. The sample contains 287 respondents, out of whom 24% have previously used a banking chatbot. The measure items were validated by a measurement model and hypotheses were tested using Partial Least Squares-Structural Equation Modeling (PLS-SEM). The findings highlight the importance of perceived compatibility and perceived usefulness in the adoption of banking chatbot technology. 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. Also, perceived ease of use influences perceived usefulness, and perceived compatibility has an effect on both perceived ease of use and perceived usefulness. Perceived ease of use and perceived privacy risk show no effect on usage intention

2.	Banking Chatbot (B-Bot)	Dr. C.Punitha Devia ^{X1} Dr.S.Geetha ^{X2} N.Nagalakshmi ^{X3} S.Karthiga ^{X4} V.Suvedha ^{X5}	<p>Chatbots square measure intelligent systems that perceive a user's tongue queries and respond consequently during a conversation, that is the focus of this study. It's an additional sort of a virtual assistant, folks want they're talking with a real person. They speak a constant language we have a tendency to do, and will answer all queries. In banks, at customer care centers and enquiry desks, humans are lean and usually take very long time to method the only request which ends up in wastage of your time and additionally cut back quality of client service. In this paper we introduce a more efficient way to resolve customer queries. Today's customers have high expectations and they want quick and accurate responses, complete and robust resolution, service that is available anywhere and anytime. All of these can be within well-designed chatbots. The entire experience is conversational. The aim is to implement a chatbot which may resolve client queries, search the knowledgebase for resolution and provide the solution. The chatbot can handle the queries ultimately reducing human effort.</p>
3.	Conversation to Automation in Banking Through Chatbot Using Artificial Machine Intelligence Language	Sasha Fathima Suhel ^{X1} Vinod Kumar Shukla ^{X2} Sonali Vyas ^{X3} Ved Prakash Mishra ^{X4}	<p>Artificial Machine Intelligence is a very complicated topic. It involves creating machines that are capable of simulating knowledge. This paper examines some of the latest AI patterns and activities and then provides alternative theory of change in some of the popular and widely accepted postulates of today. Based on basic A.I. (Artificial Intelligence) structuring and working for this, System-Chatbots are made (or chatter bots). The paper shows that A.I is ever improving. As of now there isn't enough information on A.I. however this paper provides a new concept which addresses machine intelligence and sheds light on the potential of intelligent systems. The rise of chatbots in the</p>

			<p>finance sector is the latest disruptive force that has changed the way customers interact. In the banking industry, the introduction of Artificial Intelligence has driven chatbots and changed the face of the interaction between bank and customers. The banking sector plays an important role in development into any country. It also explores the existing usability of chatbot to assess whether it can fulfill customers ever-changing needs.</p>
4.	Intelligent Chat Bot for Banking System.	<p>Aniket Dole^{X1}</p> <p>Hrushikesh Sansare^{X2}</p> <p>Ritesh Harekar^{X3}</p> <p>Sprooha Athalye^{X4}</p>	<p>An intelligent chat bot will be used to give information or answers to any question asked by user related to bank. Our Intelligent system will first take input from bank customer. This input will be taken as voice or written format. According to input, intelligent system will process the query and give response to user. An artificial intelligence is most important and helpful part of our project. Intelligent system is automation of activities associated with human thinking, decision making, and problem solving process. This system will be available on web. Our system will represent the design and development of an intelligent chat bot. It will present a technology demonstrator to verify a proposed framework required to support such a bot (a web service). While a black box approach is used, by controlling the communication structure, to and from the web-service, the web-service allows all types of clients to communicate to the server from any platform. The service provided will be accessible through a generated interface which allows for seamless XML processing; whereby the extensibility improves the lifespan of such a service. By introducing an artificial brain, the web based bot generates customized user responses,</p>

			aligned to the desired character. Questions asked to the bot, which will not be understood, are further processed using a third-party expert system, and the response will be archived, improving the artificial brain capabilities for future generation of responses.
5.	Artificial intelligence in banking A case study of the introduction of a virtual assistant into customer service.	Mehmet Ateş ^{X1}	The usage of artificial intelligence in banking is an important theme within entrepreneurial research. The purpose of the study was to analyze the motivations, challenges and opportunities for Swedish banking institutes to implement artificial intelligence based solutions into their customer service process. The research is based on a case study of the Swedish banking institute Swedbank AB, who introduced an AI based virtual assistant (Nina) to deal with customer requests. For the qualitative study, interviews with Swedish banking customer and experts were conducted. Further, to understand the managerial motivations of Swedbank, a theory of Moore (2008) regarding innovation management was applied. The findings display that Nina improved the service spectrum of Swedbank with the potential of decreasing costs, while maintaining customer satisfaction. Further, the results displayed a high acceptance of new technologies from the customer perspective. This provides the foundation for Swedbank to introduce further artificial intelligence based services. Banking institutes and other service oriented organizations with high customer interaction can use the implications of the thesis when considering to more effectively handle customer requests.
6.	Chatbots In Banking Industry: A Case Study	Dr. Shalini Sayiwal ^{X1}	Conversational Banking is a smarter way to retain the loyal customers by offering them a quick response to their queries. Technology has helped humans to evolve from the Stone Age to the modern digital era. The pace of the shift

			<p>in consumerism behavior from a service seeker to a game-changer is quite quick. Gone are the days, when a business could afford to prioritize the customers' needs at a later stage. With the customer becoming the ultimate decision-maker for a business to stay or go, it had become the priority of every business to ensure that customer satisfaction is achieved at any extent. Speaking about the banking sector, technology has gifted many exclusive ways to allow the industry to gain customer's satisfaction to the maximum. One such smart strategy is to introduce the chatbots to its customers. Chatbots designed with AI are one of the most promising strategies of a banking business that can lead the bank to win the satisfaction vote of their loyal customers.</p>
7.	Artificial Intelligence Powered Banking Chatbot	<p>K.SatheeshKumar^{X1}</p> <p>S.Tamilselvan^{X2}</p> <p>B.IbrahimSha^{X3}</p> <p>S.Harish^{X4}</p>	<p>Chat robot, a computer program that simulates human conversation, or chat, through artificial intelligence an intelligence chat bot will be used to give information or answers to any question asked by user related to bank. It is more like a virtual assistant, people feel like they are talking with real person. They speak the same language we do, can answer questions. In banks, at user care centres and enquiry desks, human is insufficient and usually takes long time to process the single request which results in wastage of time and also reduce quality of user service. The primary goal of this chat bot is user can interact with mentioning their queries in plain English and the chat bot can resolve their queries with appropriate response in return The proposed system would help duplicate the user utility experience with one difference that employee and yet get the queries attended and resolved. It can extend daily life, by providing solutions to help desks, telephone answering systems, user care centers. This paper defines the dataset that we have prepared from FAQs of bank websites, architecture and</p>

			methodology used for developing such chatbot. Also this paper discusses the comparison of seven ML classification algorithm used for getting the class of input to chat bot.
8.	Role Of Ai-Induced Chatbot In Enhancing Customer Relationship Management In The Banking Industry	MeganathanKumar Satheesh ^{X1} NagarajSamala ^{X2} RahulVillamarin Rodriguez ^{X3}	Customers are less satisfied with the prompt services provided by the banks. They also feel that guidance to use the bank's products and services is not adequately explained. When they ask for information or report any issues, the process is not easy. On the other hand, handling millions of customers with limited bank employees is a tedious process. The bank employees are also exhausted to answer to the same repetitive questions for a long time. The customers are comfortable with the answers, and the bank employees are also tired of the same routine of giving the same answers to different customers. This unpleasant situation will weaken the relationship between the banks and the customers. This paper will discuss how AI-induced chatbots improve customer interaction and how chatbots play an essential role in customer relationship management in the banking industry. The AI induced chatbot certainly enhances the customer relationship with the banks.
9.	Using corpora in machine-learning chatbot systems	BayanAbuShawar ^{X1} Eric Atwell ^{X2}	A chatbot is a machine conversation system which interacts with human users via natural conversational language. Software to machine-learn conversational patterns from a transcribed dialogue corpus has been used to generate a range of chatbots speaking various languages and sublanguages including varieties of English, as well as French, Arabic and Afrikaans. This paper presents a program to learn from spoken transcripts of the Dialogue Diversity Corpus of English, the Minnesota French Corpus, the Corpus of Spoken Afrikaans, the Qur'an Arabic-English parallel corpus, and the British National Corpus of

			<p>English; we discuss the problems which arose during learning and testing. Two main goals were achieved from the automation process. One was the ability to generate different versions of the chatbot in different languages, bringing chatbot technology to languages with few if any NLP resources: the corpus-based learning techniques transferred straightforwardly to develop chatbots for Afrikaans and Qur'anic Arabic. The second achievement was the ability to learn a very large number of categories within a short time, saving effort and errors in doing such work manually: we generated more than one million AIML categories or conversation-rules from the BNC corpus, 20 times the size of existing AIML rule-sets, and probably the biggest AI Knowledge-Base ever.</p>
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