ARTIFICIAL INTELLIGENCE AI BASED DISCOURSE FOR BANKING INDUSTRY

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LITERATURE SURVEY

SURVEY 1:

"Artificial Intelligence Marketing: Chatbots"

Uroš Arsenijevic; Marija Jovic

2019 International Conference on Artificial Intelligence: Applications and Innovations (IC-AIAI)

According to Marija Jovic et al., the chatbot is analyzed as an artificial intelligence tool in marketing. The chatbot is proposed by using AI which is used to communicate with the customer queries related to banking. To measure the chatbot efficiency three metrics are evaluated as follows: accuracy, precision and response.

The main drawback of this proposal is it cannot withstand longer conversation of language principles. Also, there might be a chance or fear of getting wrong information to respondent.

SURVEY 2:

"Conversation to Automation in Banking Through Chatbot Using Artificial Machine Intelligence Language"

Sasha Fathima Suhel; Vinod Kumar Shukla; Sonali Vyas; Ved Prakash Mishra

2020 8th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO)

Sonali Vyas et al., proposed a strategy in designing a virtual chatbot for banking and finance sector. The strategy is based on ARTIFICAL INTELLIGENCE MARKUP LANGUAGE(AIML), a type of XML. They used this AIML to design a framework for handling customers queries.

Using this method, the chatbot can easily interact with the queries based on plain text, letters, spaces and grammatical models. But the framework can't able to supports entire interaction.

The pattern used in the framework creates an inadequacy while interpreting the comments passed by the customer. The inadequacies involve, incorrect text recognition, improper grammar asserts, and it only supports FQA's based interaction.

Also, it is not able to fulfil the complete implementation of an intelligent question management program capable of self-learning to improve itself in the next stages, thus not only increasing the quality of user service.

SURVEY 3:

"Artificial Intelligence in Banking sector: Evidence from Bahrain"

Yomna Abdulla; Rabab Ebrahim; Sumathi Kumaraswamy

2020 International Conference on Data Analytics for Business and Industry: Way Towards a Sustainable Economy (ICDABI)

Yomna Abdulla et al., highlights that the usage of chatbot based on AI during pandemic was incredible. As per the highlight, in Bahrain most of the banks using chatbot or Digital Assistant based on AI for quick and easy communication. Using this chatbot can manage and resolve customer queries immediately.

But also, there are two important drawbacks or aspects of using this kind of chatbots.

The critical aspects of using this chatbot is maintaining **Technological Infrastructure and Cyber-Security.** These two place a crucial role in the complete implementation of chatbots in banking sector.

SURVEY 4:

"Simulating the Effects of Social Presence on Trust, Privacy Concerns & Usage Intentions in Automated Bots for Finance"

Magdalene Ng;Kovila P.L. Coopamootoo;Ehsan Toreini;Mhairi Aitken;Karen Elliot;Aad van Moorsel

2020 IEEE European Symposium on Security and Privacy Workshops (EuroS&PW)

According to Magdalene Ng et al., usage of AI based Chatbots are more effective because it has the functionalities like **politeness**, active listening, empathetic response and personalization towards customer. These functionalities make chatbot most popular and convenient for using.

But there are some factors which are neglecting the usage of chatbots in Banking sectors such as

Trust, privacy and social perception.

The above mentioned were the main crucial and stimulating factors which affects chatbot in AI.

REFERENCES

- 1. K.Satheesh Kumar, S.Tamilselvan, B.Ibrahim Sha, S.Harish, "Artificial Intelligence Powered Banking Chatbot", International Journal of Engineering Science and Computing, March 2018
- 2. S. T. Lai, F. Y. Leu, and J. W. Lin, "A banking chatbot security control procedure for protecting user data security and privacy," in *BWCCA*, 2018.
- 3. Intelligence, A. (2016). Chatbot Market Size, Share & Trends Industry Forecast 2022. Arizton Advisory & Intelligence. https://www.arizton.com/market-reports/chatbot-market-global. Assessed on July 22nd, 2019.
- 4. M. S. Selvi, A. Kayalvizhi, and C. Premalatha, "Effective back-channel response to user queries using banking bot artificial intelligent system", *International Journal Innovative Technology and Exploring Engineering (IJITEE)*, Vol. 8, no.12, Oct. 2019.