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AN EXPLORATORY STUDY ON PROBLEMS & CHALLENGES FACED BY USERS OF CHATGPT

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Keywords

ChatGPT, Artificial Intelligence, Exploratory

Abstract

As the use of AI chatbots becomes increasingly prevalent, it is crucial to understand the issues faced by users to improve their experience. By identifying and analyzing these challenges, this research seeks to provide insights and recommendations for enhancing the usability, reliability, and effectiveness of ChatGPT. This study aims to explore the problems and challenges faced by users of ChatGPT. The technique used in this study is a text mining using the qualitative tool NVIVO 12. The findings of the study indicate that the problems and challenges faced by the users of ChatGPT are Generating False information, Lack of knowledge relating to the Current scenario, Lack of Context understanding, Language and Cultural limitations, Lack of User control, Lack of Accountable and transparency, Unreliable, Plagiarism and cheating, Lack of customization and Capability and Deployment challenges

1.INTRODUCTION

OpenAI ChatGPT is an advanced chatbot that utilizes the OpenAI GPT-3 language model. Its primary purpose is to generate text responses that closely resemble human-like conversation based on user input. Trained on a vast dataset of human dialogues, It exhibits versatility in

generating responses across a wide range of topics and prompts. It finds practical applications in customer service, content creation, and language translation, supporting multilingual replies. Accessible through the OpenAI API, developers can seamlessly integrate it into their own applications and systems. As a variant of the GPT language model developed by OpenAI, it possesses the ability to generate text that mirrors human-like language. It excels in engaging users in natural and intuitive conversation. Trained on extensive collections of human dialogues, It comprehends and responds effectively to diverse subjects and contextual cues. Its versatility enables its utilization in various applications, including chatbots, customer service agents, and language translation systems. Notably, It represents a cutting-edge language model capable of generating coherent and authentic text that can be nearly indistinguishable from human-written content (Aydın & Karaarslan 2022).

OpenAI acknowledges that ChatGPT can exhibit problematic behavior, including responding to harmful instructions, displaying discriminatory tendencies, and generating incorrect or nonsensical responses. Slow response times are also a recognized issue. While there is excitement surrounding such technologies and their potential to address societal challenges like bridging racial gaps in reading proficiency, mitigating risks is crucial. One approach is careful selection of training data to prevent the inclusion of harmful content. Additionally, organizations can opt for specialized models instead of generic generative AI models, or customize generic models with their data to align with specific goals and reduce bias. Critical decisions impacting resources or human well-being should not rely solely on generative AI models, and human review of model outputs should be conducted prior to publication or utilization. AI, although powerful, has limitations when it comes to addressing complex issues like sustainability. The quality of data and techniques it relies on greatly influences its effectiveness. AI systems can only make predictions based on the data they have been trained on, which means their capabilities are constrained by the information they have access to. Furthermore, AI lacks certain human-specific abilities such as creativity and empathy. While AI systems can perform specific tasks, they cannot generate original ideas or fully understand nuanced human emotions. It is important for users to exercise caution and verify information from reliable sources before fully relying on responses from ChatGPT. Unlike platforms like Google, ChatGPT does not provide links or citations to validate its responses, making it

challenging to verify their accuracy. While efforts are made to continually train and improve the accuracy of ChatGPT, being a new technology, it still requires further refinement. As a result, there is a possibility of the AI chatbot providing inaccurate information. (Haleem, et al 2022).

The purpose of conducting this is to evaluate the problems and challenges faced by the users of ChatGPT. By examining user experiences, feedback, and concerns, the research aims to shed light on areas where ChatGPT may fall short or encounter obstacles. The study seeks to provide valuable insights that can contribute to the improvement and development of AI chatbot technologies, leading to enhanced user satisfaction, more accurate responses, and better user experiences overall.

2. REVIEW OF LITERATURE

Aydın, Ö., & Karaarslan, E. (2022). This paper explores the potential applications of AI in a specific procedure, utilizing OpenAI's ChatGPT as a demonstration of artificial intelligence technology. The authors employed ChatGPT to generate a literature review on the applications of Digital Twin in healthcare by paraphrasing abstracts from articles published between 2020 and 2022. While conversational interactions with it yielded promising results, the use of the Authenticate tool revealed substantial similarities in the paraphrased passages. This article represents the authors' initial effort to showcase the accelerated information collection and representation enabled by AI. The authors anticipate future academic publishing procedures that require less human labour, enabling researchers to focus on their work, and will track references to this study to assess its academic impact.

Deng, J., & Lin, Y. (2022). An overview of the ChatGPT natural language processing (NLP) system created by Open AI is given in this publication. It goes through ChatGPT's characteristics, advantages, and drawbacks. The essay also examines ChatGPT's limitations and potential applications. According to the research, ChatGPT is an effective NLP system that can create conversations that appear human, but it has important problems that need to be fixed.

Haleem, A. et al. (2022). The Generative Pre-trained Transformer (GPT) architecture served as the foundation for the introduction of ChatGPT, an AI chatbot tool, by Open Artificial Intelligence (AI) in November 2022. Because it can create interesting stuff like tales, poems,

music, and essays, ChatGPT has become incredibly popular. It does, however, have certain restrictions. ChatGPT allows users to engage by entering questions and obtaining pertinent and persuasive answers. Academic communities have taken notice of the instrument, which has prompted the creation of task teams and institution-wide talks on its use. The overview of ChatGPT in this study emphasises its importance and the demand for its use. Visual representations of the Progressive Work Flow Processes of the Tool are provided, and an analysis of the ChatGPT Support System's unique characteristics and capabilities is done. The research also examines ChatGPT's existing functions and their implications for neural language models, where deep learning techniques are used to analyse and produce text by comprehending the subtleties of human language through a massive quantity of internet data.

Haque, M. U. et al. (2022). Using 10,732 tweets from early ChatGPT users, the authors conduct a mixed-method analysis in this study. They employ topic modeling to identify primary subjects, followed by a comprehensive qualitative analysis of each topic. The findings reveal that the majority of early adopters hold highly positive opinions on aspects such as entertainment, creativity, and disruptions in the software development industry. However, a small percentage of participants express concerns regarding potential implications of ChatGPT usage, particularly in relation to educational elements. The authors provide specific instances for each subject and discuss the implications for addressing these concerns, both for academics and users.

M Alshater, M. (2022). This research attempts to investigate how artificial intelligence, in particular natural language processing, might improve academic achievement using the fields of economics and finance as examples. By employing ChatGPT as a specific illustration of an NLP tool with the potential to improve research, the study adopts a case study methodology. ChatGPT has the potential to greatly advance academic research in general and economic and financial research in particular, according to our review of its uses, capabilities, and limits. Researchers can benefit from the help of ChatGPT and other AI technologies for scenario design, data analysis, and interpretation, as well as for communicating their findings. However, there are a number of drawbacks to take into account when using chatbots or comparable tools in research, including universality, reliance upon data quality and variation, lack of domain expertise, limited context understanding, ethical considerations, and limited

capacity for original insight. Therefore, it's crucial to carefully examine these constraints while employing ChatGPT and to combine it with human interpretation and analysis.

Susnjak, T. (2022). This study assessed ChatGPT's capacity to carry out complex cognitive tasks and generate language that may be mistaken for text created by humans. It is a recently created artificial intelligence (AI) agent. This feature raises questions regarding how it may be used for academic dishonesty during online assessments. The study discovered that it poses a potential risk to the integrity of online tests, particularly in higher education settings where such exams are becoming more common since it is capable of displaying critical thinking abilities and producing very realistic prose with little input. Returning to invigilated and oral tests might be a part of the answer. While adopting advanced proctoring techniques and AI-text output detectors may be useful in tackling this issue, they are unlikely to be failsafe solutions. Large language models like ChatGPT have significant consequences, and further study is required to properly comprehend these implications and develop tactics to reduce the danger of cheating while utilising these tools. Maintaining the validity and fairness of online tests for all students requires educators and institutions to be aware of the potential for ChatGPT to be exploited for cheating and to look into strategies to combat it.

3. OBJECTIVE OF THE STUDY

To evaluate the problems and challenges faced by users of ChatGPT.

4. RESEARCH METHODOLOGY

The current study uses an inductive technique and an exploratory, qualitative approach. 32 ChatGPT users who were chosen using non-random convenience selection make up the sample. NVIVO software was used to apply text mining techniques to the data, such as creating a summary table and word cloud. (As per Creswell,2014, the minimum required to conducted a qualitative analysis is 30 respondents). The application of these techniques enables a thorough analysis of the gathered data.

5. DATA ANALYSIS AND INTERPRETATION

Table No: 1 Summary Table

Keywords	Len	Co	Weighted

	gth	unt	Percentage (%)
Generating False information	16	36	11.43
Lack of knowledge relating to Current scenario	15	35	11.11
Lack of Context understanding	20	34	10.79
Language and Cultural limitations	19	33	10.48
Lack of User control	11	33	10.48
Lack of Accountable and transparency	23	31	9.84
Unreliable	10	30	9.52
Plagiarism and cheating	10	29	9.21
Lack of customization	17	28	8.89
Capability and Deployment challenges	20	26	8.25

As per the above summary table, it is seen that the problems and challenges faced by the users of ChatGPT are; Generating False information with a weighted percentage of 11.43, Lack of knowledge relating to Current scenario with a weighted percentage of 11.11, Lack of Context understanding with a weighted percentage of 10.79, Language and Cultural limitations with a weighted percentage of 10.48, Lack of User control with a weighted percentage of 10.48, Lack of Accountable and transparency with a weighted percentage of 9.84, Unreliable with a weighted percentage of 9.52, Plagiarism and cheating with a weighted percentage of 9.21, Lack of customization with a weighted percentage of 8.89 and Capability and Deployment challenges with a weighted percentage of 8.25.

Figure No: 1 Word Cloud

As per the above word cloud it can clearly be seen that the problems and challenges faced by the users of ChatGPT are Generating False information, Lack of knowledge relating to the Current scenario, Lack of Context understanding, Language and Cultural limitations, Lack of User control, Lack of Accountable and transparency, Unreliable, Plagiarism and cheating, Lack of customization and Capability and Deployment challenges.

6. CONCLUSION

The study findings highlight a range of problems and challenges faced by users of ChatGPT. These include the generation of false information, limited knowledge about the current scenario, difficulties in understanding context, language, and cultural limitations, lack of user control, issues related to accountability and transparency, unreliability, concerns of plagiarism and cheating, limited customization options, and challenges in deployment. Understanding these issues is crucial for improving the performance and usability of ChatGPT, ensuring accurate and reliable responses, addressing cultural and linguistic biases, enhancing user control, promoting transparency, and developing solutions to customize the AI tool based on user needs. Additionally, resolving these challenges will contribute to creating a more

trustworthy and effective AI chatbot experience for users. To enhance the user experience and address challenges, suggestions include implementing fact-checking mechanisms, improving contextual understanding, ensuring language and cultural inclusivity, offering user control and customization, ensuring transparency and accountability, incorporating user feedback, and establishing ethical guidelines. These measures can help create a more reliable and user-centric AI chatbot experience.

7. AUTHORS CONTRIBUTION

The writers affirm that they have no connections to, or engagement with, any group or body that provides financial or non-financial assistance for the topics or resources covered in this manuscript.

8. CONFLICT OF INTEREST

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article**.**

9. PLAGIARISM POLICY

All authors declare that any kind of violation of plagiarism, copyright and ethical matters will taken care by all authors. Journal and editors are not liable for aforesaid matters.

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