Still, Man Is The Most Remarkable Being

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ABSTRACT
ChatGPT and Google, two natural language processing systems, have attracted media attention. Google is a search engine that finds specific information online, while ChatGPT is an AI chatbot that understands and responds to natural language. The study in this paper looks at how users of Google and ChatGPT behave differently when using search engines and chatbots to find information. Both ChatGPT and Google have advantages and disadvantages. Since data inaccuracies can cause bias, accuracy concerns were especially important. According to ChatGPT's readability scores, answers are frequently inappropriate for people with limited literacy. Google occasionally returns results based on for-profit organizations, whereas ChatGPT responds to inquiries with more pertinent information. Google does share the source, but one might need to use their own imagination to improve it. ChatGPT does not permit this because it presents the result immediately. Despite the fact that this study carefully investigated ChatGPT user reactions, it has a number of limitations that might all be taken into account for the purpose of improving future research.
Keywords— Google search engine, ChatGPT, Artificial Intelligence, Machine learning

1 Introduction

The ability to perform web searches is essential for using the internet. Larry Page and Sergey Brin launched Google in 1998 to promote Google Search, the most prominent web search engine. Google is a more adaptable and comprehensive research tool. This latest series on businesses that change the world shows how Google uses rapid news, click-through ads, mapping, email, satellite images, and more to establish a high-tech power that has changed the way people work and live [1]. With years of experience, everyone has an intuitive sense of what to do next [2]. Similarly, experimental chatbot ChatGPT has gained immense popularity since its introduction by AI research startup OpenAI in late November 2022. The AI-based LLM "ChatGPT" was released in November 2022. It was trained on massive text datasets in multiple languages and can respond to text input like a human. ChatGPT, a chatbot developed by OpenAI (OpenAI, L.L.C., San Francisco, CA, USA), uses the generative pre-trained transformer (GPT) architecture. A neural network processes natural language in the GPT design based on context. ChatGPT outperforms GPT-based predecessors because it can respond to multiple languages and produce complex and intelligent responses using advanced modelling. The presented review paper compares the two distinct search engines.

The main goal of this review paper is:

The review paper compares Google and ChatGPT search engines, discusses their impact on artificial intelligence, and highlights techniques and fields inspiring creativity and application of new technologies worldwide.

1.2 Methodology

This study's findings are presented in a descriptive manner, drawing on the studies of both Google Research papers published in the early 2000s and ChatGPT research that is still going on. There are benefits and drawbacks to both Google and ChatGPT. The origin of a result is rarely mentioned in ChatGPT. Compared to ChatGPT, Google more frequently provides a date and a trustworthy source for the response, whereas ChatGPT offers more pertinent answers to questions. The findings of ChatGPT frequently lack a valid time stamp and may be out of date. Google occasionally displays results depending on businesses. Google may be the best tool ever for that. It has developed a deceptively easy method for instantly scanning billions of papers, and it has spent hundreds of millions of dollars of its own money to enable us to read millions of books while lounging in our pyjamas, but on the other hand in-context learning, Large-scale language models, reinforcement learning from user feedback, and an essential technological process to construct Chat-GPT are the major components of Chat-GPT.

2 Literature Review

2.1 Based on Literature, limitation of current research on the concept of google

User data is being used more and more in modern technology, as exemplified by Google, to customise and enhance services. The user and occasionally society as a whole gain greatly from this reuse of data, which occasionally happens in unexpected ways [3]. According to the definition, creativity combines novelty and utility. The way individual describes their selves is evolving as a result of our adaptation to new intellectual tools [4]. People now have quick access to an unparalleled amount of knowledge thanks to the internet. However, a growing collection of scientific evidence suggests that the Internet, characterised by its frequent interruptions and distractions, may have a detrimental impact on our ability to think rationally and deeply. The Internet currently assumes a diverse range of functions in our daily lives and exerts a more extensive influence on our cognitive processes than any other form of communication in history.

2.2 Based on literature, limitation of current research on the concept of ChatGPT

Specifically, this paper looks at how well ChatGPT can solve basic problems in the area of quantum mechanics, focusing on how well it can understand basic physics problems and correctly write code solutions for them. Although ChatGPT demonstrates outstanding capabilities in comprehending basic physics problems, its performance in answering conceptual questions was partially weak. Nevertheless, the available data suggests significant opportunities for the physics education community to explore the use and potential of this phenomenon [5,7]. The use of ChatGPT in university settings may facilitate academic dishonesty, thereby diminishing students' educational growth and potentially fostering instances of plagiarism. Moreover, the AI system has the potential to generate inaccurate or deceptive responses, thus contributing to the dissemination of misinformation. The outcomes of the study are supported by studies conducted in the Czech language, indicating the potential for the instrument to be misused in languages of varying nature. Figure 1 shows the browsing Internet by Law enforcement in order to verify cybercrime techniques.
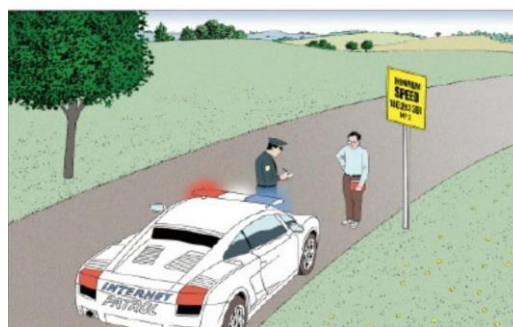

Fig. 1 Shows law enforcement staff browsing the internet in order to check cybercrime techniques [4].

3 Google merits and demerits

3.1   Merits

1) **Google Search**- The concept of relevance holds significant importance in the field of information retrieval, rendering it a critical factor in the functioning of Google Search. In a nutshell, the assessments of relevance have a dual effect on search results: they determine the ranking order of the results and also influence the selection of articles that are provided in response to a given search query. The prioritisation of the most relevant result is often determined by the presentation method or media, with the outcome being displayed first or at the top. The user did not provide any text to rewrite [8-9].

2) **Google Classroom**- Google Classroom (GC) is an online classroom management system designed to facilitate the seamless creation, assessment of assignments, and distribution. Educators possess the ability to monitor and ascertain the submission status of assignments from students. Students have the ability to collect assignments and retrieve educational resources from their teachers at any given moment and from any geographical place. This finding aligns with a prior study that demonstrated the positive impact of Google Classroom on students' learning environments through the facilitation of assignment management, promotion of collaborative efforts, and enhancement of communication channels. Furthermore, Google Classroom provides educators with the capability to establish classes and allocate assignments [9].

3) **Google Meet**-Google Meet allows videoconferencing platform that facilitates the organization of meetings including a maximum of 25 participants possessing Google accounts or more. It allows users to engage in video-based discussions and textual exchanges with one another. One advantage of Google Meet is its cost-free nature and extensive availability, providing for the needs of both educators and learners. The interface is highly practical, emphasizing efficient management, while still being compact and lightweight. Additionally, it is designed to be user-friendly, ensuring accessibility for users of all levels of proficiency [9].

4) **Google Bard**- Google, a prominent player in the search engine industry, has recently unveiled Bard, an AI-powered chatbot. Through the process of identifying the most up-to-date and reliable responses, consumers can be informed and it is implied that Google's latest AI technology has the capability to notify individuals about the most recent occurrences. The precision of information given by ChatGPT is limited to the date of its training, which concludes in 2021. LaMDA, also known as the Language Model for Dialogue Applications, is a conversational AI model developed by Google.Bard utilises Applications, a convolutional neural language model developed by Google, as its underlying source of power [10].

5) **Google Earth Engine**- The Google Earth Engine (GEE) technology analyses digital elevation models, basin boundaries, and river stream data to generate global watershed morphometric features. Morphometric analysis involves the examination of mathematical relationships between different stream properties through the process of comparing streams and identifying potential discrepancies. Ensuring the consideration of this aspect is of utmost importance during the planning process of any watershed [11].

3.2   Demerits

1) **Social Structures**: The concept of "multi-sided relevance" (Sundin et al., 2022) encapsulates the convergence of diverse and potentially conflicting notions of relevance that shape the organisation of information in Google Search. This process often occurs with inherent biases, which may sustain repressive social systems.

2) **Stability of Internet**: Although Google Classroom is used in learning and teaching activities, obstacles are still a possibility. Because in reality, some pupils are still unable to attend class. The majority of student absences are brought on by the not having a strong enough internet connection to use Google Classroom. Additionally, prior studies have shown that in practise, pupils' inability to access the entire internet network is what prevents them from using Google Classroom.

3) **Utilisation**: Google Meet encounters various problems in its implementation, one of which pertains to the constraints imposed by student data packages or limited internet packages, hence

hindering certain students from actively participating in Google Meet sessions. The instructor disseminates the instructional material via Google Classroom, enabling students to maintain access to it and engage in discussions with the instructor when encountering challenges. This measure mitigates the risk of academic disadvantage for students who are unable to participate in Google Meet sessions.

4) **Potential Bias**: It is crucial to use cutting-edge technology carefully and to be aware of its limitations, just like with other cutting-edge technology. To address potential biases and inaccuracies in language models like ChatGPT and to further improve their performance, more study is required.

5) **Google Earth Engine**: The scope of the geospatial data and algorithms provided in GEE is limited. Complex geographic processes remain difficult to describe, and GEE suffers from the same drawbacks as cloud platforms in terms of network transmission rate, difficulty with computer resource distribution, and storage constraints [12-13].

4   ChatGPT merits and demerits
4.1   Merits

1) **Personalized Tutoring**: ChatGPT has the potential to offer tailored educational support and constructive evaluations to students by considering their unique learning requirements and advancements. Chen et al. (2020) conducted a study whereby they utilised a generative model-based conversational agent, known as ChatGPT, to deliver personalised math tutoring to students. The findings of the study indicated that this approach led to enhanced learning outcomes among the students. The research demonstrated that the conversational agent effectively delivered customised explanations to address students' misconceptions and adjusted its responses based on their individual comprehension levels [5-6].

2) **Language Translation**: The utilisation of ChatGPT facilitates the translation of educational resources into diverse languages, hence enhancing their accessibility to a broader demographic. In a study conducted by Johnson et al. (2016), it was shown that the utilisation of a generative model known as ChatGPT, which was trained on a dataset consisting of bilingual sentence pairs, exhibited high accuracy in language translation. This model achieved exceptional performance on many translation benchmarks, thereby establishing itself as a leading approach in the field. The research findings demonstrated that the model shown proficiency in comprehending the semantic content of phrases in a given language and effectively producing precise translations in a distinct language [14-15].

3) **Creating learning assessment**: ChatGPT offers academic staff and instructors an innovative and adaptable way to build learning assessments with instantaneous feedback and complete reports, considering the importance of assessment in high-quality education. Zhai (2023) suggests educators use ChatGPT to create learning evaluation items, saving time and effort. This technique can also improve question quality by following a common framework. Teachers can use ChatGPT to develop open-ended question prompts that meet class learning objectives and success criteria (Baidoo-Anu & Ansah, 2023). Given the time educators spent creating quizzes, monthly assessments, and exams, ChatGPT could help teachers ease the assessment burden.

4) **Creating an outline**: Scholars can give ChatGPT instructions to outline essays or other writings. Kasneci et al. (2023) suggest using a model to help students organise their research and writing. In this context, students have the ability to easily propose prompts, enabling ChatGPT to promptly build an outline. Nevertheless, it may be necessary for researchers or students to make some modifications to the contents in order to render the outline suitable for use. Indeed, several scholars have already been utilising this tool to produce outlines for their scholarly compositions (see to Zhai, 2022; Qadir, 2022). Furthermore, ChatGPT possesses the capability to expeditiously generate a concise overview of scholarly publications, hence facilitating researchers in promptly and accurately comprehending the primary aspects (Kasneci et al., 2023).

5) **Brainstorming ideas**: ChatGPT plays a vital role in academic research, specifically through facilitating the generation of ideas for written work. Consequently, it can serve as a valuable tool to

support researchers in their writing endeavours. Several scholars have initiated the utilisation of ChatGPT for the purpose of composing research papers (see to King & ChatGPT, 2023; StokelWalker, 2023). Zhai (2022) employed the utilisation of ChatGPT for the purpose of idea generation and thereafter authored a comprehensive scholarly article named "ChatGPT User Experience: Implications for Education." The individual observed that they made minor revisions and restructured the written document. According to Zhai (2022), it has been determined that ChatGPT exhibits a significant capacity to arrange and compose various sections of articles (p. 9). Hence, it is indisputable that the recently developed tool generated by artificial intelligence (AI), known as ChatGPT, possesses a substantial capability to assist researchers in generating ideas for research articles. However, it is crucial for researchers to exercise caution and verify the content produced by ChatGPT to prevent errors or the dissemination of misleading information (Gordijn & Have, 2023; Mogali, 2023). The user has provided a numerical reference [16].

4.2 Demerits

1) **Limited Understanding**: Generative models rely on statistical patterns within their training data and lack a comprehensive comprehension of the underlying concepts they assist students in acquiring. This limitation can pose a drawback in terms of delivering customised explanations or feedback that address the unique requirements and misunderstandings of each student. According to the findings of Wang et al. (2020), the generative model-based tutoring system had limitations in delivering customised explanations that addressed students' misconceptions.

2) **Bias in Training Data:** The effectiveness of generative models is contingent upon the quality of the training data, as any biases present in the data will inevitably be reflected in the model's output. For instance, if a machine learning model is trained on a corpus of essays predominantly authored by students belonging to a specific demographic, its ability to effectively assess essays produced by students from different demographics can be compromised. Bolukbasi et al. (2016) conducted a study wherein they observed that a generative model, trained on an extensive dataset of internet text, demonstrated a tendency for gender bias in its language creation [16]

3) **Academic integrity issues**: Despite the numerous advantages within the realm of schooling, it is important to acknowledge that ChatGPT also carries several noteworthy risks. The potential misuse of ChatGPT, which has the ability to generate responses based on different prompts provided by users such as students, raises concerns regarding its ethical implications. Specifically, its utilisation may run counter to the principles of academic integrity. The utilisation of AI in generating responses or articles may potentially result in instances of plagiarism, unless explicit acknowledgment of its usage is provided (Kleebayoon & Wiwanitkit, 2023) or appropriate citation of sources is implemented (Thurzo et al., 2023). Failure to properly attribute the sources generated by chatbots in academic assignments may lead to instances of academic misconduct and dishonesty, which can have negative consequences for students' long-term academic achievements.

4) **Unfair learning assessment**: AI-powered systems like ChatGPT could bias student work assessment. Researchers suggest that ChatGPT and human textual outputs may be hard to distinguish (Cotton et al., 2023; Else, 2023; Shiri, 2023). According to Mhlanga (2023), ChatGPT's fast writing speed frightened teachers that students might outsource their work. Because of this, students who use this advanced tool to create assignments, homework, and projects score higher. In Taecharungroj (2023, p. 6), "one user reported students using ChatGPT to write a school essay and then taking credit for the A+ grade, while another found that ChatGPT passed a practise bar exam with a score of 70% (35/50)". To avoid biassed evaluation, this may harm students' feelings and educational institutions.

5) **Inaccurate information**: When using ChatGPT, students and teachers may encounter inaccurate information due to its limitations. ChatGPT can make factual errors, according to several researchers (Baidoo-Anu & Ansah, 2023; Gordijn & Have, 2023; Qadir, 2022; van Dis et al., 2023). This context has issues like fake articles and incorrect responses (Baidoo-Anu & Ansah, 2023). This material used by students or professors for professional purposes may cause misunderstandings. According to Qadir (2022), ChatGPT can provide inaccurate information due to user prompts or inputs, training data quality, and application limits. Educators and students must carefully evaluate an intelligent AI-based

application's responses. This examination ensures the information's efficacy and efficiency thus encourages prudent use [16,18-19].

5. Challenges
5.1 Challenges by Google
The obstacles pertaining to the subject under analysis are indicated in Figure 2. There are several noteworthy concerns associated with large digital platforms.
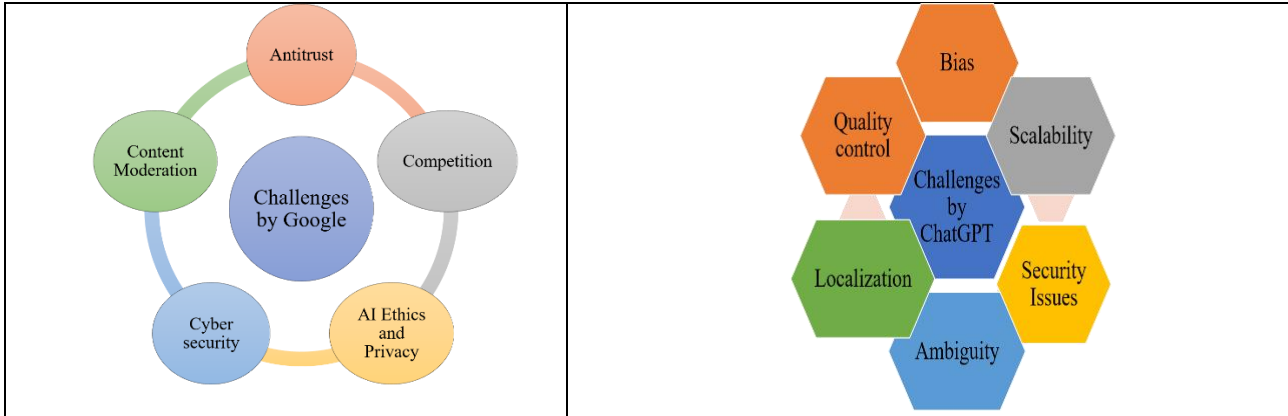

Fig. 2. Challenges by Google and ChatGPT.

The obstacles pertaining to the subject under analysis are indicated in Figure 2. There are several important concerns associated with large digital platforms. Firstly, the extensive scale required for these platforms often hinders the emergence of genuine competition. Secondly, these platforms have the ability to collect and utilise confidential information to gain competitive advantages or generate additional revenue. Thirdly, biases may arise within the platform, particularly when the supplier role and platform role are consolidated. Lastly, the dominant platform's revenues and user base can be utilised to expand both horizontally and vertically [15,20-23].

Conclusion
The very contextual and ephemeral idea of relevance is what Google is most worried about (Bili, 2016; Gillespie, 2014. To develop a critique repertoire, one must continuously, transdisciplinary, and cross-sectorally discuss ignorance and relevance and understand how algorithmic systems, corporate platforms, capitalist society, and daily living socially produce ignorance. Since the inaccuracy of the data could become a significant source of bias if it is not remedied, those concerns about accuracy were thought to be particularly pertinent [17]. The work has a number of limitations, all of which might be taken into account for the aim of improving future research, despite the fact that this study thoroughly examined ChatGPT user reactions. First, the quantity and range of the data obtained are not particularly vast due to the restricted time and resources that are accessible. Additional data are required to perform more in-depth analysis and to identify content. The possible societal effects of ChatGPT are too extensive to be contained in a single column. Perhaps this signals the beginning of the end for all white-collar knowledge work ends and widespread unemployment starts, as some commenters have suggested. The source is provided by Google; however, one may need to add their own creative touches to it. ChatGPT does not permit this because it displays the outcome immediately. By researching the history of Google and how it altered the world, as well as the thinking ability and rise of ChatGPT and its effects on the world, this technique permitted a timely synthesis and summary of Google and ChatGPT with their important conclusions. Fig 4 Google Trends demonstrates significant differences between ChatGPT and Google during the past year. Google prioritizes people despite not using AI in its search bar.
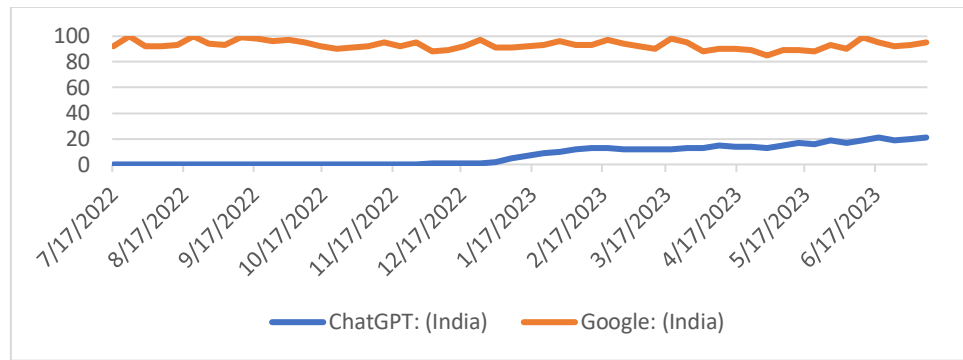
Fig. 4. shows worldwide trends on Google and ChatGPT.

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