

UTILITY OF CHATGPT

Business Applications of ChatGPT

By: Marshall Warner & Alexander Racher

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ChatGPT is a cutting-edge language model developed by OpenAI.

Since ChatGPT was released in November 2022, numerous AI language models and ChatGPT-like chatbots have taken the internet by storm and have demonstrated a wide range of applications for organization leaders and employees. These chatbots are cutting-edge language models that search and learn from their knowledge bases to provide the user a response to their prompt. Already, many users have successfully integrated ChatGPT and similar language models to streamline or enhance their work, such as debugging code or creating document templates. One reason ChatGPT is so versatile is because it has been able to create a sustainable query and response mechanism. ChatGPT interprets user queries and sorts through its knowledge base for an adopted and comprehensible response. In this article, we will address the benefits and limitations of ChatGPT across its four primary commonly used business cases: marketing, customer engagement, idea generation, and data summarization.

Category	Applications	Limitations
Marketing	<ul style="list-style-type: none"> Personalized recommendations and insights Subject line generation and testing 	<ul style="list-style-type: none"> Data privacy and security concerns about customer data Lack of understanding regarding cultural nuances and regional behaviors
Customer Engagement	<ul style="list-style-type: none"> 24/7 support Quick and comprehensive responses Strong writing ability 	<ul style="list-style-type: none"> Dataset limited to 2021 Limited ability to respond to highly technical or complex questions Ability to provide a convincing, yet incorrect response to customers
Idea Generation	<ul style="list-style-type: none"> Help generates ideas, concepts and perspectives Creation of a template or broad structure 	<ul style="list-style-type: none"> Pulls from existing work and lacks originality Generated ideas may not be relevant Concerns about ownership of work
Data Summarization	<ul style="list-style-type: none"> Rapid analysis of large pieces of data Can help extract key points and data 	<ul style="list-style-type: none"> May not provide the most relevant information Summaries or calculations can be incomplete or inaccurate Does not initially list its sources for information

Figure 1: Summary of Applications and Limitations of ChatGPT



Figure 2: ChatGPT's query and response mechanism

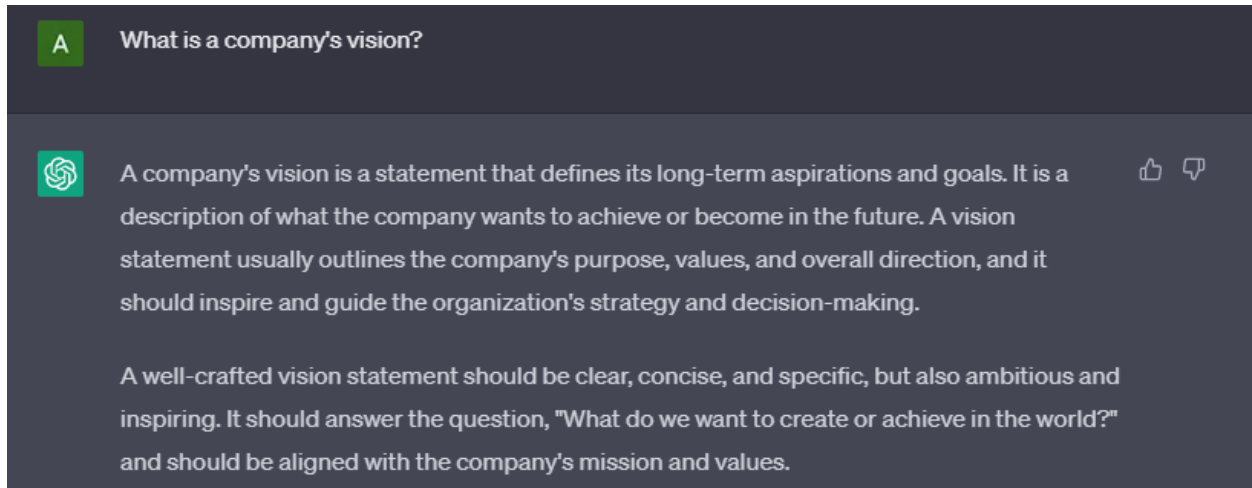


Figure 3: Sample Question for ChatGPT

Marketing

ChatGPT can be used to improve marketing efforts by providing personalized recommendations and insights. It can analyze customer data to understand preferences and behaviours and provide targeted recommendations for products or services. ChatGPT can take this even further by providing tailored messaging to individual customers. It can also provide insights through its recommendations and new ideas.

For instance, ChatGPT can use subject line generation to test different email headings to determine the greatest degree of engagement with a particular audience and assist in tailoring its messaging to specific groups.

However, such uses inherently run into data privacy and security concerns, as it requires access to customer data. Additionally, its training may bias ChatGPT against understanding cultural nuances or regional differences that could impact the marketing messaging.

Customer Engagement

Chatbots attached to corporate websites are not new, however, up until now they were very limited in their capabilities and often forward customers to human customer service agents. Conversely,

ChatGPT is incredibly powerful, can be externally integrated as an in-site tool through API, and can be used to engage with multiple customers simultaneously, providing information on products and offering quick and easy access to possible questions. This can lead to increased customer satisfaction and loyalty. Due to ChatGPT being a digital AI, it can operate 24/7; providing support and assistance beyond typical office hours.

However, ChatGPT may not be able to answer very complex or technical questions requiring specialized knowledge, and at the time of this article, its database is limited until the end of 2021.

If ChatGPT can be combined with other AI models to search an even broader knowledge base, this can greatly increase its viability in customer engagement and support. Combining the writing ability of ChatGPT with the capabilities and reference links that other search engines can provide would make for an incredible tool.

An additional weakness of ChatGPT is that it can occasionally provide an incorrect – yet very convincing response. Due to its query and response mechanism, the chatbot nearly always provides a response, even when it possesses incomplete or absent data.

Idea Generation

ChatGPT can also be used to help generate ideas for broad concepts, such as drafting new brand names or marketing initiatives. It can suggest new ideas, perspectives, and approaches, which can be especially useful for creative professionals when brainstorming new directions for their work. Often ChatGPT can be very helpful in creating a basic outline for an article, providing key points and a framework to build off.

However, the suggestions provided by ChatGPT may not always be original or truly innovative, as the model is trained on existing internet data (limited to events during or before 2021). Further, the generated ideas may not always be applicable or relevant, so it is important to carefully evaluate the results produced by ChatGPT and consider other sources of information and inspiration. Additionally, while this use suffers comparatively less from accuracy errors (as such works are by their nature open to interpretation), ideas created by ChatGPT may face concerns about ownership rights of the works.

Data Summarization

ChatGPT can assist in sorting through and analyzing sets of documents for summarization. Additionally, it can analyze large datasets of numbers to find key insights or numbers of interest.

The chatbot can help identify key information from a large number of articles or email chains, making it easier for users to parse the content more efficiently. Furthermore, more specific queries can even compare different sections for cross-referencing data, have the summarization evaluated by specific criteria, or extract certain elements such as people or organizations from the text. This can be especially useful for professionals who need to quickly understand large amounts of information, such as lawyers and researchers.

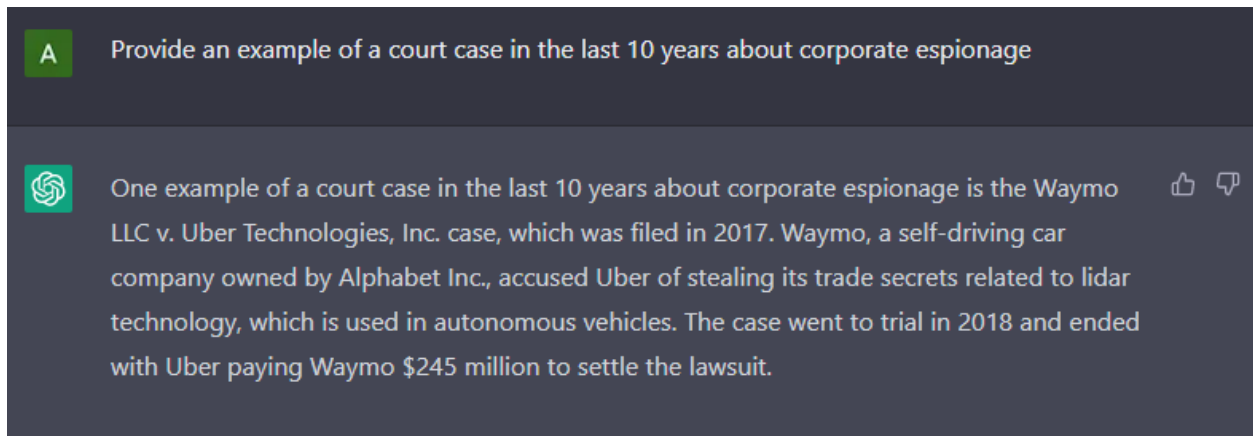


Figure 4: Sample Question for ChatGPT

However, ChatGPT may not always provide the most relevant information to the user, and the summaries it provides may not always be complete or fully accurate. It is suggested that ChatGPT should be used as a starting research tool, however, asking for backup sources and taking a deeper dive into them is vital before deriving a conclusion to avoid poor generalizations and outright mistakes.

Additionally, similar, yet distinctly different elements in a text (such as highly technical products with slight differences), might be clustered under a single label by ChatGPT, leading to misleading summarizations.



Figure 5: Framework of ChatGPT's Idea Generation

FINAL THOUGHTS

In conclusion, ChatGPT has a wide range of applications and shows promise in assisting businesses in marketing, customer engagement, idea generation, and data summarization, among other use cases. However, it is important to be aware of the limitations of ChatGPT and to carefully evaluate the results it produces to ensure they are accurate, relevant, and useful.

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The Black Box Institute

Toronto, Canada | London, U.K 

For more information, please contact:

Janet McLeod
P.O. Box 52025
Oakville Ontario, Canada
L6J 7N5
T: 416.862.5487

www.theblackboxinstitute.com

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