



ChatGPT For Marketing Communications: Friend or Foe?

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Abstract

The release of the ChatGPT chatbot in November 2022 received significant public attention. ChatGPT is an artificial intelligence (AI)-powered chatbot that allows users to simulate human-like conversations with AI. GPT stands for Generative Pre-trained Transformer, a language processing model developed by the American artificial intelligence company OpenAI. These innovations and technologies are changing business interests, revolutionizing marketing communications strategies, and enhancing the consumer experience. ChatGPT is a powerful tool for marketers, but we need to understand the risks and have realistic expectations. The author uses data collection techniques using literature studies and observations on ChatGPT about their potential and impact on marketing communications. Authors analyze brand information, data search, reference services, cataloging, content creation, and ethical considerations such as privacy and bias. As a result of this study, ChatGPT can provide and support creative content creation or copywriting, improve customer service, automate repetitive tasks, and support data analysis. However, humans are irreplaceable for examining outputs and creating marketing messages consistent with a company's strategy and brand vision. With good marketing strategies, ChatGPT can effectively enhance and support marketing processes.

Keywords: ChatGPT, OpenAI, Communication, Marketing, Content

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INTRODUCTION

OpenAI, a San Francisco, California-based artificial intelligence research startup, produced ChatGPT in 2020 and was formally introduced to the public in 2021. ChatGPT was built on GPT-3, the previous most profound generative language model (Kirmani, 2023). Although GPT-3 can recognize human language, training requires significant processing power (Liu et al., 2021). As a result, ChatGPT development began by considering ways to make the model more resource-efficient, allowing it to be accessed via several platforms, such as websites and applications. OpenAI is a research laboratory founded in 2015 (Brockman et al., 2016). This laboratory has achieved rapid progress in the creation of AI technologies and has made various machine-learning products available to the general public, including DALL-E and ChatGPT. (Devlin et al., 2019).

ChatGPT can comprehend and analyze user requests and then provide relevant responses in a manner that is strikingly comparable to that of human speech by employing its enormous data stores and excellent design. ChatGPT, in addition to its practical applications, represents a significant achievement in the disciplines of natural language processing and artificial intelligence due to its ability to produce human-like language and complete complex tasks (Brady D. Lund and Ting Wang, 2023).

ChatGPT OpenAI exploded its popularity throughout the world. This application has become a preferred application with the fastest growth in history. Chatbot has attracted attention because they can have natural conversations with users and answer various questions. The software's success has ruffled several relevant technology companies, such as Alphabet (Parent Google) and Microsoft, to launch new functions on Google and Bing.

ChatGPT is a new technology gaining popularity among the general population and academics. Today's technology is both highly innovative and groundbreaking. ChatGPT was designed by OpenAI, one of the most advanced artificial intelligence (AI) systems for deep learning to interpret human language.

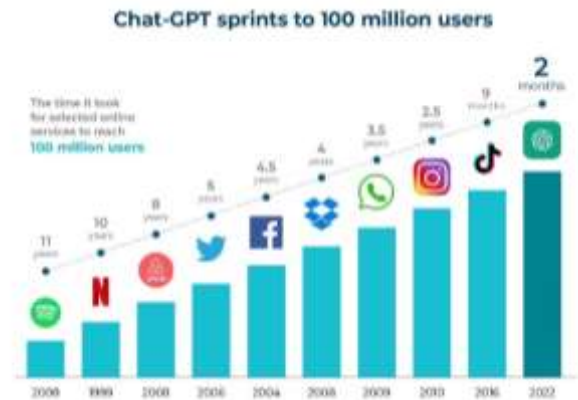
Figure 1. In just five days, Chat GPT attracted a million users.



Source: Statista, 2023

In just two months after its inception, in January 2023, ChatGPT is anticipated to have surpassed 100 million active monthly users, making it the fastest-growing consumer application in history. In January, ChatGPT received more than twice as many unique users (approximately 13 million) as in December 2022. The substantial excitement surrounding Chat GPT can be blamed for the platform's quick user base expansion. Many users were attracted to the site in a short time thanks to the anticipation these variables created. Many users were attracted to the site in a short time thanks to the anticipation these variables created.

Figure 2.



Source: Reuters, 2023

Since its inception in 2020, the global community has been highly responsive. However, problems and negative consequences are also anticipated. For instance, consider security and data privacy. ChatGPT technology can be used to make decisions, but it must be developed ethically, responsibly, and long-term.

The capacity of ChatGPT to recognize context, intent, emotion, and other factors enables users of different ages and backgrounds to interact easily in multiple languages without prior programming or computer science expertise or experience. It can be utilized for various purposes, including customer service, entertainment, education, finance, healthcare, and others (George et al., 2023). So it's no wonder technology companies compete to develop this technology in every country.

When the AI race heats up, large technology companies in China scramble to make their local version. Meanwhile, the authorities in China are currently said to limit the use of chatbots. Some popular Chinese applications delete access to ChatGPT. Although ChatGPT is not officially available in China, residents have used private networks and foreign telephone numbers to help them access the application. The search for ChatGPT on the Chinese platform can no longer be done and is replaced with a notification. This notification said they had been suspended for "violating relevant laws and regulations." In India, corporations such as TCS have indicated that generative AI platforms such as ChatGPT will produce "AI colleagues" rather than replace labor. Such tools will aid in increasing efficiency but will maintain the company's business models. (Outlook Publishing India, 2023).

We must establish the direction and method of combining AI and ChatGPT to provide the most significant benefits for the community's development of science and technology. The uniqueness of facts determines the integrity of ChatGPT output.

The validity of the rules is also affected by the learning model employed by AI professionals. As a result, it still requires human justification. ChatGPT is currently not connected to the internet. If this is the case, the ability to renew facts and rules will be faster and may even exceed human capabilities; this is something to keep an eye on.

In this paper, we explore the use of ChatGPT in marketing and determine whether it can assist brand marketers. The pros and cons that accompany ChatGPT are interesting to look at. Is this technology a friend to the company that owns the brand? Or, with its various limitations, is ChatGPT an opponent for a marketer?

METHOD

The authors use desk study and observation research methods to analyze the impact of ChatGPT on marketing in general and marketing communications in particular. The author conducted a literature study of various scientific journals, books, articles, opinion columns, reports, mass media, the internet, and survey results regarding the ChatGPT phenomenon, especially in digital marketing activity. The analysis produced is still limited to the level of desk study; more in-depth exploration is needed in further research to determine the use and impact of ChatGPT in various fields.

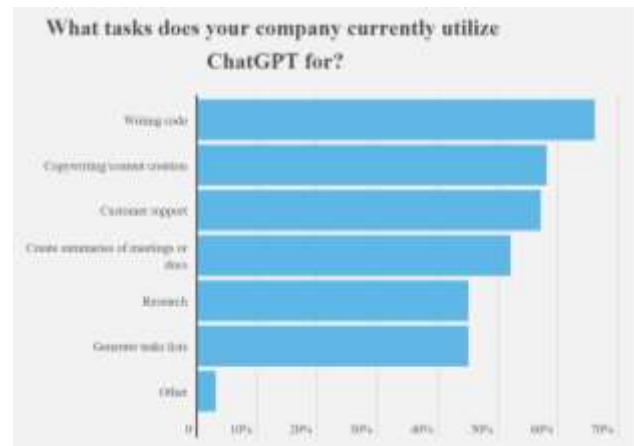
RESULT AND DISCUSSION

Early Response To ChatGPT: From Professional & Gen Z

Almost half of the US companies that use ChatGPT think the AI chatbot has replaced human employment. This is known from a recent survey released by the [resumebuilder.com](https://www.resumebuilder.com) work platform (Resume Building, 2023). They polled 1,000 corporate leaders in the United States who use or plan to utilize ChatGPT. As a result, nearly half of the surveyed organizations had begun to deploy a chatbot. In addition, 50% of US leaders polled said ChatGPT had replaced personnel in their organizations.

This new technology has recently become more prevalent in the workplace, and employees must consider how it may alter their present job responsibilities because the study indicates that the employer wishes to use ChatGPT to streamline some work activities. According to a poll conducted by [resumebuilders.com](https://www.resumebuilders.com), US organizations employ ChatGPT for various reasons. The majority is roughly 66 percent for programming code and 58 percent for copywriting and content creation. While 57 percent prefer customer service, 52 percent prefer a meeting and other document summaries. According to the research, most corporate leaders were impressed with ChatGPT's work. Approximately 55% claimed the quality of work provided by ChatGPT is 'amazing,' while 34% said 'very good.'

Figure 3. Companies use ChatGPT to assist in hiring, writing code, and more



Source: Resume Builder, 2023

One of the sophistications is that this chatbot can answer user questions in the same way as humans but in the form of automatic or automatic text. This GPT chat can give users answers when there are questions or orders to make something in text form. For example, ChatGPT can immediately provide a sentence with good word structure when a user asks for a happy birthday sentence. ChatGPT can also do other text-based things, such as explaining how an object works, describing something, making travel plans, writing essays, and many other things.

The latest, ChatGPT, is not only available in English but can already be in Indonesian. So, users in Indonesia can ask questions or commands in Indonesian, which will then receive answers in the same language. Apart from that, ChatGPT can also do the following:

1. Write code
2. Write articles or blog posts
3. Translate
4. Debugging
5. Write stories/poems
6. Recommend chords and lyrics

To make AI do one of these requests, the method is straightforward; you only need to type commands into the chatbot. AI generative will be a colleague. This will be a coworker, and the colleague will need time to comprehend the customer's context. In terms of the work context to be carried out, it will be industrial and customer-centric.

The rise of social media has also changed the information-seeking pattern in Gen Z. Now, Google Search has the potential to be replaced by TikTok and ChatGPT, according to a Morning Consult report. The percentage of Gen Z seeking information on TikTok is more significant than any other generation. The rate of Gen Z looking for top stories on Google Search is lower than that of different generations. Most of them choose TikTok (Kevin Tran, 2023).

Soon, the next generation will be more familiar with AI. The incorporation of AI technology has been carried out in various applications. Compared to search engines like google search, ChatGPT has several advantages. Suppose users have

to browse search results on the Google page about what they seek. In that case, ChatGPT will instead provide the information they are looking for directly with narration or language that seems easy for users to understand. Interestingly, ChatGPT will not display advertisements to its users, while search will usually be filled with several promotions.

Acceleration On Digital Marketing & E-Commerce

ChatGPT is a powerful new technology that has the potential to revolutionize digital marketing. This technology employs natural language processing (NLP) and machine learning algorithms to construct conversational AI chatbots that comprehend clients' wants, automatically assist them in solving problems, and even help them purchase items. By automating some areas of customer service and sales, businesses can save time while providing a tailored client experience. ChatGPT can also be used with other technologies to boost digital marketing initiatives, such as artificial intelligence (AI) or analytical tools.

ChatGPT in digital marketing provides several benefits to companies in this industry, including increased efficiency through automation, better customer engagement, more accurate data collection leading to better decision-making, cost savings through reduced labor costs for manual tasks such as answering questions or closing transactions, and greater scalability because it does not require additional human resources when expanding operations to new markets or launching global campaigns. Organizations in this industry can acquire insights they would not otherwise obtain if they did not invest much money in research and development, as is frequently the case, by integrating NLP approaches with artificial intelligence models trained on large data sets from many industries. They must create custom solutions that meet the organization's needs (George et al., 2023).

E-commerce is one business that can significantly benefit from ChatGPT. Customer service is critical to the success of e-commerce businesses; however, offering quality help via traditional techniques such as phone calls or emails may be costly and time-consuming. E-commerce enterprises may quickly reply to consumer inquiries by employing ChatGPT's automated chatbot capabilities, saving money while improving the overall customer experience. Using ChatGPT's advanced capabilities provides numerous benefits to digital marketing firms, allowing them to gain a competitive advantage while saving significant time and money spent on manual processes directly related to assuring good campaign results.

ChatGPT Capabilities and Limitations in Marketing Communication

ChatGPT uses transformer-based neural networks to process massive data so that AI may analyze it and generate answers. When a human user communicates with ChatGPT, the AI evaluates the human text and creates a

response based on its available data. The technology also considers context, syntax, and word associations and can generate responses that mimic human speech and writing.

Whether it's a question, an answer, an essay, or an entire conversation, ChatGPT is designed to process like a human. This technology also; answer follow-up questions, admit mistakes, challenge false assumptions, and deny inappropriate requests. With its human-like abilities, ChatGPT has countless uses.

As an AI language model, ChatGPT has various capabilities that can help assist marketing communication activities. Here are some ways in which ChatGPT can be used to support marketing efforts:

- **Content Generation:** ChatGPT can create engaging and relevant content for various marketing channels, such as social media posts, blog articles, email newsletters, and website copy. It can tailor the content to specific target audiences and help maintain a consistent brand voice.
- **Copywriting:** ChatGPT can assist in crafting compelling ad copies, product descriptions, and promotional materials. It can suggest attention-grabbing headlines, persuasive language, and call-to-action statements to optimize conversion rates.
- **Market Research:** ChatGPT can help marketers by providing valuable insights and data analysis. By processing large amounts of data, it can identify market trends, customer preferences, and competitor strategies, aiding in making informed decisions.
- **Social Media Management:** ChatGPT can monitor social media platforms and assist in responding to customer inquiries, comments, and direct messages. It can also help schedule posts, manage content calendars, and recommend relevant hashtags.
- **Personalization:** ChatGPT can assist in creating personalized marketing campaigns based on customer data and preferences. Marketers can increase engagement and foster customer loyalty by tailoring messages to individual customers.
- **Customer Support:** ChatGPT can provide basic customer support, answering frequently asked questions, troubleshooting common issues, and guiding customers through the buying process.
- **Email Marketing:** ChatGPT can help draft and optimize email marketing campaigns, ensuring they are engaging, relevant, and personalized. It can also assist in segmenting email lists and analyzing campaign performance.
- **A/B Testing:** ChatGPT can generate alternative versions for A/B testing, enabling marketers to compare different marketing messages and designs to identify the most effective strategies.
- **Language Translation:** ChatGPT can assist in translating marketing materials into different languages, enabling businesses to reach a more diverse audience.
- **SEO Optimization:** ChatGPT can help with SEO strategies by suggesting relevant keywords, optimizing meta descriptions, and assisting in creating content that aligns with search engine ranking criteria.

It's essential to note that while ChatGPT can be a valuable tool in marketing communication, human oversight, and creativity are still necessary to ensure the content aligns with the brand identity, complies with regulations, and maintains a high level of quality. As with any AI application, privacy and data security considerations must be considered when using ChatGPT for customer interactions and data processing.

There are so many ways a marketer can use ChatGPT. When integrated into a company's marketing tools, ChatGPT can bring the following benefits: Increased customer satisfaction, more accessible understanding of customers and target markets, data-driven decision-making, better brand awareness, increased sales, and more effective campaigns (Julian, 2023).

But there must still be a substitute for enthusiasm and creativity in human action. ChatGPT is one of the most advanced artificial intelligence voice programs but has limitations. ChatGPT cannot perform physical tasks such as; handling physical products, conducting personal market research, or showing personality in team meetings. ChatGPT is incredibly smart, but its database is the internet, and only some things you read online are accurate. Therefore, we do not guarantee 100% accuracy when using the tool. Marketers should always check the accuracy of their interactions with ChatGPT. There is no alternative to free will. ChatGPT can analyze massive quantities of data and provide calculated recommendations but cannot replace marketer intuition (ENTREPRENEUR, 2023).

The Weakness Of ChatGPT; The Reason Why It Can't Replace Human

ChatGPT has recently dominated the topic of artificial intelligence (AI) by providing extraordinary responses or answers as a chatbot. However, all things must have weaknesses. ChatGPT sometimes writes reasonable solutions, even though the truth is accurate or wrong. ChatGPT uses the reinforcement learning method from Human Feedback (RFHL) which could lead to error.

ChatGPT can also experience doubts about the prompt (command or question) entered several times in the presence of a paraphrase. For example, in a clause, ChatGPT can still respond. But by changing the composition of the clause, ChatGPT becomes unable to respond. In addition, ChatGPT programming models are often too wordy and use excessive phrases, as well as stating again that it is a program that OpenAI trains. This problem arises from the pain of extreme optimization and bias that long answers are preferred because they look comprehensive.

When the user enters the wrong query, a chatbot model ideally asks for clarification. However, ChatGPT responds by guessing what the actual user means. ChatGPT also sometimes still responds to dangerous instructions or shows discriminatory behavior even though there has been an attempt to make a model that rejects inappropriate requests.

Most people see an "amazing" first impression of ChatGPT. However, that did not make ChatGPT overall

human work, especially in writing. Because it uses continuously, users will see the weaknesses of ChatGPT. However, ChatGPT is a robot trained using a specific language model, so there may be a mistake. Here are some shortcomings in ChatGPT (Tempo.Co, 2023);

1. Do not understand the complexity of language
Humans spent years learning a language, understanding the point, and responding in return. However, they are only partially convinced that they have met the total capacity of that language. ChatGPT too, needs help to understand the complexity of language fully. This applies when ChatGPT receives a query or response. The more questions or commands entered, the harder ChatGPT training itself for the query and gives a better answer. However, the words presented are often challenging to understand.
2. Dependence on a conversation
When someone asks ChatGPT about certain things and knows they will get an absolute answer in return, they can be "misleading" ChatGPT by giving opposite statements. Then, when the person asks the same thing, ChatGPT will answer according to what they stated.
3. Not a professional "answer."
ChatGPT might give a fundamental answer so that the lay quickly understands it. But in the eyes of an expert regarding the question asked, they will see many "things" missing. ChatGPT answers cannot be compared to the ability of professional humans. For example, when a layperson asks ChatGPT to write code from a program, their response will be unique. However, in the eyes of a programmer, the ChatGPT codes can be nothing.
4. Writing based on trends
ChatGPT tends to respond in the form of something that many people like or based on trends at a certain period. Like social media, many things are only based on popularity, regardless of actual or wrong. ChatGPT may be the right tool to start an idea of a collection of texts given. However, remember that the response is a copy of other readers on the internet.
5. Copy the text from other sources
Still related to previous weaknesses, ChatGPT often displays similar text repeatedly. This may be strange because ChatGPT will not include the start of the answer unless requested in some cases. Likewise, when someone asks for ChatGPT to write something technical or non-technical, such as poetry, essays, or matters related to technology, this chatbot will pick up part of research journals published via the internet.
6. Have a bad evaluation
The initial part of the ChatGPT response will look reasonable, but the last lines of prose are of poor quality. ChatGPT needs to learn how to end prose, even like an amateur. The AI only gives articles with the structure as they are. The more often someone uses ChatGPT, the more they will begin to pay attention to all their shortcomings. ChatGPT can admit its mistakes, and it attracts the users' sympathy. Ultimately, ChatGPT may be used for certain basic things, but only some things.

Overall, since ChatGPT was available for trial by the public at the end of November 2022, many have been amazed

by its ability and sophistication in thinking and producing text. Using the advanced features, ChatGPT offers some advantages to digital marketing firms, giving them a competitive edge while reducing time and money spent on manual activities directly related to assuring good campaign results.

But even though many are amazed by its intelligence, ChatGPT is not perfect because it is not uncommon for ChatGPT to generate inaccurate and biased information. An unfavorable response to questions or very complex customer complaints will impact unsatisfactory customer service, damage the company's reputation, and even impact losing customers. Shallow company, contextual analysis data, will cause the company to be unable to determine good market segmentation. This will result in inaccurate target segmentation and harm the company's advertising planning. ChatGPT can store company databases to process those data as needed. However, this allows the company's essential data to leak. Technology is very vulnerable to this matter (CNNIndonesia, 2023).

But that is understandable and certainly very reasonable in the world of technology. This chatbot is also still in the testing phase, which requires a lot of input and evaluation for its development.

Regulatory Urgency For Artificial Intelligence

According to a new survey, more than three-quarters of Americans are at least somewhat concerned about the accuracy of results, prejudice, and misinformation in artificial intelligence-powered search engines — as well as data privacy and foreign intervention in AI systems in general (Consult, 2023).

Figure 4. AI-Related Concerns About Data Privacy, Foreign Influence, Misinformation



Source: Morning Consult, 2023

The Creator of ChatGPT, Sam Altman, acknowledged that the artificial intelligence technology (AI) he developed had a frightening potential. According to him, it is crucial to regulate the application of AI with precise regulations immediately. He believes that the transition to the world before and after AI can take place quickly. The same is the

case with the change of the era before and after the smartphone. While the community adapted to AI, Altman appealed to the importance of the rules about advanced technology.

We also need enough time to find out what to do in the future. Regulations will be critical, and take time to find out what is right. AI currently on the market, such as ChatGPT and other cloning, is not dangerous. However, along with its development, AI risks threatening many things.

At present, one of the challenges of AI is a society that needs to be more stable in communicating with chatbots. The accurate chatbot is only an engine. Recently, Microsoft's AI chatbot called Bing made an internet tantrum. The reason, chatbot gives strange advice like telling people to cheat. Bing itself also developed OpenAI, which developed ChatGPT. Chatbot Bing's peculiar behaviour was also experienced by a technical scientist named Marvin Von Hagen. The chatbot accused him of hacking Bing to get information about the technology. Von Hagen was also charged with threatening the security and privacy of the chatbot.

Microsoft also responded to the problem. The company explains that its chatbot is still one week old and hopes to find mistakes during this period. Microsoft hopes the system can make mistakes during this preview period, and responses are significant to help identify things that are not functioning so that we can learn and help models better.

CONCLUSION

Today, ChatGPT is a handy tool in business and marketing. ChatGPT can provide the following benefits when integrated with a company's marketing tools: Increased customer satisfaction, improved understanding of customers and target markets, data-driven decision-making, increased sales, and more effective advertising (engagement). ChatGPT, however, has significant limits compared to a marketer or branding specialist job. This AI needs more information about the market and target customers because it cannot do a complete contextual analysis for the organization. Although ChatGPT delivers fascinating ideas and a solid beginning point for branding chores, its output could be more general and used for only some branding. ChatGPT's weakness will significantly influence the company if monitoring or pulse control is poor. When deploying ChatGPT, businesses should be aware of potential obstacles and issues and their ethical and data obligations. It's worth noting that ChatGPT is continually improving and will be improved in the coming weeks and months. It's fascinating to see how the language learning model's applicability in branding and marketing evolves.

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Conflict of Interest Statement: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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