

THE CHATGPT REVOLUTION?

Will, and how, this new technology model help contact centers?

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WILL, AND HOW, THIS NEW TECHNOLOGY MODEL HELP CONTACT CENTERS?

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ILLUSTRATION PROVIDED BY ADOBE IMAGES

For the past several months the technology conversation has been dominated by the emergence of ChatGPT, first GPT-3, then GPT-3.5, and most recently (at presstime) GPT-4. But could it revolutionize the contact center industry? To get a handle on ChatGPT, its implications, benefits, challenges, and best practices for contact centers we had a virtual conversation recently with Nathan Hart, Senior Director of Technology, Solutioning & Data Analytics, The Northridge Group.

Q WHAT IS CHATGPT, SPECIFICALLY CHATGPT BASED ON GPT-4, AND WHAT LED TO ITS CREATION AND BY WHOM?

A: ChatGPT, short for Chat-based Generative Pre-trained Transformer, is a state-of-the-art artificial intelligence (AI)-powered natural language processing (NLP) model created by OpenAI, a company co-founded in 2015 to advance digital intelligence in the way it can interact with humans.

The most recent version of ChatGPT, which is based on GPT-4 and was released in March 2023, is OpenAI's latest and most advanced chatbot.



NATHAN HART

Open AI has developed what is known as open domain bots that can understand nearly any question related to the subject matter of their design – in this case conversations.

This technology equips ChatGPT to hold conversations about almost anything without any prior programming or configuration. It has immense promise not only for enabling people to talk with machines but also for improving customer service, providing emotional support, and revolutionizing key processes associated with other lines of work that are currently done solely by humans.

An advertisement graphic featuring a blue icon of a person with a headset sitting at a desk with a laptop. A speech bubble next to the icon contains the text: "TEAM SUBSCRIPTIONS AVAILABLE @ ContactCenterPipeline.com". To the right of the speech bubble is a circular logo with a stylized 'p'.

From our research, GPT-4 is more sophisticated than any of its predecessors:

- It can understand various types of information, including images with complex entity recognition, which is a significant improvement over its predecessor, GPT-3.5, which was limited to text-based input.
- It has other powerful upgrades such as integrated intent classifiers and specialized custom context preservation with every sentence.

In addition, GPT-4 is more resistant to manipulation. It has a greater capacity to remember information, allowing it to respond with more accurate and relevant responses. GPT-4 is also proficient in multiple languages, making it more accessible and user-friendly for people from different linguistic backgrounds.

Finally, GPT-4 enables users to customize their personalities to meet their specific needs, which enhances its adaptability and flexibility in different situations.

“...CHATGPT...HAS IMMENSE PROMISE NOT ONLY FOR ENABLING PEOPLE TO TALK WITH MACHINES BUT ALSO FOR IMPROVING CUSTOMER SERVICE...”

Q WHAT ARE THE KEY FEATURES OF CHATGPT BASED ON GPT-4?

A: ChatGPT provides a powerful set of features to enable the creation of Conversational AI applications. It leverages natural language understanding and machine learning technology.

The key features of ChatGPT include a wide variety of pre-trained models that can be used across various forms of networking channels. It also has numerous deep learning models, a configurable text generator refined on massive datasets, customization capabilities that enable fine-tuning to user-defined parameters, and easy integration with other Conversational AI platforms.

ChatGPT's state-of-the-art tools make it possible for users to easily construct sophisticated Conversational AI applications quickly and efficiently. GPT-4 boasts some crucial advancements over its predecessors. These include the ability to process images, a greater ability to avoid being tricked, a longer memory, more multilingual skills, and greater steerability.

Q HOW DOES CHATGPT, BASED ON GPT-4, WORK?

A: ChatGPT uses NLP techniques to analyze and understand text input and generate human-like responses. It was created using AI techniques called transfer and generative learning.

Transfer learning allows a pre-trained machine learning system to be adapted to another task. Generative learning allows for tasks like text generation, conversation, and question-answering, where the goal is to create new, original content that is coherent and contextually relevant.

The model was trained on massive data, allowing it to learn patterns and relationships in language, and generate coherent responses to a wide range of queries and topics. ChatGPT was designed to be highly versatile and assist with various tasks, from answering questions and providing recommendations to generating text and translations.

Users can interact with ChatGPT via text-based chat interfaces, such as messaging platforms or websites that offer chat functionality. The model uses machine learning algorithms to continuously improve its performance and accuracy based on user interactions and feedback.

But ChatGPT can do much more than just reply. For instance, it can provide proactive suggestions, understand past context, and proactively suggest answers. It can also be easily integrated via APIs with popular apps such as Slack, Instacart, Snapchat, or Facebook Messenger for easy access across multiple platforms. ChatGPT utilizes deep learning algorithms to learn from every conversation it has and become smarter over time.

BENEFITS, CHALLENGES, AND INTERACTION TYPES

Q WHAT ARE THE BENEFITS OF GPT-4 AND ALSO ITS CHALLENGES?

A: ChatGPT, based on GPT-4, can process conversations on a human-like level. In addition to its impressive accuracy over traditional methods of NLP, GPT-4 brings several advantages to conversations, such as decreased time investments, heightened interactivity and reactions, and increased speed and fluency.

However, GPT-4 poses some challenges regarding security and privacy risks. Because GPT-4 relies on trained databases to generate responses, confidential information can be accessed or misused without the knowledge of the user or the provider.

Therefore, when thinking about testing and implementing GPT-4 within a contact center, users, such as data security and infrastructure teams, must exercise caution by properly configuring their datasets and mitigating the risks to any networks they use with strong authentication practices.

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Despite these challenges, careful handling of GPT-4 can unlock tremendous value for both users and providers by improving efficiency and increasing the effectiveness of communication strategies.

Q COMPARE AND CONTRAST CHATGPT WITH OTHER CUSTOMER AND ALSO INTERNAL EMPLOYEE CHAT TECHNOLOGIES. DOES IT SUPPLEMENT OR SUPPLANT OTHER CHAT TOOLS?

A: ChatGPT stands out from other available tools. Its features make it more efficient than traditional customer service messaging platforms.

For example, GPT-4's NLP enables it to better understand customer needs and respond quickly to requests. Additionally, its capacity for personalized conversations allows companies to provide more targeted customer care in real-time. Many existing chat technologies still rely on simple scripts and pre-programmed generic responses, which do not add value to the conversation.

GPT-4 is uniquely positioned to supplement or even supplant certain aspects of existing internal chat technologies while improving overall efficiency. This makes it a highly valuable tool for customers and employees alike (see chart).

Q WHAT TYPES OF CUSTOMER INTERACTIONS: B2B OR B2C, WILL CHATGPT PROVIDE THE MOST BENEFITS OR CONVERSELY THE LEAST AND WHY?

A: I do not think there will be a huge difference in the way ChatGPT will handle B2B and B2C customer interactions, so the benefits it brings to contact center interactions for both customer types will be similar.

GPT-4's responses will be highly dependent on the type of interactions it is exposed to. It will be good at responding to simple interactions but will be less capable of offering appropriate responses to emotional issues that require the more nuanced understanding that only human agents can provide.

Both B2B and B2C contact centers handle a full range of simple and complex issues, so I anticipate that contact center interactions for both customer types will benefit equally from GPT-4.

Q DO YOU THINK, THEN, THAT CHATGPT/GPT-4 COULD REVOLUTIONIZE THE CONTACT CENTER INDUSTRY, GIVEN THE CHALLENGES LIKE ENSURING A HIGH QUALITY COMPETITIVE CX AND COPING WITH STAFFING SHORTAGES? OR DO YOU SEE IT MORE LIKE AN EVOLUTIONARY MOVE?

A: GPT-4 has the capacity to revolutionize the contact center industry, yet reaching that goal will be a slow and evolutionary process. Its potential to improve customer experience (CX) by automating certain customer interactions, helping with staffing shortages, and providing multilingual, round-the-clock contact center support – all at reduced costs, is nothing less than revolutionary.

However, before contact center agents can relinquish the handling of routine tasks to GPT-4 so they can become more efficient and focus on more complex interactions, various challenges must be resolved, certain risks must be mitigated, and a new level of trust in GPT-4's responses will be necessary. This will be an evolutionary process for the contact center industry which could take up to two – five years.

GPT-4 HAS THE CAPACITY TO REVOLUTIONIZE THE CONTACT CENTER INDUSTRY, YET REACHING THAT GOAL WILL BE A SLOW AND EVOLUTIONARY PROCESS.

AVAILABILITY AND SUPPLIERS

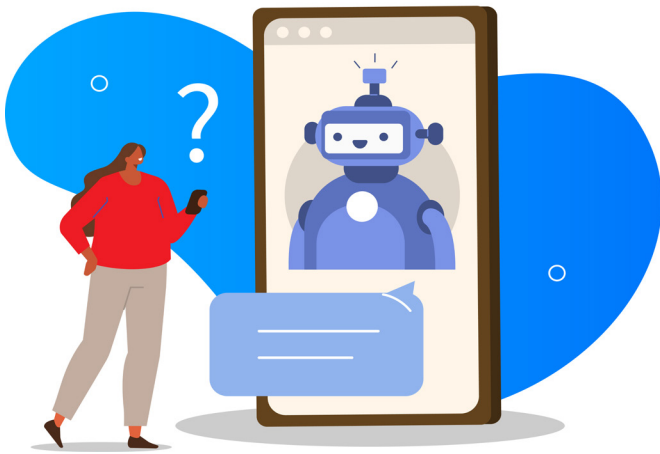
Q WHEN DO YOU EXPECT CHATGPT/GPT-4 TO BE READY FOR PRIME TIME? WHAT NEEDS TO BE DONE AT THIS STAGE TO MAKE IT USABLE IN THE CONTACT CENTER?

A: ChatGPT was initially developed as a high-end natural language processor specifically designed to be used in contact centers.

Currently, the technology is still undergoing beta testing and evaluation, as developers work towards making it ready for prime-time use. My estimation is that ChatGPT technology will be appropriate for contact centers within the next two to five years, but it will require extensive supervision and act as a supplement to human associates.

To make ChatGPT optimally functional within customer service operations, developers need to invest further in increasing the accuracy of the AI's natural language generation capabilities and improving the overall quality of its simulated conversational interaction with customers. They also need to optimize its classification and object recognition performance.





Developers should test ChatGPT in a sandbox environment that replicates a contact center environment before deploying it in contact centers. By enhancing all these aspects of ChatGPT's functionality, developers can make the technology ready for use in real-world contact center operations and provide novel opportunities for companies to interact more effectively with customers.

The scenario is like that of driverless cars. The technology for providing AI-powered accurate issue resolution will be available, but some interactions will lack the nuance needed to make customers comfortable. Customers will always appreciate the human touch and the empathy that human associates are trained to provide.

Q WHERE ARE THE CONTACT CENTER INDUSTRY VENDORS ON CHATGPT?

A: ChatGPT is fast out of the gate and is rapidly evolving. So, what you read at this moment could change in the next instance. But here is what we have gathered, seen, and analyzed to date for our clients.

NICE

NICE appears to be the first contact center industry vendor to move forward with this technology, announcing on January 26, 2023, that it will integrate its CXone Expert with the generative modeling used in ChatGPT. CXone Expert is a cloud-native customer service knowledge management solution that delivers answers for resolving customer issues.

The goal of integrating NICE CXone Expert with OpenAI's generative modeling is to ensure that the resulting answers to customer self-service inquiries are not only quick and highly accurate but that they are also semantically constructed in a human-friendly manner that is easy to understand.

The technology should immediately route customers to the right answers without the need for transfers or callbacks, creating self-service experiences that feel human without engaging associates.

...THE TECHNOLOGY IS STILL UNDERGOING BETA TESTING AND EVALUATION, AS DEVELOPERS WORK TOWARDS MAKING IT READY FOR PRIME-TIME USE.

SALESFORCE

Salesforce has expanded its contact center platform by introducing Einstein GPT, a generative AI CRM technology, that delivers AI-created content across sales, service, marketing, commerce, and IT interactions, at a hyper-scale.

With Einstein GPT, customers can connect data to OpenAI's advanced AI models and use natural-language prompts directly within their Salesforce CRM to generate content that continuously adapts to changing customer information and needs in real-time.

THE TECHNOLOGY FOR PROVIDING AI-POWERED ACCURATE ISSUE RESOLUTION WILL BE AVAILABLE, BUT SOME INTERACTIONS WILL LACK THE NUANCE NEEDED TO MAKE CUSTOMERS COMFORTABLE.

FIVE9

Five9, a provider of cloud contact center software, has introduced two new products that use GPT 3.5 from OpenAI.

The first product, AI Insights, combines ChatGPT with real-time transcription to automatically interpret and categorize customer conversations. By grouping contacts by intent or other traits, contact centers can identify opportunities to improve automation and other processes.

The second product, "AI Summaries", auto-summarizes interaction transcripts and publishes them in the CRM to streamline post-contact processing for agents.

According to Mike Burkland, Chairman and CEO of Five9, "these new AI-powered offerings demonstrate Five9's commitment to continuous AI innovation, which is critical to the company's growth. The company's AI and automation portfolio includes speech analytics, workflow automation, and IVA solutions."

ChatGPT is expected to play a significant role in fueling further AI innovation at Five9. Its large language models offer quick wins in custom data charting, trending, and routing, as well as potential game-changing opportunities.

GENESYS

Genesys is currently beta-testing generative AI on its Cloud CX platform for various use cases. These include new agent-assist capabilities, such as summarization, which provides automatically generated summaries for agents to accelerate their work during wrap-up time following a voice call or a digital interaction.

Other companies will likely follow suit but are proceeding with caution. GPT-4's knowledge base and language processing capabilities far outpace other technology on the market, but it still has limitations. Its responses, while remarkably accurate and convincingly human, are based on the dataset it is trained on, and they are not necessarily based on the truth or the latest information.

COMPARISON OF TECHNOLOGIES

CCAAS PROVIDER	ABOUT	KEY FEATURES	COMPARE AND CONTRAST TO CHAT GPT	DOES CHATGPT SUPPLEMENT OR SUPPLANT THIS CHAT TOOL?
Five9	Five9 is an all-in-one cloud contact center solution for inbound, outbound, blended, and omnichannel contact centers worldwide.	Powered by Practical AI, Five9 enables agents to provide customer experiences across phone, email, chat, mobile, social, and more.	AI Insights combines ChatGPT-3 with real-time transcription to automatically interpret customer conversations and cluster them into categories. In grouping contacts together – by intent or various other traits – contact centers may quickly identify opportunities for automation and process improvement. AI Summaries supplements its agent-assist solutions by auto-summarizing interaction transcripts and publishing them in the CRM.	Supplements
NICE CXone	NICE inContact is cloud-based call center software that helps businesses to maximize the quality of leads and minimize the cost of client interaction. The solution comprises many features required to process inbound support requests and helps businesses connect with their customers via multiple channels such as inbound/outbound voice calls, email, voicemail, chat, social media, and more.	NICE inContact provides call routing features, including IVR, CTI, and ACD. In addition, it offers workforce optimization capabilities, such as e-learning, hiring, and workforce management. Its blended predictive dialer tool enables call blending, message lay-down dialing, call suppression, and auto-dialer for blended call centers. The solution integrates easily with popular CRM applications like Salesforce and Oracle Service Cloud.	CXone Expert integrates with the generative modeling used in ChatGPT. CXone Expert is a cloud-native customer service knowledge management solution that delivers answers for resolving customer issues. The goal of integrating Nice's CXone Expert with OpenAI's generative modeling is to ensure that the resulting answers to customer self-service inquiries are not only quick and highly accurate but that they are also semantically constructed in a human-friendly manner that is easy to understand. The technology should immediately route customers to the right answers without the need for transfers or callbacks, creating self-service experiences that feel human without engaging associates.	Supplements
Genesys Cloud CX	Genesys Cloud CX™ cloud contact center software transforms the customer experience.	Cloud CX connects data across teams, tools, and interactions so actionable insights for addressing customer problems are available on any channel, at any moment, beyond just the call center. Genesys Cloud CX is trusted by thousands of small, medium, and large enterprises and is recognized as an industry leader across the globe.	Genesys is currently beta-testing generative AI on its Cloud CX™ platform for various use cases, including new agent-assist capabilities, such as summarization, which provides automatically generated summaries for agents to accelerate their work during wrap-up time following a voice call or a digital interaction. Genesys is working on additional capabilities to add to its portfolio in the coming months, including smart replies, auto-tagging charts and articles, and machine translation, among others.	Supplements
Salesforce's Einstein GPT	Generative AI CRM technology that delivers AI-created content across sales, service, marketing, commerce, and IT interactions, at a hyper-scale. Transforms every customer experience with generative AI.	Einstein GPT will infuse Salesforce's proprietary AI models with generative AI technology from an ecosystem of partners and real-time data from the Salesforce Data Cloud which ingests, harmonizes, and unifies all of a company's customer data. Einstein GPT will integrate with OpenAI to provide out-of-the-box generative AI capabilities.	With Einstein GPT, customers can connect data to OpenAI's advanced AI models out of the box or choose their own external model and use natural-language prompts directly within their Salesforce CRM to generate content that continuously adapts to changing customer information and needs in real-time.	Supplements

Source: The Northridge Group

While contact center executives are excited about the possibilities of deploying this advanced level of AI for their chatbot solutions, some are concerned that overreliance on such AI models could result in their contact centers unknowingly delivering incorrect information to customers.

Many companies are working on ways to ensure the responsible use of this technology. In some cases, this may mean tasking contact center associates with monitoring where the technology gets things wrong and then feeding it new information.

RECOMMENDATIONS

Q WHAT IS INVOLVED WITH INSTALLING GPT-4 IN THE CONTACT CENTER?

A: Installing GPT-4 in the contact center requires a clear strategy. To get started, users will need to decide which channels they want to incorporate – including any websites or apps attached to the existing customer service infrastructure.

After this, data integration via API is necessary so the agents can query information and offer the most efficient solutions.

Finally, training agents on GPT-4 is essential for maximizing the tool's potential to learn different conversational intents and extract key customer information. With a well-thought-out installation process, contact centers can benefit from a much-improved CX with AI-driven solutions.

In summary, to incorporate ChatGPT into a contact center, businesses need to choose a provider that meets their needs, set up the chatbot, integrate it with other channels and data sources, train the chatbot and agents, and monitor and optimize its performance continually.

Q WHAT ARE YOUR RECOMMENDATIONS TO CUSTOMER CONTACT ORGANIZATIONS THAT ARE INTERESTED IN DEPLOYING CHATGPT SOLUTIONS?

A: Deploying ChatGPT solutions can be a great way for customer contact organizations to streamline the CX and reduce response times.

To ensure successful deployment, I would recommend setting up a team dedicated to learning the ins and outs of chatbot conversations, so that they can design tactics to guide the conversation when needed and create an exemplary user experience.

If possible, customer contact organizations should consider starting with the customer segment that is most receptive to adopting new technology. Any issues that are identified can then be resolved before expanding the deployment to additional customer segments.


Additionally, organizations should define clear objectives and success metrics early on so that they know precisely what results are expected from the chatbot. Finally, to ensure user loyalty, organizations should routinely review and update any content used within their bots to make sure it is accurate and up to date with any feature changes or other new developments.

IF POSSIBLE, CUSTOMER CONTACT ORGANIZATIONS SHOULD CONSIDER STARTING WITH THE CUSTOMER SEGMENT THAT IS MOST RECEPTIVE TO ADOPTING NEW TECHNOLOGY.

ChatGPT based on GPT-4 is a powerful and innovative technology that has the potential to revolutionize customer service and bring truly natural, conversational AI experiences to customer contact organizations.

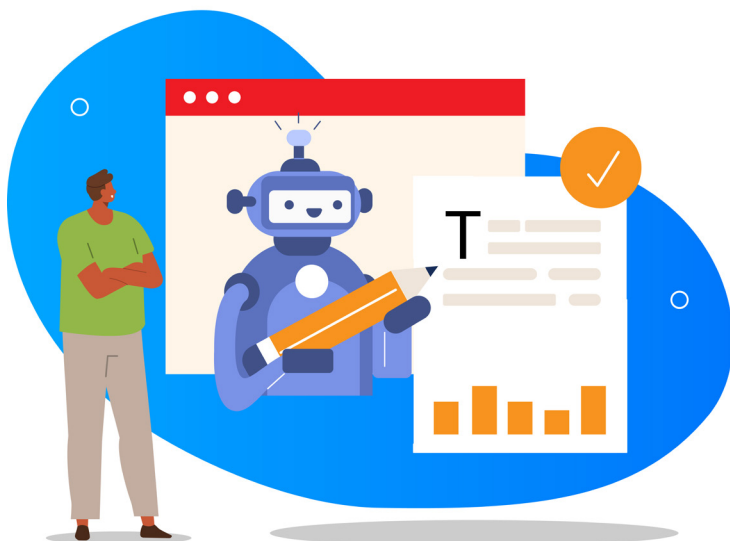
Created by top researchers in the field of AI, GPT-4 provides a wide range of features and plug-in options to make it easier for contact centers to incorporate it into their existing chat tools or other channels. Security measures must be in place for companies to use this technology safely and efficiently.

Although certain aspects of the technology need improvement before GPT-4 is ready for prime time, and some vendors have yet to start developing offerings, many leaders in the contact center industry are already exploring how they can leverage GPT-4 solutions.

Companies that are interested in this type of technology, should therefore take careful precautionary steps before deploying ChatGPT-like solutions, like by working with an experienced objective partner. 



Brendan Read is Editor of Contact Center Pipeline. He has been covering and working in customer service and sales and for contact center companies for most of his career. Brendan has edited and written for leading industry publications and has been an industry analyst. He also has authored and co-authored books on contact center design, customer support, and working from home. Brendan can be reached at brendan@contactcenterpipeline.com.



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