Smarter AI with (Chat)GPT

How to leverage generative AI for business in 2023

About this guide

ChatGPT had set a record as the fastest app to reach [100 million active users](#), reaching that milestone in two months. It reached over 173 million users in April 2023.

And it's not surprising – given the impressive ChatGPT text generation capabilities. Open AI, the brains behind ChatGPT, started a whole revolution within the AI industry.

> Any chatbot, even ChatGPT, requires training to process human language, understand the intent, and then use it to reply accordingly. **For ChatGPT, the training has already been done** – to some extent. And you can use it to your own advantage.

This guide exists to explain what's GPT, why businesses rush into integrating it, and how to use it now following best security and use case practices.
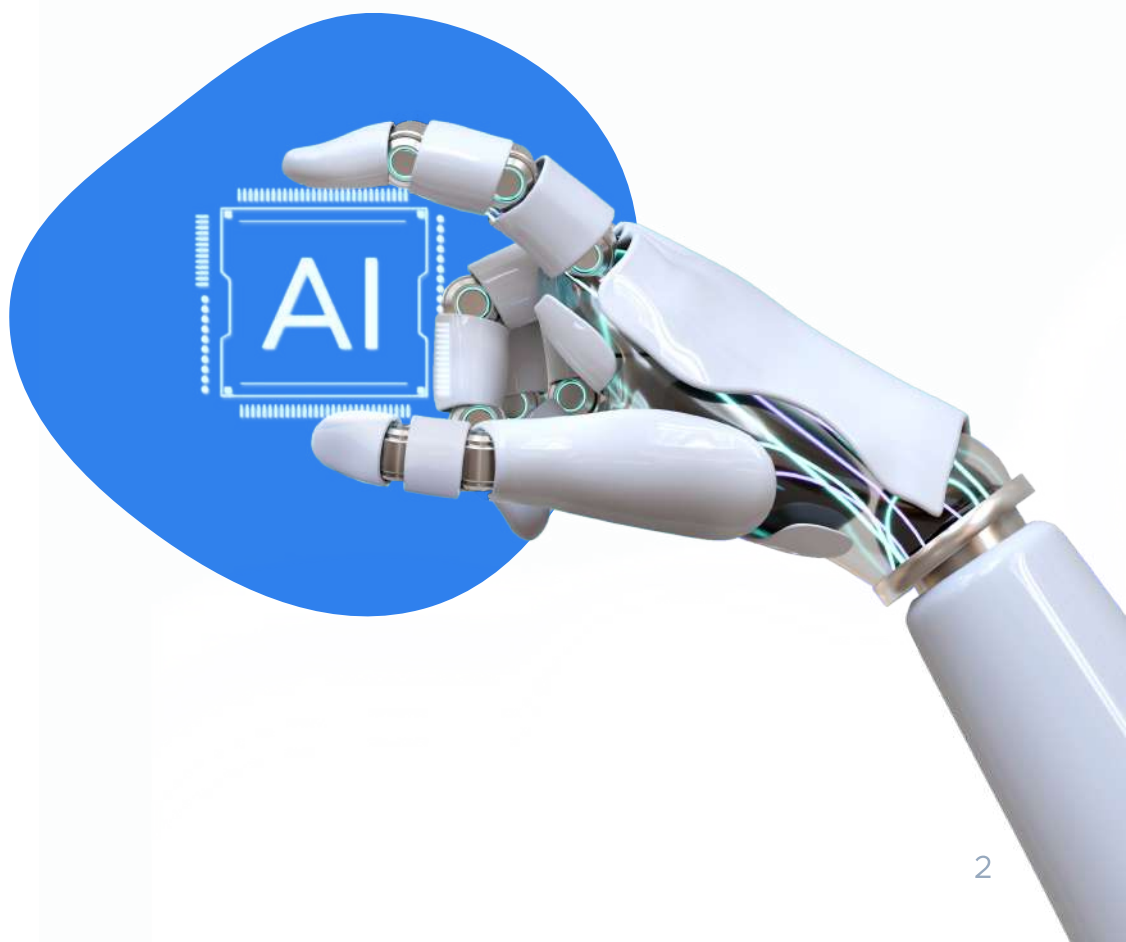
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What is (Chat)GPT and generative AI

Generative artificial intelligence or generative AI is an artificial intelligence system capable of generating text, images, or other media in response to prompts. Generative AI models learn the patterns and structure of their input training data and then generate new data with similar characteristics.

Generative AI starts with a **prompt** that could be in the form of text, an image, a video, or any input that the AI system can process. AI algorithms then return new content in response to the prompt. Content can include essays, solutions to problems, or realistic fakes created from pictures or audio of a person.

Generative AI is not a new concept: it was introduced in the 1960s. But it wasn't until recently that generative AI created genuinely authentic images, videos, and audio that impressed the audience with their responsiveness and highly convincing outputs.

What is (Chat)GPT?

ChatGPT is a chatbot developed based on the GPT language model (Generative Pre-Trained Tranformer). It's available via the Open AI website and is used to get users' feedback and learn about its strengths and weaknesses. During the research preview, usage of ChatGPT is free.

GPT is a language model trained on a massive amount of data (millions and millions of content taken from the Internet up to 2019) that acts as an internal content repository. It "powers" ChatGPT and can be accessed via API. The most recent version is GPT-4 (able to process images and voice inputs).

GPT uses a process called "transformer" architecture:
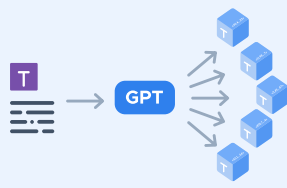
The input text (prompt) is passed through multiple layers of neural networks to learn the patterns and relationships between words

These networks generate coherent and fluent responses that follow prompt conditions

The final outputs are compared to the original input; the most accurate ones are given out to the user

In simple words, ChatGPT takes the prompt and runs through its "back" data to find patterns that will help to generate a unique, but at the same time, highly relevant response to a prompt.

So far, the GPT model has shown great performance for these tasks:

Text generation

Text summarization

Question answering

Text classification

Language translation

Code generation

For example, this way, a GPT-powered chatbot (a chatbot connected to this model) can generate human-like answers and engage in conversations on various topics **without** time-consuming training.

Read more about GPT:

ChatGPT: How Customer Service Can Benefit From a GPT-3 Chatbot

Read article

ChatGPT and GPT-4 for Business: How to Customize and Use in 2023?

Read article

What (Chat)GPT can do for businesses

With these impressive capabilities, the GPT didn't go unnoticed by a number of companies.

Firstly, ChatGPT is currently free and open for use by anyone. With recently introduced plugins (available via ChatGPT Plus) and the mobile app, ChatGPT has become even more accessible and user-friendly. Content managers and even developers can use it daily to optimize their work.

Secondly, Open AI offers API for ChatGPT and GPT models: the most recent one is GPT-4. It's capable of processing images in addition to text and has been "tuned" for a better understanding of prompts

Since this guide is about business use cases, we will focus on the API-based ones. If you're curious about specific ChatGPT use cases, you can find them here.

Overall, the GPT-4 deserves attention for the following reasons:

The *smartest* Open AI LLM

GPT-4 surpasses ChatGPT in advanced problem-solving capabilities

Astonishing intent recognition

NLU tests hit 85.5% accuracy results in English

Used by the world's largest companies

Adopted by Microsoft, Salesforce, and Intercom

Broad use case potential

GPT-4 is the largest LLM able to process text and images

What is the broad use case potential?

A number of companies have already integrated GPT-4.

Microsoft

Microsoft confirmed that versions of Bing using GPT had, in fact, been using GPT-4 before its official release. On March 17, 2023, Microsoft announced further integration of GPT-4 into its products, revealing Microsoft 365 Copilot, "embedded in the apps millions of people use daily: Word, Excel, PowerPoint, Outlook, Teams, and more". Basically, GPT is now built-in in the frequently used tools in the workplace.

Snap Inc.

Snap Inc., introduced My AI for Snapchat+. My AI offers Snapchatters a friendly, customizable chatbot at their fingertips that offers recommendations, and can even write a haiku for friends in seconds. Snapchat, where communication and messaging is a daily behavior, has 750 million monthly Snapchatters.

duolingo

Duolingo built GPT-4 into a new language learning subscription tier. The team is creating a GPT-4-powered system that'll retrieve info from company documents and serve it to financial analysts.

stripe

Stripe uses GPT-4 to scan business websites and deliver a summary to customer support staff.
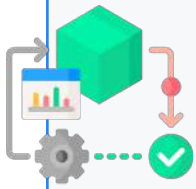
How did they do this so fast?
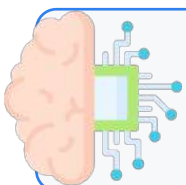
GPT model is already powered by billions of data. This data helps to **train AI much faster** by tuning it with well-described prompts.
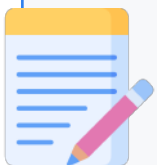
The model **generates human-like text** with unprecedented quality. It makes up a powerful conversational interface for executing a number of tasks. It's like Siri – but any company decides what it will do for them.

Via the API, it's possible to **train a chatbot on specific data**, like Knowledge Base. This way, the GPT-4 can be customized and will refer to the company's data to generate a response. A response could be a message, a link to a resource, a newly generated content – the possibilities are endless.

This way, a GPT-powered solution can be built in weeks instead of months – with high customization and low optimization efforts.

For example, a very powerful implication of a GPT-4 assistant is an **internal chatbot**. GPT-4 can be connected to an internal database and find the information for employees in a matter of seconds. All of that – via a conversational interface, so if a user asks information about some specific question, GPT will generate it from a few available resources (that were connected to it) and provide a link to the quoted materials.

Another powerful use case is in a **customer service environment**. Powering existing chatbots or creating new ones has become simpler – we will cover these examples in the next section.

Some of the other use cases include:

Answer questions in chat	Generate unique content	Analyze and structure inputs
Search	Summarize text	

How to power AI chatbots with GPT

Using the benefits of GPT – like the unique ability to generate human-like text – it's possible to power existing customer service chatbots with better language understanding and faster training.

For example, here is how a regular chatbot (as we know it) and a GPT-powered chatbot differ from case to case.

Language understanding

First experiments have shown 85% intent recognition potential with GPT

❌ Without GPT

Chatbots trained on older engines like Dialogflow require intents and entities to understand user queries. It also requires consistent training by conversational designers to detect intents correctly.

✅ With GPT

GPT-powered chatbots don't require this setup and can understand natural language queries without additional configuration. This makes it easier and quicker to set up a GPT-powered chatbot.

Contextual understanding

GPT continues conversation even when "unusual" questions appear

❌ Without GPT

Conversational designers make bot messages sound "real" and work on improving chatbot understanding. Yet, "older" chatbots often have issues understanding users. When such a situation happens, the user can be navigated to a live agent to resolve the issue.

✅ With GPT

GPT-powered chatbots can understand the context of the conversation, making them better at handling complex conversations. GPT can analyze the entire conversation and provide appropriate responses, making the conversation more natural and seamless.

Chatbot training

Depending on the complexity, GPT can speed up the training time up to x5 times

❌ Without GPT

Let's say we need to connect our own source for a chatbot to refer to, like a knowledge base. A traditional chatbot requires profound training to bring up accurate data in responses that correlate with the user's initial request.

✅ With GPT

By incorporating knowledge graph data into GPT, the model brings a wealth of background information and context. This way, the model generates responses with a greater depth of understanding and context – without involving humans.

This sounds fantastic, isn't it? GPT has great potential for customer service chatbots. Although, it can't replace the "traditional" approach to AI-powered chatbots yet: additional tuning, analysis of use cases, and overall conversational experience are still under the competence of conversational AI designers.

BUT: conversational AI and generative AI could work together!

For example, GPT-4 could **take over the fallback intent** when the chatbot fails to understand the user. Another example is **intent recognition** – in other words, understanding what the user wants. This will help a chatbot give a better response.

Botscrew's approach to GPT

With over seven years in chatbot development, BotsCrew has been at the forefront of the latest trends and technologies. Since the GPT release in November 2022, we have built several GPT solutions **– so you don't have to develop them yourself.**

A few well-tread ways to implement GPT at low risk include:

GPT Design Workshop

Not sure how to use GPT-4? Do you need it at all? We created a GPT Design Workshop to help you find out. Learn, map out ideas, and test a prototype to form a vision.

Learn more

Secure Generative AI Solutions

How to implement GPT and other LLMs into business? Learn how we leverage Generative AI with predictable results and up to security standards.

Learn more

Free tool: Train GPT-4 on your website

Try now

Current GPT-4 limitations and how to deal with them

The main GPT limitations are the following:

01

Hallucinations

It is true ChatGPT can occasionally generate fake or provide not correct information. Since ChatGPT used information from the web until 2021, it lacks some up-to-date information and facts. It can also generate very convincing but fake facts just to answer the question.

How to overcome it:

Just recently, Open AI introduced plugins which allowed ChatGPT to browse the Internet. Also, when using the API, it's possible to customize the model with existing company data, like Knowledge Base. This way, the chatbot will refer to this source of information for answers.

02

Security

Multiple security concerns have been raised regarding ChatGPT.

Can ChatGPT store your data? Open AI has created ChatGPT to collect information and tune the GPT model for better understanding. So yes, it's possible for ChatGPT to store your data. It's a bad idea to share sensitive information to ChatGPT.

It's mentioned in Open AI's privacy policy:

> " User Content: When you use our Services, we may collect Personal Information that is included in the input, file uploads, or feedback that you provide to our Services ("Content").

How to overcome it:

However, when using the GPT model via API, the risks of information leaks are less prominent. OpenAI's Moderation API can help reduce the frequency of unsafe content in completions. Although, security measures can vary from case to case: you could consider other practices like Microsoft Azure services.

Microsoft Azure OpenAI Service offers enterprise security and compliance controls associated with other Microsoft products. Azure OpenAI Service empowers developers to build cutting-edge AI applications through direct access to OpenAI models backed by Azure's trusted, enterprise-grade capabilities and AI-optimized infrastructure and tools.

In need of expert guidance for GPT security or solution?

Contact us to learn more about GPT and get any questions answered!

Learn more about us through social media or ask a chatbot

botscrew.com   Linkedin   Instagram   **Ask our chatbot!**

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