How to Build a Smart Chatbot
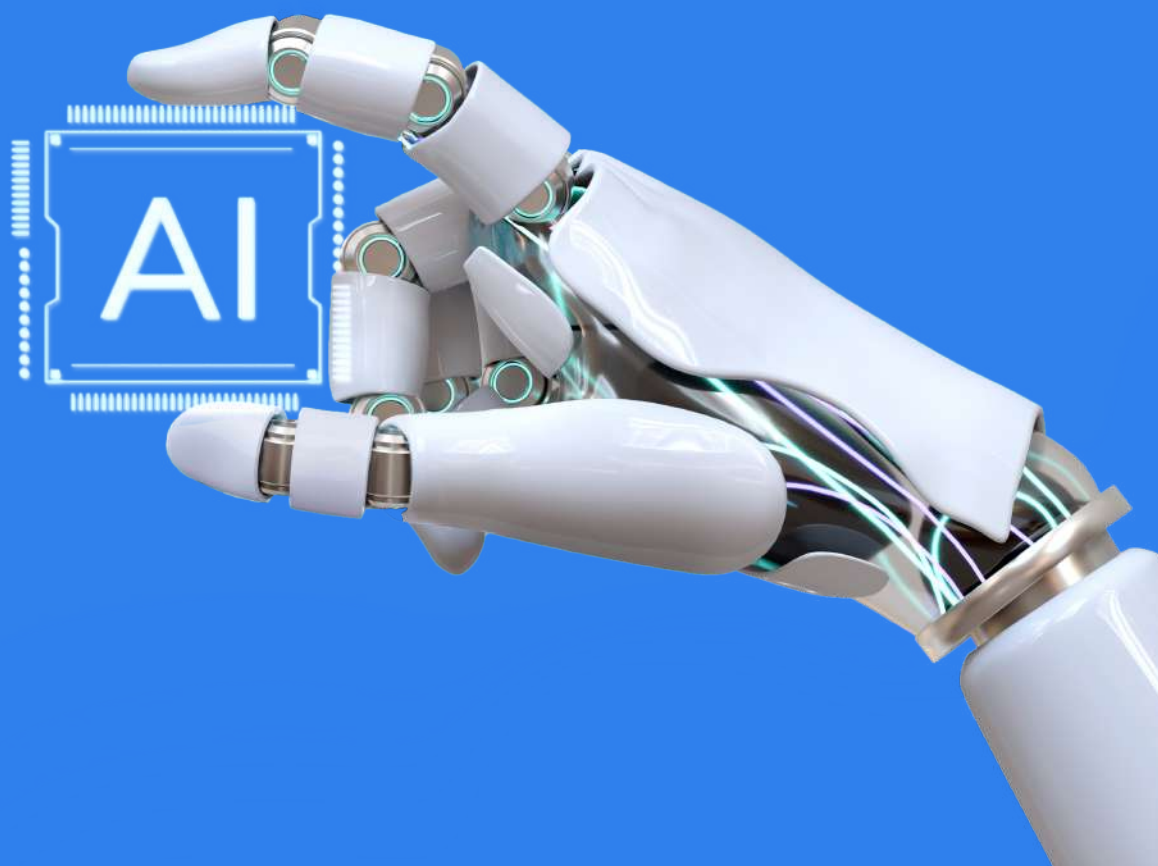
Boost your business with intelligent automation
in the right place, time, and investment

Contents

INTRODUCTION

What are chatbots?

Chatbot is:

a computer program that simulates human conversation through voice commands or text chat. Chatbots are typically used in dialog systems for different practical purposes, including customer service or information acquisition.

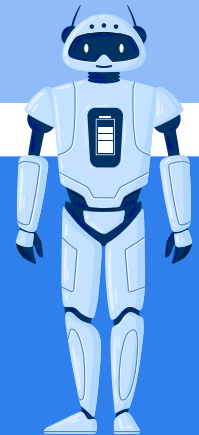Depending on the situation, businesses can implement different types of chatbots.

Rule-based chatbots

people interact with these bots by clicking on buttons and using predefined options.
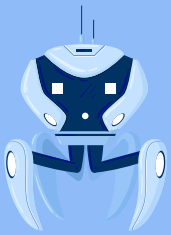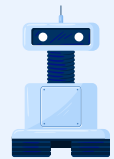
Intellectually independent chatbots

are trained to understand specific keywords and phrases that trigger the bot's reply.

AI-powered bots

combine the best of rule-based and Intellectually independent chatbots. Your feedback is far more likely to refer to it as "smart" or "intelligent."

> *"It feels like stepping into a Tesla for the first time after spending your whole life driving a Honda Civic"*

Casey Phillips, Product manager in the Conversational AI, Chatbot space

In our guide, we will explain in detail what AI-based chatbots are, their technical components, what are the key benefits for businesses, how chatbots can be implemented in different industries, and how to start chatbot development.

What makes an AI-powered chatbot smart?*

Natural Language Processing (NLP)

Ability to "read" or parse human language text

Intent Recognition

Ability to take a written input even if phrased unexpectedly and classify it based on what the user wants to achieve

Entity Recognition

Ability to easily identify the key elements in a text, like names of people, places, brands, monetary values, emotions, product names

Fulfilment

Ability to pull data from web services or databases using APIs, run conditions, and inform the Dialog Manager

Machine Learning

Ability to learn how to better respond to the user by analyzing human agent responses
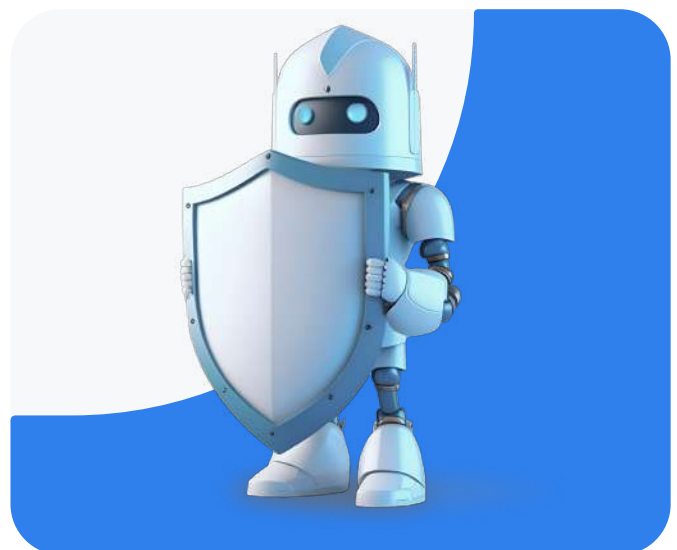
*Deloitte, Conversational AI, 2019

What is the secret power of AI-enabled chatbots?

"By leveraging machine learning and natural language processing, AI-powered chatbots can understand the intent behind your customers' requests, account for each customer's entire conversation history when it interacts with them, and respond to their questions in a natural, human way.."

Hubspot Blog

The goal of NLP is to make the interaction between computers and humans feel like communication between two people. With the help of NLP, people can freely interact with chatbots when asking a question.

NLP involves 2 processes: **Natural Language Understanding** and **Natural Language Generation.**

Natural Language Understanding (NLU)

the ability of the chatbot to understand a human. It is the process of converting text into structured data for a machine to understand

Natural Language Generation (NLG)

is the process that transforms structured data into text

For example, a user writes to a chatbot: *"What is the weather in San Francisco today?"*

To give a reply chatbot breaks down the sentence into Intents and Entities.

"What is the **weather** in **San Francisco** **today** ?"

Intent

is an action or a request the user wants to perform or information he wants to get

Entity

is a detail that compliments the Intent. It can be a location, date, color, size, flavor, etc.

With NLP, bots analyze a user's input and employ technology to determine **what the user means** instead of just **what they said**. Then, they're able to generate their own appropriate responses (think natural language generation or NLG). Understanding context is perhaps the key function of an advanced AI-powered chatbots.

Tips on How to Train a Chatbot for Businesses → **Read more**

Smarter chatbots with (Chat)GPT

Heard of a trendy ChatGPT? It stole the headlines with bold words as a "revolution of conversational AI". Is it so? What makes it so "smart"?

We couldn't skip the latest breakthrough in this guide. So here it is, fresh from the oven!

As we covered in the previous section, any chatbot 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.

What is GPT?

ChatGPT is a chatbot developed based on the GPT language model (Generative Pre-Trained Tranformer). It's a 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. GPT uses a process called "transformer" architecture:
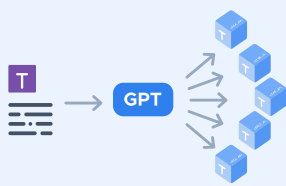
The input text (prompt) is passed through multiple layers of neural networks to learn the patterns and relationships between words
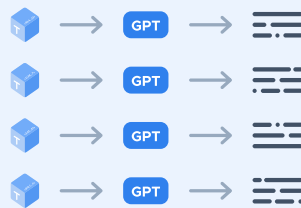
These networks generate coherent and fluent responses that follow prompt conditions

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

> In simple words, ChatGPT is looking for patterns in content and concept relationships so that it can predict what text should be presented based on a prompt. 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.

Tasks that GPT-4 performs best

Text generation

Text summarization

Question answering

Text classification

Language translation

Code generation

In simple words, ChatGPT is looking for patterns in content and concept relationships so that it can predict what text should be presented based on a prompt. 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

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

Read article

Read article

How to power chatbots with GPT

Using the benefits of GPT – the unique ability to generate human-like text – it's possible to power existing 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 chatbots.

Although, GPT has some limitations. For example, ChatGPT can occasionally generate fake or not correct information; also, multiple security concerns have been raised. To overcome those, there are multiple ways to ensure the GPT chatbots operate as expected. Here's is our approach to GPT.

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

How do chatbots help businesses?

"Today vendors need to step up their game, using proprietary natural language technologies to build smarter, more capable virtual agents that can interpret the nuances of human conversation and act on key processes as well. A basic chatbot that answers questions on a few hundred topics is like building a house on a shaky foundation.

It may look and work ok at first, but soon enough it will come tumbling down."

Henry Iversen

Chatbot as a channel

Higher open rates

Chatbots have higher open rates than email due to having an interactive and immediate response. The average CTR or (Click Through Rate) on Messenger is 43% while email's CTR is only ranking in 2.5%.

The average chat messenger open rate is 80-90% compared to 20% for email
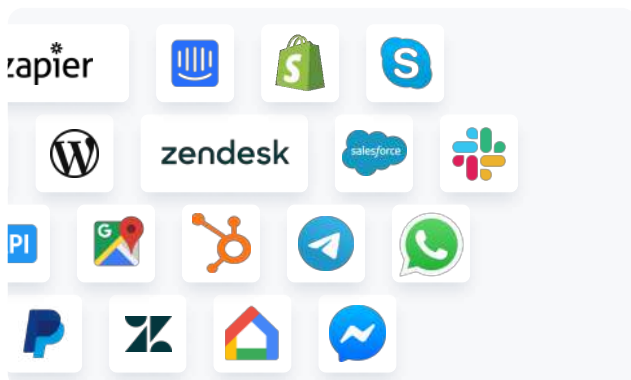
Greater digital presence

Chatbots can be enabled on the website, WhatsApp, Instagram, Telegram, Facebook Messenger, and even SMS. This way, it's easy to build a bot specifically for a channel that is most popular for users or scale the bot to other platforms when needed.

Decreased bounce rate

A great aspect of chatbots is that they keep users on the same platform along with the flow of conversation. Chatbots can receive payments, generate documents, fill out forms, order products, schedule meetings, and many other tasks. This way, users won't have to visit a different website page to complete the action. As an outcome, it reduces the bounce rate.
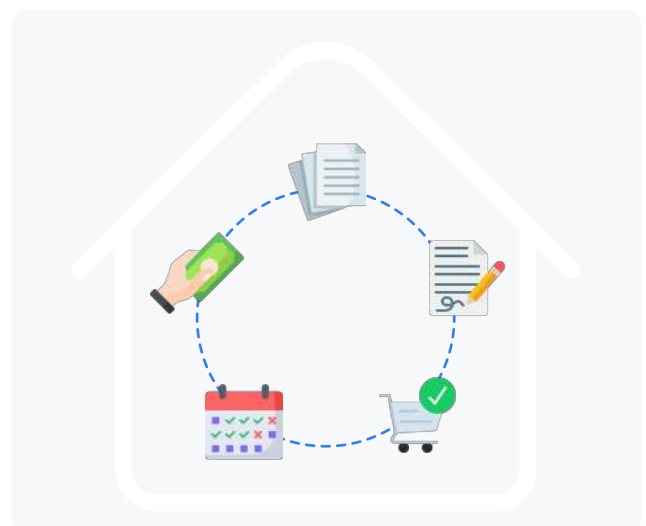
Chatbot as a solution

01

Always "live" customer support

Chatbots provide support 24/7 – even when agents are away or busy in a different chat

02

Immediate response time

Chatbots can reply immediately – even when there are multiple customers in chat

03

Advanced personalization

Chatbots can be integrated with any tools – CRMs, analytics, messengers – to record or refer to previous customer data during the conversation.

04

Operational efficiency

A chatbot can cover and close simple requests – especially when comes to popular questions – while agents focus on more complex ones

05

Lead pre-qualification

Chatbots can collect information such as location, price range, gender, and characteristics, as well as many more marketing insights.

06

Driving more sales

Chatbots can naturally reach back to leads with direct and personalized messages with discounts, special offers, or notifications about updates, etc.

91% of consumers say they are more likely to shop with brands that provide offers and recommendations that are relevant to them.

Chatbot use cases and benefits for different industries

"Call centers, websites, and mobile apps are no longer the only means of interaction with brands. Chatbots are fast becoming a business imperative for businesses that want to engage with their customers. Online chat through chatbots has grown faster than any prior channel."

Eileen Brown, ZDNet

Healthcare Industry Benefits

> *"The global healthcare chatbots market is expected to reach $345.3 million by 2026, registering a CAGR of 14.5% from 2019 to 2026."*

Allied Market Research

Benefits of Using Chatbots in Healthcare

Less stress for medical employees

Reduce workload by reducing unnecessary tasks & routine.

24/7 Availability for Patients

Patients receive information they need at any time of the day or night.

Online Communication Savings

Automate repetitive chats and let specialists cover unique cases

Better Patient Experience & Retention

Create meaningful conversations and convenient patient experience on scale

Efficient Record-Keeping

Use bots to collect data for doctors to save time for informed decisions

Healthcare Chatbot Use Cases

01

Effective information exchange for medical stuff

Chatbots offer quick access to information about patients. Healthcare bots enable medical staff to find patients' medical cards, prescription histories, and previous visit reports in a matter of seconds.

And it is not only about finding the bunch of text but asking exact questions like:

> What was the blood pressure of the patient two weeks ago?

02

Automating repetitive tasks

Chatbots can free up the medical stuff from repetitive tasks like answering the same questions or collecting patient data, allowing them to spend more time on more complex cases. Healthcare chatbots can educate patients on various topics and services, for example, genetic tests.

They can ask certain questions to learn more about patient medical history and prompt the best solution for a patient.

> What to expect from this test?

03

Caring remote treatment & tracking

Chatbots can act as personal nurses for patients and send them medical reminders about pills, and medical procedures they need to complete. They can also track patients' moods, diet, training, and symptoms, and send organized notes to doctors, keeping them updated about the statuses of their patients.

> James, it's time to refill your prescription inventory

Also, the healthcare chatbot can send reminders about doctor appointments or steps that a patient has to take before a specific procedure. For example, the bot would send a notification that a person should not eat for 12 hours before the test.

04

A consent bot

Administrative work is a big part of doctors' workdays. On average, doctors spend 10-20 hours per week on paperwork. Chatbots can help doctors collect patients' consent and medical information and gather their history into an organized electronic health report.

Click "accept" to indicate that you have read and agree to the terms presented in Terms and Conditions agreement.

Read the agreement

Accept   Decline

05

Scheduling appointments and the online check-in

Healthcare chatbots and voice assistants can help organize schedules for medical staff and help patients set up appointments. Also, patients can use a chatbot to check in to join the line for lab work before they arrive at your location. The patient could also see the current waiting time or how many people are in the line.

It's more comfortable for patients and eliminates big crowds of people waiting for their doctor in the hall ways.

Please choose one of options:

Book appointment   Line status

Check in   Contact us

Natera's Educational Virtual Assistant that offers actionable genetic testing education to more patients

INDUSTRY: Biotechnology Research, Healthcare

USE CASE: Pre and Post-test chatbots in the genetic testing

INTEGRATIONS: Natera Patient Portal

CHANNELS: Website, Client's portal

LANGUAGES: English 🇬🇧

Only 0,5%
of patients book a consultation with a genetic counselor after talking to NEVA

85%
Chatbot usage, meaning that patients finish flow

0 min
Waiting time to receive test results explanation compared to 2 weeks

Watch demo of the chatbot 🔗

BOTSCREW & NATERA COLLABORATION ACHIEVEMENTS

3+
Years creating chatbots together

3
Products created

3
Genetic tests automated by NEVA chatbot

Natera is a global leader in cell-free DNA (cfDNA) testing, offering genetic testing for more than ten years. With more than 1300 employees in 90 countries, Natera offers proprietary testing services to physicians, researchers, and clinicians in women's health, transplant and cancer, and genetic laboratories through its cloud-based software platform.

Millions of people take genetic tests yearly, and the number is rapidly growing. However, often the genetic test results are complicated for patients to understand. This created a high demand for sessions with genetic counselors to get a proper explanation.

CHALLENGES:

Few genetics professionals exist to meet the increased demand for genetic information. Only 4,000 members in the USA in 2021. **Source**

Patients have to wait two weeks to book a consultation with a genetic counselor

Natera needs to address their patient growth without over-hiring genetic counselors

Today, meet Natera Educational Virtual Assistant (NEVA)

During the three-year collaboration, we organized a team of eight employees that work full-time on the project developing new features and chatbots that improve the genetic testing industry.

Our BotsCrew NEVA team created a chatbot ecosystem – NEVA. These are three chatbots that educate patients about three different genetic tests, and two of them explain the test results.

Improved Horizon NEVA
(pre and post-test)

Empower NEVA
(pre-test)

Panorama NEVA
(pre and post-test)

Empower, a genetic test for those who want to know more about their risk of developing cancer;

Panorama, a blood-based genetic prenatal screening test of the pregnant person that screens for common chromosomal conditions that affect a baby's health.

79.65%
High Risk Flow
Completion rate

90.59%
Low Risk Flow
Completion rate

This means that in most cases people use NEVA to get a test explanation

Only 0,5%
of patients book a consultation with a genetic counselor after talking to NEVA
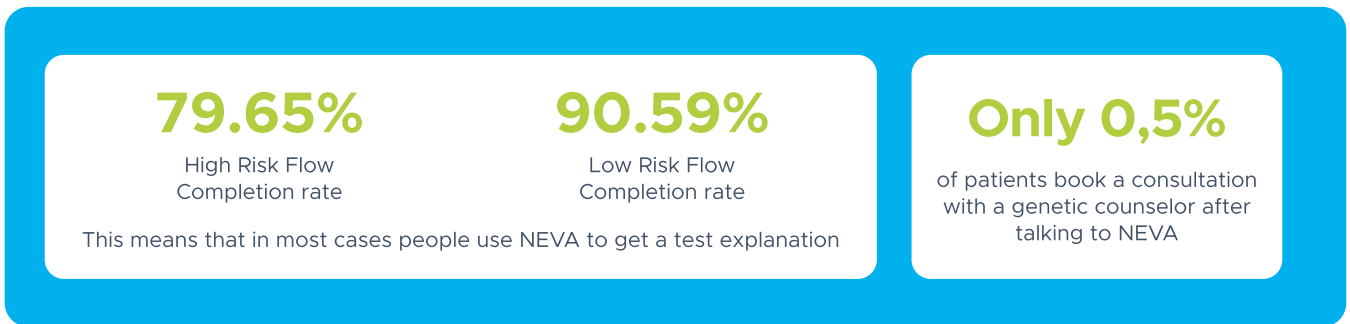
BotsCrew's approach to healthcare chatbots

Read more

HIPAA-compliant healthcare chatbots

E-commerce Industry Benefits

> *"Around 50% of people say they'd purchase something from a website's chatbot using conversational marketing."*

Drift

Benefits of using chatbots in e-commerce

24/7 Support

Chatbots can instantly address customer queries and concerns without delay.

Cost-effective Support

The studies say that around 80% of the time of customer service reps go to repetitive queries. Chatbot could take that load off the agents.

Personalized Shopping Experience

Chatbots can recommend products based on the customer's previous shopping or chat history.

Increased Customer Satisfaction

Customers get quick answers to their questions without waiting for an agent or scrolling through the website.

Better Engagement

Conversational marketing or customer service provided by chatbots is an effective way for brands to have a one-on-one conversation with their customers

E-commerce Chatbot Best Use Cases

01

Automating first-line support

The studies say that around 80% of the time, customer service reps go to repetitive queries. Chatbots can automate simple queries while your customer service agents perform more complex tasks. For example, one of the most common questions from customers is their order status. Chatbots can provide real-time updates on order status and shipment tracking. Customers can get instant notifications about their orders and track their packages without contacting customer support.

Customers can get instant notifications about their orders and track their packages without contacting customer support.

> Was my order shipped already??

> Let me check it for you! Please provide your order number in format HM-XXXXXX.

02

Providing product recommendations & support

Chatbots can be programmed to help users make the best choice in chat. They can also suggest related or complementary products to customers, which can lead to increased sales and revenue for e-commerce businesses. Chatbots can be integrated with other tools to analyze the customer's purchase history, making upselling and cross-selling more effective. The opportunities are limitless!

> What is the size table for jeans?

> You can find all measurements here: sizetable.com.

> Also, you may like our newest arrival ;)

> 80's style vintage jeans
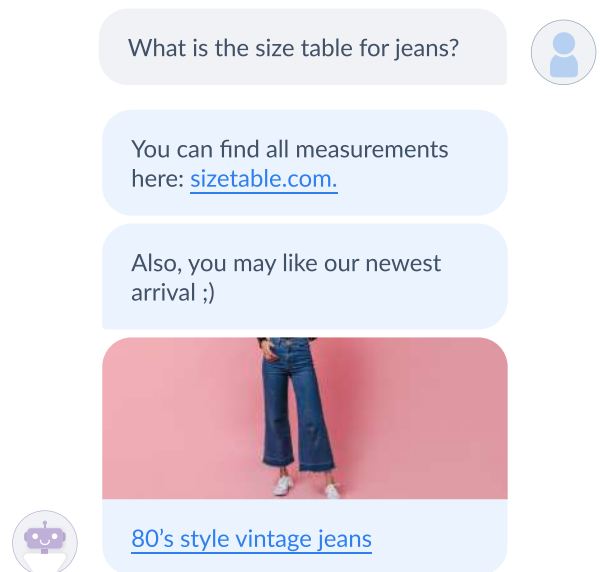
03

Gathering useful insights

By having meaningful and engaging conversations with customers, chatbots can gather useful feedback and insight. A business can find the best moment in the conversation to ask users for feedback. This way, companies can gather useful analytics to help

them level up their business and know customer behavior better.

> Anny, did you like the shopping experience with Vintage Jeans?
>
> Please share your feedback and get a $20 coupon for your next purchase!

04

Boosting engagement & brand awareness

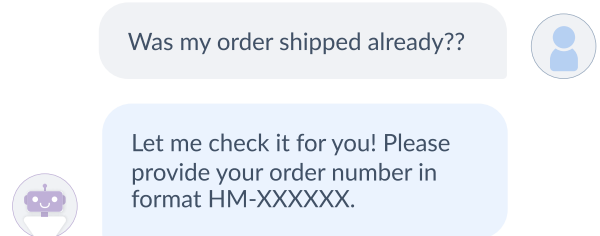Conversational marketing or customer service provided by chatbots is an effective way for brands to have a one-on-one conversation with their customers, learn what they care about, and build long-term relationships to serve them better. Chatbots can be built to mirror the brand image: welcome customers in a certain way, bring up fun promotional activities on holidays or simply help them navigate through your website.

Bots help businesses increase engagement with their brand, which eventually leads to a boost in sales rates.

> Happy Halloween! Click here to see how Jack the Ripper tries our jeans 😱

05

Turning conversations into sales

With a conversational interface, it's possible to integrate payment systems right into a chatbot. So for example, when the user turns into a chatbot for product advice, the flow can lead up to a closed sale. Integrated payment systems allow users to buy goods without leaving the messenger. Integrated payments have a positive impact on bounce rate

as with chatbots, business keeps users on the same platform. Moreover, chatbots can remember users' payment details and use them when the client returns to make another purchase.

> All fetched! Continue to payment to finish your order.

> Pay $55

Meet Pluggi. The AI Budtender & Product Recommendation chatbot simplifies dispensary eCommerce.

CUSTOMER:	Pluggi
INDUSTRY:	eCommerce, Startup
LOCATION:	California, USA
USE CASE:	Pre-sale, Reseller scalability, Platform customization
STATUS:	Ongoing
CHANNELS:	Dispensaries' websites (each chatbot is connected to a different dispensary)
LANGUAGES:	English 🇬🇧

Watch demo of the chatbot ↗

The Californian startup Pluggi was looking for a development team with experience building successful chatbot-based products from scratch. The purpose was to test the idea of creating the AI Budtender & Product Recommendation chatbots for multiple e-stores fast and with a limited budget.

Together, we completed the Discovery phase (tech investigation into required integrations, bot mockups), built and launched the pilot version for the first actual client in 1 month, under a $10k investment.

Results

Together we launched 10 chatbots for different dispensaries since March 2022, and we still are adding new customization capabilities.

1500+
users total on all bots

10x ROI
One of the bots is influencing 1200$ of additional revenue for the dispensary, which provides a 10x ROI

In addition to increasing revenue, chatbots give dispensaries insights into user product preferences

With our setup, dispensaries can connect their Google Analytics to the bot to track the bot's performance on their side

FEEDBACK FROM THE CLIENT:

"They've provided very high-quality work with flexibility and scalability to support startups."

Read the whole feedback

"They're responsive and flexible, even when we made changes to the project multiple times a week."Their team successfully created a viable solution ready to test the marketplace. They're responsive and flexible in the face of rapid changes to project scope. Staying in touch multiple times per week kept the project running smoothly."

Wyatt Hahn
Founder & CEO, Pluggi

Pluggi

Looking for more chatbot use cases and examples?

Check out our full directory of chatbot case studies – including Adidas (WhatsApp chatbot for Pitch, Please marketing campaign), Women First Digital (multi-channel chatbot for effective support), Choose Chicago (website chatbot for engaging users into traveling), and others!

Real-world Chatbot Case Studies (with results)

Explore cases

21 Chatbot Use Cases For 5 Different Industries

Read the article

...or contact us to learn more about chatbot usage for your specific industry! Just reach out to christina.vergelets@botscrew.com with your request for more information.

Detailed guide: how to start chatbot development

Before we start...

Have you ever had a frustrating chatbot experience? When a chatbot says nothing but

Sorry, I didn't get it... :(

You probably did.

Is it just poor conversational AI training?

Designing a chatbot for customer service can be a tricky experience. Even when companies build chatbots and invest in constant improvement, not every chatbot-to-user conversation ends with a 5-star rating.

So why do some chatbots fail while others succeed? Or is it better to ask how?

How do chatbots fail?

Where's my order?

Please select an option above

I want to see main menu

Please select an option above

Go back to all options

Sorry, Sir, I didn't get you. Can you specify, please?

:(((
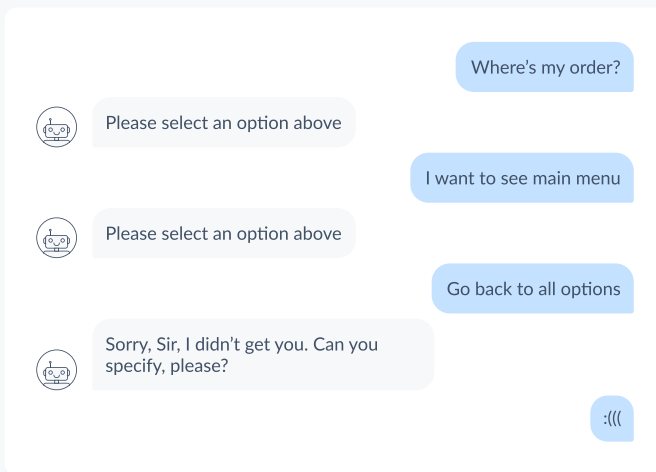
✕ Unrealistic expectations from the chatbot

✕ Wrong use case & technology

✕ Poor user friendliness

✕ Lack of personalization

✕ Bad NLP implementation

Yes – in many cases, the chatbot fails to understand the user due to poor planning. This is why the road to a successful chatbot consists of 9 steps: from understanding if the chatbot is a fit for your business to building a full version of a chatbot. So have patience!

In this section, we will cover each step of those common pitfalls – and how you can avoid them.

Your road to a successful conversational AI solution starts here.

01

Understand if the chatbot is the right fit for your company

Chatbots are a good idea if:

You want a creative and modern solution for communication with your customers/users/patients at a scale

You receive a lot of questions on the same topic

You have a lot of multilingual customers/patients/users

Your team performs a lot of routine and repetitive tasks

You have multichannel customer support

You are looking for ways to cut customer service costs

You want to boost your marketing efforts

You want not to fall behind the competition

You want to help sales with lead qualification

Your customers/users/patients reach out to you outside your working hours, and you want to provide 24/7 support to them

Read more: 21 Chatbot Use Cases For 5 Different Industries

Define the chatbot goal or goals

So, now that you know whether you need a chatbot or not, let's move further into chatbot development planning.

You need to understand the reason for implementing a chatbot.
Stop for a second and ask yourself two questions:

Which problem would the chatbot solve?

What will exactly a chatbot be doing?

The best way to create a chatbot's goal is to use SMART goals. A goal can be:

"The chatbot should automate 30% of customer service requests about productsand our policies in the first 3 months after implementation"

Also, think about metrics to measure success at the end.

Choose measurable metrics with more precise numbers that can be analyzed. For example:

"By implementing the chatbot, we want to reduce average ticket resolution time from 4 minutes to 1 minute 10 seconds by April 2024"

Define areas that the chatbot can take over

You need to **analyze and list current time-consuming and routine processes.**

Usually, the best areas for chatbots are client-facing processes that are repetitive. For example, customer service, technical support, sales processes like lead qualification and evaluation. A good fit is also HR and recruitment processes.

We'll start by defining the main customer intents when contacting your customer service. To do so, we create categories with the most popular customer requests on the same topic.

Let's say you've collected data about popular customer requests and noticed that most of the interactions are about a delivery date. You can group in one category **"Delivery info"** requests like:

Define a few main categories, and let's move to the next part of this step.

Take a look at the list you have created, then **evaluate each customer intent/category on the list.** You can assess processes based on:

Ease

how easy do you think it will be to automate these customer requests?

Importance

how important for you to automate these customer requests?

Time

how much time do you think this will take to automate?

Impact

what impact will it have on your business/customer service if you automate this category with customer requests?

But, you can choose other metrics that are important to you:

Ease ★ ★ ★ ★ ★   **Importance** ★ ★ ★ ★ ★

Time ★ ★ ★ ★ ☆   **Impact** ★ ★ ★ ★ ☆

So, the "Delivery status check" gets **18 points.**

Do this with every process on your list and then choose for automation those with the highest scores.

04

Choose channels and languages

At this step, there are a few more questions you want to ask yourself:

Which communication channels do I want to automate? Website, WhatsApp, Facebook, or all of them?

Which languages do I want to automate with the chatbot?

Before answering these questions, you have to consider a few things:

- Is it reasonable to develop a chatbot for the volume of customers coming from this channel and speaking this language?

- Is the volume of customers from this channel/speaking this language growing or decreasing?

- Will you support this channel in a long-term plan?

It's also good to evaluate each of these channels the same way you evaluated areas for automation. Use metrics like:

Ease of automation

Strategic importance

Requests volume

Impact of this process automation

Choose the right chatbot development company or chatbot platform

01   Check the vendor's main and services
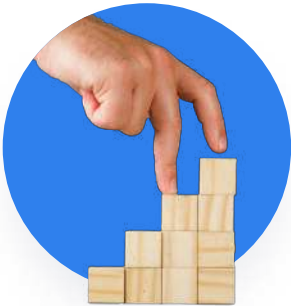
You need to think about the future and be sure to choose a company that provides a full chatbot development cycle from ideation to post-release training.

What will happen after the chatbot has been created? Will you need chatbot marketing or post-release training? If yes, then make sure that the company provides these services.

02   Research their target industries and areas of expertise

Ensure that the chatbot development company you choose has experience in your industry and knows your business's specifics.

03   See if they have a platform or admin panel to manage the chatbot

An admin panel will make your life so much easier because you will alter, train, and manage the bot by yourself. Even though for significant changes like adding new languages, channels, integrations, etc., you'll still need developers, if you need to make a small change like the bot's wordings, you'll be able to do it yourself.

04   Discuss integrations with the current software ecosystem

Nobody wants to change the whole array of different tools. You need to make sure that the company will help you connect all your current platforms and tools with the chatbot.

05   Ask who owns the code

What if this chatbot development company shuts down or your contract ends?

Make sure that, in any case, you'll have access to the chatbot – either deploy the chatbot to your servers or check if the vendor will provide you with all the custom code in case something happens.

06   Check if the company works with your channels and languages

Some channels like WhatsApp require specific expertise, so ensure that the company you choose has experience with the platforms you want to cover. The same with languages, not all companies offer multilingual products and services, so check if they will create for you chatbot in different languages.

07   Check feedback and testimonials

Of course, check what others say about this company. Are there any familiar big names on their client lists? Check out their project portfolio.

Useful resources:
- Top 10 Chatbot Development Companies
- Top 10 Chatbot Platforms

Create a detailed chatbot roadmap and project requirements

Usually, you build a roadmap and requirements together with your chatbot vendor.

The chatbot development company has more experience and knows exactly what needs to be included in the roadmap, in which order, and how much time this takes.

At this stage, you need to:

- Discuss and set clear Key Performance Indicators (KPI's);

- Set milestones and deliverables;

- Discuss time and budget estimates of the chatbot development;

- Discuss your involvement in the whole chatbot development process;

- And also, discuss your future communications with your chatbot vendor: How often will you have calls? Demos? What communication channels will you use? Etc.

If you want to create your requirements, here's a little advice: **don't overthink this part.** When creating the chatbot development requirements, focus on bot use cases, and bot user stories.

You can start creating a chatbot development plan by defining the use cases.

Think about what you want the chatbot to assist with. Describe all the necessary functionality of your chatbot. It's like writing what a bot will be able to do.

For example:

> 'A bot will be able to answer the user about the availability of the product'

Next, think about bot user stories. Describe how you see your chatbot from the user side by completing the sentence: *"As a user, I can..."*

For example:
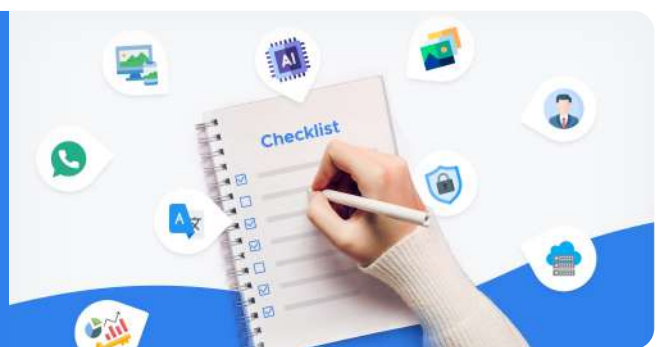
> *'As a user, I can* ask him a question about working hours'

Tip: try breaking down the bot user stories into smaller chunks.

Think about what will bring value to the user, and what are his or her goals and needs. Try putting yourself in the user's shoes to understand what they want to get from a chatbot and what they want to achieve.

How to form Chatbot requirements

Read more

Create a chatbot persona, design a chatbot flow, and a logic tree

Usually, if you are working with chatbot development companies, they will help you form your chatbot flow, persona, and logic tree. The only thing required from you is to collect and answer the most common questions that you want the chatbot to cover.

Clover

Clover is a very responsible and caring person, making her a great support agent as well as a great friend. She's sociable and easy-going.

Traits: communicative, smart, active, sincere, collected, helpful.

Message examples

Beginning of a chat:

Hi! 😊 I'm Clover, a virtual support agent. I'm here to help you with any questions or issues with your subscriptions, your orders, account, and more! How can I help you today?

Unclear request:

I see you would like a cancellation 🤔 What would you like to cancel: your order, your subscription, or both?

Latest order   Next order   My subscription

Latest order and subscription

- Talk to your customer service agents and sales team – ask what questions they get the most often;

- Review call logs and scripts, email chains;

- Analyze FAQ pages, and knowledge base;

- Check your @support or @info Inbox for repetitive requests;

- Check your Social Media to find customer questions.

Think about what are the most repeating questions and issues your clients stumble upon.
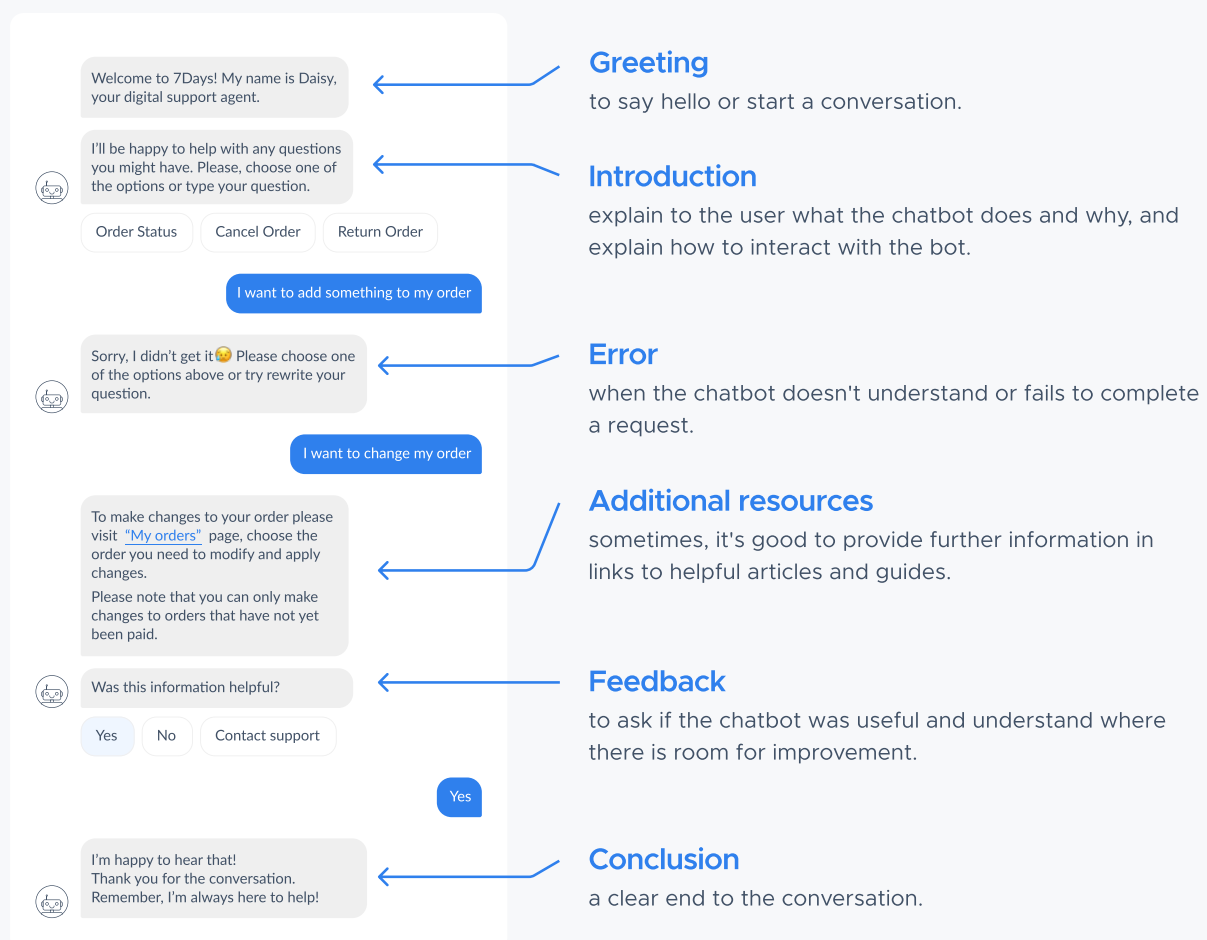
If you are working with the chatbot development team, collect these question-answers pairs, and provide them to the vendor. These Q&A pairs will be a base for the chatbot flow.

However, if you are creating the chatbot yourself using a platform, you need to consider which of these questions, words, and phrases your chatbot has to understand. And it's better to be specific and collect as many ways of saying the same thing as possible to train the bot.

For example, the customer can ask the bot about your working hours in many ways: **"What are your working hours?", "When does your shop close?", "When does your shop on 5th Avenue start working?"**, etc.

Write down as many variations of words and phrases of certain customer requests as you can think of to train your bot. The more variations you train your bot with, the smarter it will get and the fewer mistakes it will make with real users.

When you have settled with the main part of the flow – Q&As, there are other conversational elements you need to consider:

Welcome to 7Days! My name is Daisy, your digital support agent.

I'll be happy to help with any questions you might have. Please, choose one of the options or type your question.

Order Status | Cancel Order | Return Order

I want to add something to my order

Sorry, I didn't get it 😣 Please choose one of the options above or try rewrite your question.

I want to change my order

To make changes to your order please visit "My orders" page, choose the order you need to modify and apply changes.
Please note that you can only make changes to orders that have not yet been paid.

Was this information helpful?

Yes | No | Contact support

Yes

I'm happy to hear that!
Thank you for the conversation.
Remember, I'm always here to help!

Greeting
to say hello or start a conversation.

Introduction
explain to the user what the chatbot does and why, and explain how to interact with the bot.

Error
when the chatbot doesn't understand or fails to complete a request.

Additional resources
sometimes, it's good to provide further information in links to helpful articles and guides.

Feedback
to ask if the chatbot was useful and understand where there is room for improvement.

Conclusion
a clear end to the conversation.

08

Build a POC or MVP

The best way to create a successful project is to create a POC (Proof of Concept) first. Set goals and expectations for the POC, build it, and then do user testing with small focus groups or real users.

If you achieve the set goals and expectations with your POC, it means that you can scale. If you don't reach the desired outcomes, you need to sit down and analyze what went wrong, where, and why. You need to think about how to improve and optimize your POC.

The best way to test a chatbot is to have a conversation with it and pay attention to things like:

Bots flow

- Is the chatbot's dialog logical, correct, and smooth?
- Does the flow make sense from a user's side?
- Is it understandable and comprehensible for the users?

Conversational User Experience (CUX)

- Is the chatbot flow well structured?
- Is it engaging to talk to a bot?
- Does it use emojis, buttons, gifs, and images, and understandable for user wordings?
- Is the chatbot persona appealing?

Speed

- How fast does the chatbot respond?

Accuracy

- Are all the chatbot answers correct and accurate?

Fallbacks

- What will a bot do when he doesn't understand the user?
- What will the chatbot answer? Or where will a bot redirect?

There are a few options on how to find users for testing.

01

One way is to ask your co-workers to join the testing and analyze their interactions with the chatbot. Remember that your staff can be biased as they are familiar with specific terminology, your company, services, etc. and how they interact with a bot can differ from your chatbot's audience.

02

Also, you can involve your real customers in the beta testing of the bot. You can ask your most loyal clients to join the testing. Or, as an example, you can engage your current clients to chat with the bot for a reward like a discount or a coupon if applicable.

03

Another option is to use crowd testing. Some sites help connect with real testers.

For example, you can go on Reddit and find beta testers in subreddits like TestMyApp. Or use a website like BetaFamily. You can also set up testing sessions on UserInterviews, where you can choose the audience more precisely.

And remember, the more people interact with your bot, the more training data you will get to make your chatbot prepared for different use cases.

Build chatbots with predicted results using Discovery Phase

Read more

Build the full version of the chatbot

It's always good to learn from your mistakes.

After your POC has been tested, analyze and iterate to make your solution deliver the best results.

Pay attention to:

Fallback rate

check how often and where the chatbot didn't understand the question and provided a "Sorry, I didn't get it" type of answers.

Goal Completion Rate

how many successful engagements users had with your chatbot? For example, if your bot use case is scheduling a meeting or buying a product, how many users did that?

Analyze drop-offs

how many users dropped off? Where they dropped off and why?

User satisfaction

if you have a feedback feature in your chatbot, check how users rated your bot.

Average session duration

Check the session durations and calculate the avg. session duration. If the session duration is very short, it often means that the chatbot isn't engaging or helpful. However, if you have a concise flow or minimal functionality, this isn't the best metric to consider.

Understand what needs to be improved, changed, or added, and do it. Or ask your vendor to do it.

Summary

In the modern world, most of the people are focused on speed and quality of services and products that they are getting.

Modern businesses have to adopt innovations and new trends that are appearing on the market to not fal behind competitors.

Once it was just enough to use a chatbot to ask simple questions, and the user answered them with buttons. Based on that, the chatbot summed up collected info and provided a reply. For some businesses, those chatbots aren't always the best solution. Complex cases need complex chatbots.

List of useful resources to guide you on the way to a successful chatbot

Chatbot Requirements: Technical & Non-technical Things to Consider

Read the article

6 Chatbot Best Practices that Keep the User in Mind

Read the article

Voice chatbots for Customer Service

Read the article

Enterprise Chatbot: The Ultimate Guide

Read the article

How to Build a Website Bot: 5 Steps to Find the Best Solution

Read the article

Chatbot Analytics: 14 Chatbot Metrics To Track in 2023

Read the article

BotsCrew

Let's automate together!

Get started with a chatbot expert today:

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