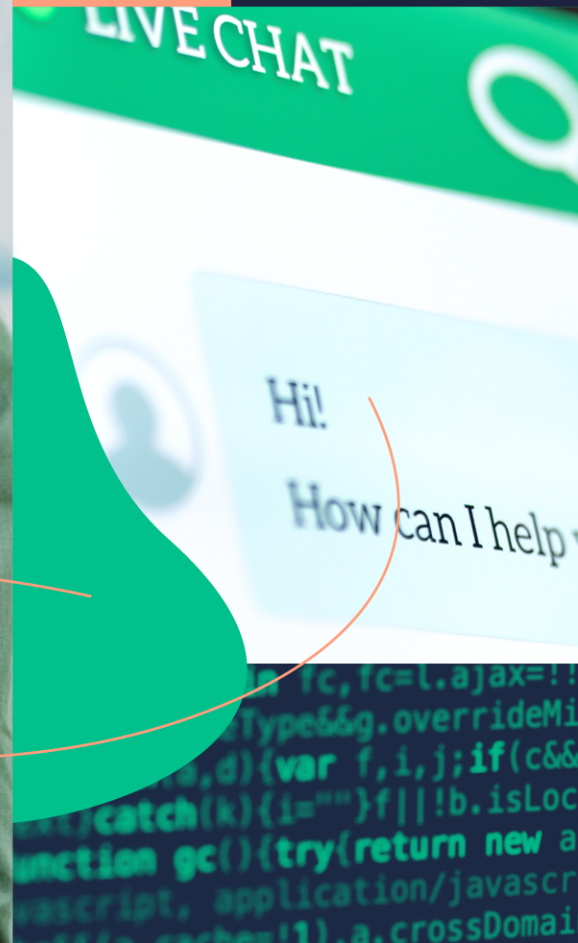


Your Guide to Better Leveraging Conversational AI

The comprehensive resource for building AI solutions
that enhance customer experiences





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Conversational AI is the future of business-to-consumer conversation. Let's face it, businesses are in a bit of a pickle.

Customers want faster, more responsive customer service and more interactive customer experiences. At the same time, digital marketing has enabled businesses to attract more customers and expand their customer bases faster than ever before.

Now businesses have more customers, and those customers expect better communication at every level. The demands are growing, and it can be challenging to add the workforce required to meet these demands.



That's why companies are using conversational AI and chatbots more and more. A properly built and managed chatbot or AI program can handle a lot of simple customer requests, and intelligently hand off more complex requests to human customer service agents.

With conversational AI, businesses can serve far more customers without significantly increasing their overhead or overtaxing their customer service teams.

Soon, conversational AI and chatbots will be so common and so powerful that choosing not to implement some sort of automated customer communication will put businesses at a real disadvantage.

This eBook will give you all the information you need to understand:

- Exactly what conversational AI and chatbots are.
- The best opportunities for deploying conversational AI and chatbots.
- What your conversational AI needs to do.
- How to create the best tech ecosystem for conversational AI.
- The pitfalls to avoid in your AI implementation.

This information will help you successfully add conversational AI and chatbots to your customer communication channels and avoid mistakes that could raise the cost of implementation.



What are conversational AI and chatbots?

Both conversational AI and chatbots are software programs that use machine learning and natural language processing to communicate with humans and accomplish certain tasks.

The main difference between conversational AI and a chatbot is how they communicate.

Typically, conversational AI refers to an artificial intelligence program that people interact with by speaking. Conversational AI is most often used for communicating with customers over the phone, where the AI responds to voice inputs.

On the other hand, chatbots usually communicate and receive inputs through text. Chatbots are most common in messaging apps, like Facebook Messenger, and SMS communication.

Each has its own set of advantages and disadvantages.

Conversational AI solutions can use voice analysis and potentially respond to a broader variety of inputs. However, conversational AI needs advanced supporting infrastructure because it requires real-time media streaming.

Chatbots have slightly lower bandwidth requirements, but are also more limited in their interactions, since they can only communicate via text.

Either one (or both) can be incredibly helpful when used correctly.



How businesses can use conversational AI and chatbots

Any business can use conversational AI and chatbots to improve their customer communication. However, the ideal implementation will vary from business to business. Still, trends can be identified using the right data.

How consumers communicate with businesses is the easiest, and most instructive data to evaluate. This is how many customers use each communication channel:





Most companies aren't using chatbots. So, adding conversational AI and chatbots can be a big brand differentiator.

However, the vast majority of consumers communicate with brands through channels that can be augmented with conversational AI and chatbots (telephone, company websites, online chat, and mobile apps).

Additionally, customers have stated how they'd like companies to use chatbots. When asked what they predict they would use a chatbot for, customers responded like this:

Getting a quick answer in an emergency: **37%**

Resolving a complaint or problem: **35%**

Getting detailed answers or explanations: **35%**

Finding a human customer service assistant: **34%**

Making a reservation (e.g. restaurant or hotel): **33%**

Paying a bill: **29%**

Buying a basic item: **27%**

Getting ideas and inspiration for purchases: **22%**

Adding yourself to a mailing list or news service: **22%**

Communicating with multiple brands using one program: **18%**

Buying an expensive item: **13%**

None of these things: **14%**



You're almost guaranteed to see a positive impact from implementing conversational AI and chatbots.

Conversational AI and chatbots can enhance the communication channels that customers use most. And, customers have some expectations that companies will use automation to make certain buying and customer support activities easier and more convenient.

However, this means that you could potentially use conversational AI and chatbots for just about anything, since they cover most communication channels and a lot of business activities.



To narrow things down, these are some ideal uses, by industry:

Finance

- Report account balances: customers can call or open a chat to request their account balances through an automated system.
- Automated customer service and support: conversational AI and chatbots can be integrated into phone, online, and SMS support channels to handle simple requests, and route customers to the appropriate customer service agent for more complex customer service tasks.
- Automated payment collection: customers can schedule and make payments through an automated phone teller or online chatbot.

Healthcare

- Appointment scheduling and reminders: patients can schedule appointments and opt-in to SMS or email reminders by phone or online through an automated system.
- Setup prescription pickup schedule: patients can schedule prescription pickups and schedule future orders over the phone, through the website, or using an app.
- Remote symptom reporting and diagnosis: chatbots and conversational AI can collect symptom information for doctors to review and send a diagnosis.
- Education for healthcare students and professionals seeking ongoing education: learning institutions can use conversational AI and chatbots to help students select and enroll in courses, and order required materials.



Hospitality

- Accept payments: customers can make payments over the phone or through the chat program after completing their bookings.
- Virtual room tours: conversational AI and chatbots can help customers choose the type of room they'd like and get a virtual room tour through email or in real-time on a website.
- Room, offers, and hospitality package comparison: conversational AI and chatbots can offer comparisons over the phone or through an online chat so customer service agents don't have to.
- Booking and confirmation: bookings and confirmations can be completed online or over the phone without the assistance of a customer service representative.
- Reservation changes: reservations can be changed using an automated system over the phone or online.

Human Resources

- Automated recruiting: interview scheduling and personal information collection can be automated with conversational AI and chatbots.
- Simplified on-boarding: simple conversational AI and chatbot programs can be built to guide new hires through initial training and policy overviews.
- Online training: automated processes can help employees select and complete the appropriate online training.
- Human resources support: automated systems can collect human resources complaints and open tickets to be handed off to human resources representatives.



Retail

- Order placement: phone and online orders can be assisted and completed by conversational AI and chatbot systems.
- Order tracking: customers can call or chat to get order status updates.
- Collect feedback and reviews: requests for product and service feedback and reviews can be handled by conversational AI and chatbots. These same automated systems can also help customers submit their reviews.
- Sending marketing offers and alerts: conversational AI and chatbots can help customers opt-in to offers and alerts. And, chatbots make automated SMS communication more natural.

Sales and Marketing

- Automated call and meeting scheduling: customers can schedule sales calls and meetings through an automated phone or chat system.
- Content and webinar suggestions: chatbots and conversational AI programs can collect customer preferences to make personalized content suggestions.
- Use case selection and delivery: customer industry and professional information can be collected and processed to place customers in the correct marketing funnel.

This is far from an exhaustive list of potential uses for conversational AI and chatbots. But, these use cases clearly illustrate how you can integrate AI technologies into your customer communication and engagement systems.

Even if you know how you'd like to use conversational AI and chatbots, take these things into consideration.



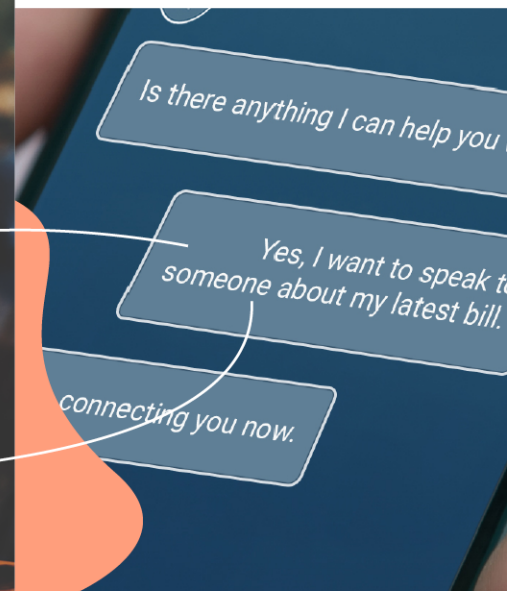
Key implementation considerations

Omnichannel experiences

Whether you're using conversational AI for voice or text, it's critical that the experience is consistent from channel to channel.

Your conversational AI and chatbots should speak in voice and style that's congruent with your other branding efforts. And, you need to ensure that information is shared between your various communication channels, so that the transition from channel to channel is seamless for the customer.

That way, if a customer starts a chat on your website, then moves to your mobile app, the chat session can continue. Or, at least any information the customer had entered should be transferred to the new channel.





Text-to-speech

Text-to-speech is first an accessibility feature for customers with disabilities which makes your conversational AI usable for more customers.

However, even customers who don't need text-to-speech for accessibility will prefer text-to-speech options so that it's easier to interact with your automated customer service systems on the go.

Natural language processing

Natural language processing is one of the most important aspects of conversational AI. It's what enables your AI to understand human languages as they're spoken or in text.

Natural language processing is critical because it enables your customers to interact naturally with your AI system. Rather than being restricted to very specific inputs, like a touchtone menu on a phone, customers can simply speak to your AI, and it will understand them.

The challenge with natural language processing is that it requires very strong underlying infrastructure. Your conversational AI must be connected to a high-reliability network with very low latency. Otherwise, the language processing system will interrupt the natural flow of conversation, and customers will get frustrated with the delays.

Human handoff

As we mentioned earlier, your conversational AI systems can't handle everything. There are some customer service tasks that must be done by humans.

Your AI needs to be able to identify when it receives a request that must be handed off to a customer service representative, and the program needs the power to transfer calls and chat sessions to live agents on-demand.

So, your AI applications need a certain level of call control, and connectivity to your live chat programs.



Sentiment analysis

The ability to identify attitudes in text may not be mandatory for a chatbot. However, if your chatbot can identify positive, negative, and neutral attitudes in customer interactions, it can tailor its responses accordingly and mitigate situations or identify faster paths to problem resolution.

This is especially useful in situations where customers are handed off to live customer service agents, because customers begin their conversation with the customer service representative in a less agitated state.

Talk-time latency

Regardless of whether the communication is through text or voice, talk-time latency may be the most important factor in successfully deploying conversational AI and chatbots.

It doesn't matter how well your conversational AI is built or how well-written the responses are if customers don't want to interact with your AI.

When there's a long delay between when the customer speaks or types and the response, customers are going to get irritated fast. Then they'll try to bypass the AI as quickly as possible to get to an actual human, which makes the customer experience worse, and completely defeats the purpose of the AI.

So, before you even start building your AI, you need to select a communications carrier with a fast network and very low latencies. That way, all your hard work will pay off.

Lastly, there are implementation pitfalls that you must avoid if you want your conversational AI to succeed.



Pitfalls to avoid

There are a handful of common mistakes in AI implementation. They're easy to make, and that's why we're warning you about them here.



1. Investing too much in the AI and not enough in the supporting ecosystem

Even though AI is the heart of any conversational AI system, the supporting ecosystem is equally important. The supporting carrier network, the data that the AI uses to learn and adapt, and the infrastructure that the AI itself is built on are all vital for the AI to function properly.

Also, remember that your machine learning programs for training the AI are part of the supporting ecosystem. Investing plenty of resources in training your AI is mandatory.

Your supporting ecosystem is also where you address talk-time latency issues by connecting your AI to a carrier network that gives you a dependable connection and low enough latency for natural conversation and real-time streaming.

The AI may get most of the attention. But, the supporting infrastructure is actually what makes it work.



2. Using conversational AI for the wrong things

Even though conversational AI is excellent, there are times when it's not a great solution. In situations where the customer knows exactly what they want, and just wants to accomplish the task as quickly and simply as possible, a conversational AI isn't a great tool.

Conversational AI is best in situations where the complexity of the task would make a GUI or touch tone menu too cumbersome. Or, if there's no possible way that the task could be completed with a fixed set of inputs—like a chatbot therapist—conversational AI is capable of helping customers through non-linear processes.

So, make sure that AI is the right tool for the job before you start building it.

3. Creating an AI that converses awkwardly

This one may be the most challenging to solve, because emulating true human conversation is tricky. But, you can usually avoid creating an awkward AI by following a few rules:

- Your AI must be clear that it's *not* a human. It also needs to clearly articulate what it can and cannot do. Never try to fool customers into thinking they're talking to a human. It's just a fast way to lose customer trust.
- Construct your AI so that customers don't need to constantly repeat information. Saying things over and over again really irritates people. So, make sure that your AI stores answers to previously asked questions and has access to customer profiles.
- Quickly gather customer intent. Your AI can't help the customer if it doesn't know what they need help with. So, set up your AI so that it can discern intent as early in the conversation as possible and start moving toward the solution efficiently.

Clearly, your AI doesn't need conversational skills that feel truly human. Conversational AI just needs to be conversational enough that it avoids speaking mistakes that drive people mad.



4. Quickly and efficiently address communication failures

No matter what, your AI will occasionally misunderstand or fail to understand what the user wants.

If the AI can't understand what the user wants, your AI needs to either ask the customer to state their intent again or ask clarifying questions.

However, it should only do this a few times. If the customer can't communicate with the AI after a few tries, the AI should quickly route the customer to a human or to another communication channel, if possible.

On the other hand, you need to build in a way for customers to tell the AI that there's been a miscommunication. Sometimes the customer will speak to the AI, the AI will assign the wrong intent, and will start helping the customer with the wrong thing.

In these cases, there must be a command that tells the AI there's a misunderstanding, such as the customer saying, "Help," or "Wait."

If your AI leads customer in circles or can't understand customers, and there's no way for the customer to communicate to the AI that there's an issue, your AI will simply frustrate users and degrade your customer experience. Always build in ways to address communication issues as quickly as possible.



Putting conversational AI to work

If you're ready to start building and implementing conversational AI into your customer communication stack, the first step is to make sure that your supporting architecture is ready for it.

That means checking to make sure that your communications carrier network can support conversational AI in terms of latency, bandwidth, and data security. That way, you'll avoid connectivity snags as you build and launch your AI, and you can rule out carrier network issues if you need to troubleshoot your newly implemented conversational AI solution. So, get your communications infrastructure in place, then create and train your AI to deliver better customer experiences.





About Telnyx

Telnyx is a cloud communications platform built on a global, fiber-optic backbone that routes data away from the public internet. The Telnyx network delivers the reliability, low-latency connection, and data security that modern conversational AI demands. Learn more about the Telnyx platform to discover what it's like to work with an AI-ready communications partner.



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