

Good Voice Bots: How They Help Businesses Thrive

Industry professionals answer questions about voice bots - from popular to awkward

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Intro

AI-powered voice bots are becoming more and more omnipresent in our day-to-day lives: we talk to them when calling our bank's contact centre or getting a seasonal bonus offering from our favourite flower shop. More businesses opt for contact centre automation with conversational technologies.

56%

of contact centres name AI and robotics among the top technologies they plan to use in the future

To help businesses find their way around voice bots, we asked industry professionals the most popular questions and busted the most common myths about contact centre automation. In this whitepaper, you'll learn when it is best to use voice bots, whether it is better to use a voice actor's pre-recorded lines or go with a speech synthesis, how to choose the right platform for call campaigns, which features make the bot's speech natural, how to assess the bot's effectiveness and whether the virtual assistants can replace call centre agents, and much more.



1. What is a voice bot?

A voice bot is a smart virtual assistant that contact centres use for outbound and inbound calls. This AI-powered virtual agent is capable of capturing, interpreting, and analysing a caller's voice input, as well as offering a proper response or transferring them to human agents when needed. AI-powered voice bots can understand natural language, identify human intent, and provide real-time, contextualised, relevant answers.

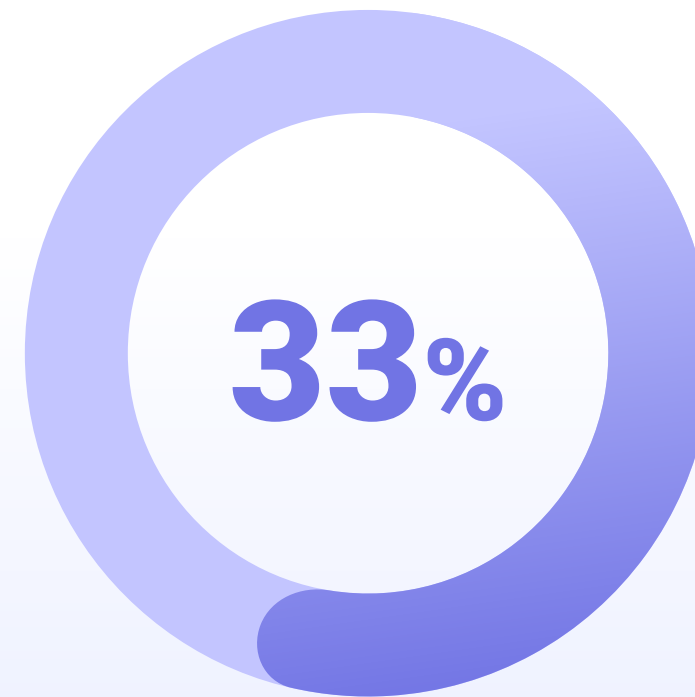
Compared to typing or selecting options from drop-down menus, voice-based communication is the fastest. As a result, voice bots can significantly improve customer service. You need a professional to create a voice bot capable of accurately capturing your company's tone and comprehending both the context and content of a customer's request.

What technologies do call centers plan to use in the future?

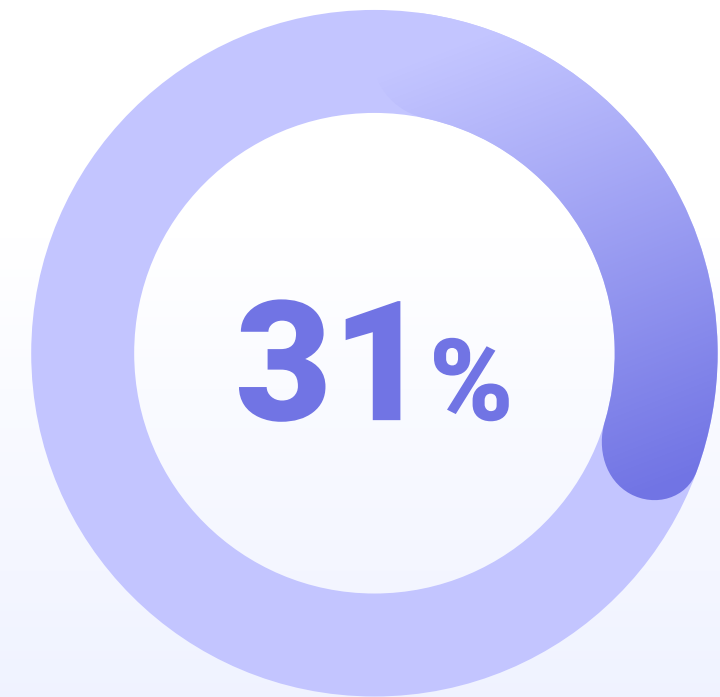
Source: Deloitte



plan to invest in AI



plan to invest in robotics and process automation



video chat

2. Why do businesses need voice bots?

Why do businesses employ AI-powered voice bots or virtual agents?



Cost efficiency is one of the main reasons

Modern technologies can replace human agents in the most mundane telephone conversation scenarios and achieve higher performance rates. A/B testing, as well as the ability to comprehend how users react to a fixed dialogue model, allow businesses to build scenarios with maximum efficiency and conversion. Unlike the case with human agents, as they almost always deviate from the script.



The second most popular reason is the scalability of operations

If you have an AI-powered agent management system implemented for both inbound and outbound calls, you can promptly boost the capacity of the AI contact centre and process more calls during peak times. If the AI contact centre system is set up properly, businesses can process 80% of inbound calls at the rate of the AI agent.

3. Voice bot implementation: where to begin?

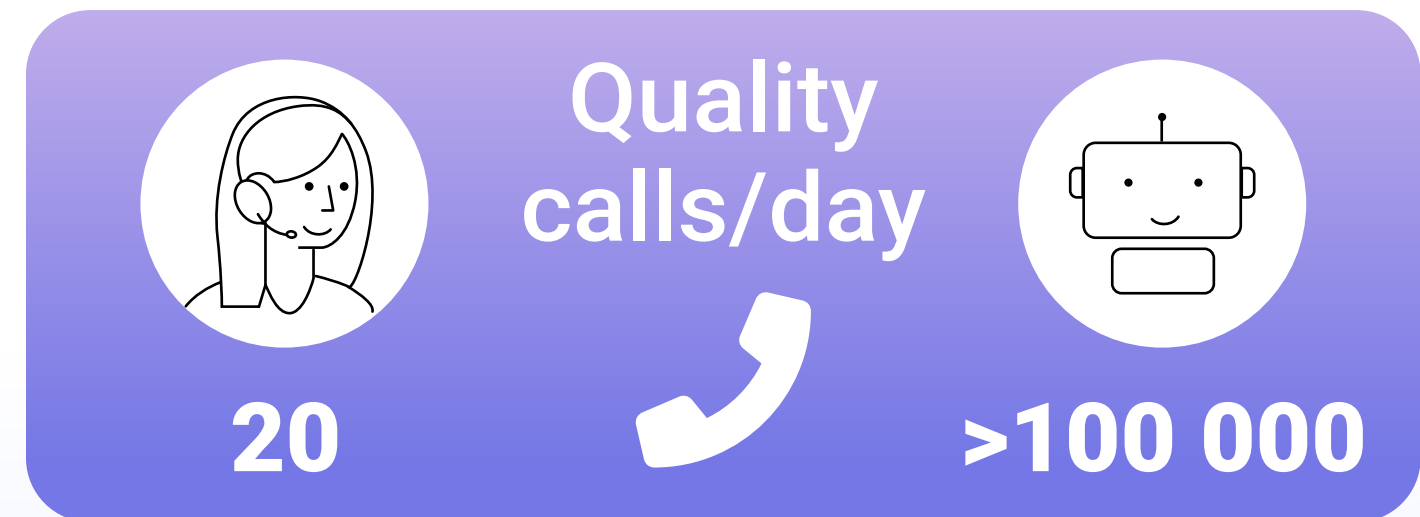
One thing is clear, voice bots must be trained. That's why it would make sense to start with projects requiring the least actions and investments so that the bot becomes good enough and at the same time brings maximum profit. Take a closer look at the business processes and find recurring aspects. Most likely, these will be cold sales or handling inactive customers. For a customer support-oriented business, there's likely to be a large service component, meaning first-line support is what they should address.

Recruitment bots are another popular case: such bots contact potential job candidates, tell them about the vacancy, ask about qualifications, answer questions and guide candidates into the recruitment funnel. This is something that businesses can launch quickly, since the costs are low, and there will be a good return on investment.

The first important thing to do before starting a contact centre automation project is to determine the goals and objectives. Usually, this is either about saving resources and cutting costs, (because bots can process a vast amount of information), or growing the business (if it is growing rapidly from a medium-sized business to a large one, then only it will be easier, faster and more efficient to increase volumes with the help of bots).

The next big step is to plan the audience coverage. Automation is worthwhile if it significantly reduces employees' workload and saves resources.


A human agent can make about 20 quality calls per day, while bots can make hundreds of thousands. For enterprise-grade projects, experts recommend starting with 50,000 minutes. However, small-sized businesses usually don't have enough resources for call campaigns. They can start by implementing OOB solutions and scaling later if necessary.



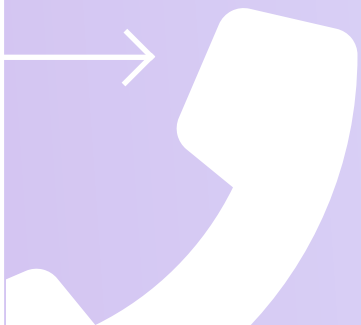
It is also as essential to determine the scenarios, based on which the bot will be contacting the customer base. There's no need to think in terms of limitations, but it is important to understand that scenarios must be more or less common.

Of course, it is crucial to know all the specifics and analyse the market to decide who to pilot with. It's better to test a few vendors first because the diversity of available solutions is truly amazing.


4. What are the most popular scenarios for AI voice bots?



For outbound calls:
banks, fintech – lead generation, debt collection, service call with confirmation or approval of something, such as a visit to a bank branch to issue a card.



For inbound calls:
answering FAQs, such as about card balance, nearest branch location, etc. Retail – confirmation of orders and requests. Medicine – doctor appointment confirmation. This makes up 80-90% of the market.



Calls outside business hours
If a company works '9-to-5' five days a week, that doesn't mean that customers don't call after hours. The easiest solution for such cases would be to add an answering machine that would ask to call back during working hours, offer to cancel an order or appointment, record a voice message with a question, and so on. To handle customer requests after hours more accurately, smart virtual agents should be the ones to take the calls.

4. What are the most popular scenarios for AI voice bots?



Frequently Asked Questions and routine tasks

It may come as a surprise, but most businesses do not want to get rid of all contact centre agents and replace them with virtual ones. On the contrary, they constantly need to hire and train new ones. Being on the receiving end of customer queries is hard work and 74% of call centre agents are at risk of burnout. This affects agent productivity forcing businesses to either re-train employees or hire new ones.

Customers seek the best treatment possible: they expect empathy, care, and commitment. By receiving this level of service, there is a higher chance that customers will remain loyal to the brand. For example, there might be tricky situations in which human-to-human interaction with clients is crucial, as dealing with the problem or even conducting a mini-investigation to solve the issue is something intelligent virtual agents are not yet well equipped to do by themselves.

It is often the case that human employees find themselves immersed in time-consuming routine tasks and find themselves physically unable to provide these levels of service.

Speaking about the contact centre of the fridge repair service, for example, its agent has to call all the customers, confirm the repairman's visit and clarify the details. But if an AI voice bot starts making or receiving "simple" calls instead – since it is not subject to the same routine – the human agent will have the time to focus on better quality of communication when faced with complex time-consuming queries from customers.

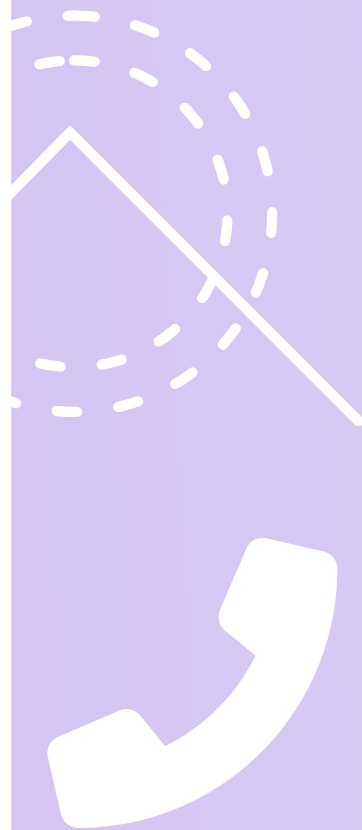
4. What are the most popular scenarios for AI voice bots?

High volume of calls

There are situations when the volume of calls is so high that call centre agents fail to handle them all. For example, a power outage occurs and lots of refrigerators simultaneously break down. The aforementioned repair shop begins to receive a lot of inbound phone calls from people asking for a fridge to be repaired. The human agents cannot physically process all of the requests, which is not a problem for a voice bot, as it can take as many calls as needed.

This goes both ways, sometimes you need to call many customers at once: for example, a company launches a birthday promotion and offers customers a discount. To call the company's 10,000 customers, contact centre agents would have to spend several weeks, but for companies with millions of customers, it's close to impossible, especially if it has to be done quickly. As in the previous example, a voice bot can easily do the job (provided it is built on a cloud platform that allows many simultaneous outbound calls).

Seasonal businesses like air conditioning maintenance, auto repair shops, flower stores, etc. find themselves in a similar situation. They have a standard load during the year, but once or twice a year they get a flurry of calls that the human agents cannot cope with, and customers do not get through. With conversational AI agents taking the calls, everyone gets through, and companies with contact centre automation eventually win.

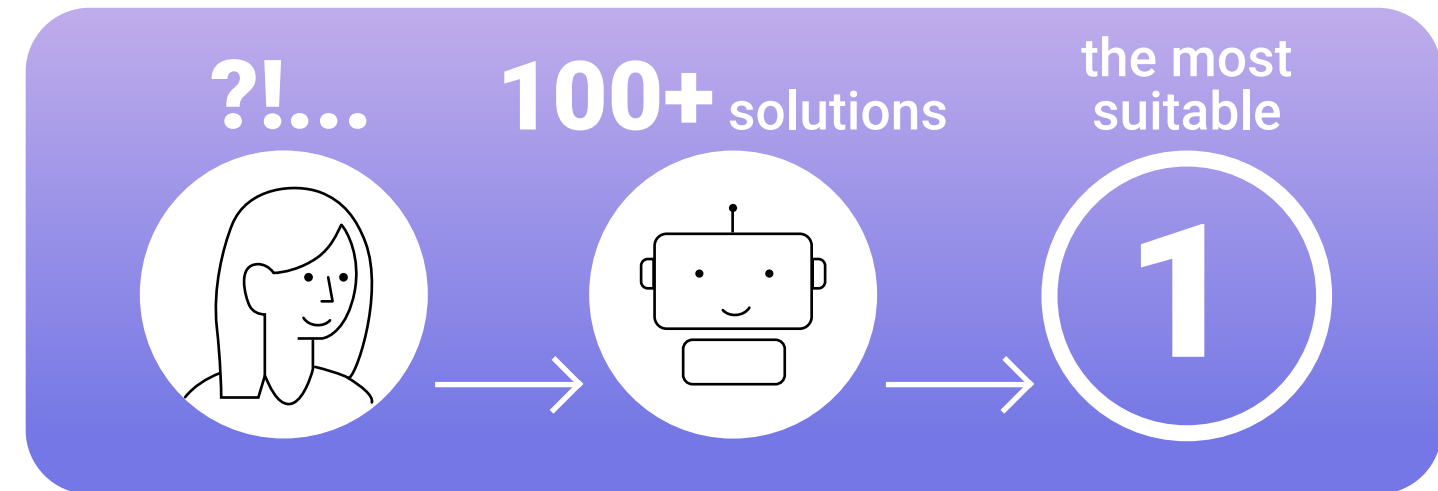


5. How to choose the right vendor for a call campaign?

Big companies tend to choose platforms that create the most convenient dialogue options for customers. These are human-like voice bots, call-centre ambient sounds, and proper reactions to interruptions, which makes them full-fledged AI agents that can process all customer requests as quickly and efficiently as possible.

So what should businesses pay attention to when choosing a vendor?

At the start, it's important to consider companies that are ready to build a bot from scratch. As for the tools, it's better to go with some one-stop-shop of the platform. On the other hand, a lot depends on voice actors and scriptwriters.



The problem with our market is linearity and horrid decision trees, based on which the configuration is built. Let's say, you've forgotten to stretch out the branch and, alas, the dialogue is ruined. We, in our turn, opt for non-linear logic. Conceptually, at the system level, the bot does not have trees, but there is purposeful logic as it leads a person to the key goal of the conversation and a huge number of decisions that the bot can make alternatively. Every time you say something, the bot weighs in 100+ solutions and chooses the one that it deems the most suitable.


6. What makes the bot intelligent?


Let's start with problems.

First, it is a technology that grasps the meaning of what is being said. A simple keyword search often fails, as a complex answer contains many key ideas. **Secondly, it is a decision-making system.** The case fails if the decision tree had nothing for the specific key.

Some systems can also fail when there is voice-to-text. A system identifies the voice, the bot picks background noise and sends it for recognition processing, then it is transcribed into text, which will be interpreted based on its meaning, the tree will make a decision and all this will be total gibberish.

According to the statistics we have:

70% 
of dialogues at least once include a detailed answer

60% 
of dialogues do not go according to the script

And if it's tree-based, it's a total disaster. The bot is a mirror of its teacher. So if the teacher is a fool, the bot will turn out to be the same.

7. What technologies are needed to create a smartphone bot?

Natural Language Understanding technology is the one that makes bots truly smart. Using it, one can train AI agents based on a large number of dialogues. As a result, bots can operate outside the given patterns and recognise the intentions of as many customers as possible, as well as interpret them correctly.

Contact centre noise has already become mainstream and is present on almost all platforms on the market. **The most recent feature is the adaptable setting of interruptions when the AI-powered agent reacts to the interruption and understands what the customer wants.**

Most tools allow you to set the duration of the phrase with no interruptions, and, accordingly, foresee different response options depending on the phrases and the moment when the AI agent is being interrupted.



Of course, you can try and make a smart AI agent without an NLU core, but it would require a huge amount of writing, including all the popular phrases, based on which the intent of users will be determined. You will have to constantly manually parse the logs, and analyse customers' conversations with the AI agent to find those phrases or intentions that were falsely recognized, add them, and manually write every common phrase. If we are talking about a large number of calls, this is extremely time-consuming and expensive. I find it impractical.

8. What are must-have integrations for a voice bot?

Surveys show that users don't like interacting with bots due to

- inadequate reactions,
- synthetic speech,
- poor-quality responses.

However, new technologies help overcome all these problems.

Automation needs to be gradual. Integration means full automation and that's what we're aiming for.



The first integration is telephony so that the bot can start conversing. Further, the bot must know its contact base. We recommend you start with the simplest – a secure file hosting service so that all data is safe.



A more complex option involves **integration with a system that can transmit information about who needs to be called over a secure communication channel.**



The third integration is the products and services that businesses offer, e.g. billing and product platforms where offers are formed.



The fourth and final stage is reporting. It is important because, without it, we will not be able to evaluate the bot's effectiveness.

9. Which is better: speech synthesis, pre-recorded voice or both?

It depends on the case and what the customer wants to get. Speech synthesis works for inbound calls when there's a specific need, but it should sound as human-like as possible. And it will need further training with the help of machine learning to communicate better on certain topics.

Another option would be to pair pre-recorded voice with the synthesised variables. This is a hybrid synthesis technology. For example: "Hello, Mary...", and state that you need to replace Mary with Lisa. The hybrid synthesis model will resynthesize the pre-recorded audio and will sound 99% like the original.

Since these are machine learning algorithms, you can train the model so that it becomes better each time. If there's a new topic, the voice actor records a new dataset, based on which the ML model is trained. Hybrid synthesis can be used in lead generation cases when you need to synthesize the client's first and middle names while making the bot sound as human-like as possible. The same applies to metadata on a banking card – the loan amount, cashback and other values that vary depending on the customer and go as a personal offer.

For the pre-recording, you should use amateur voice actors, that is, try to add interjections like "hmm", "err" and other natural reactions, use pauses ("wait a second"), etc, so that the customers assume they are talking to a person.

When working with a voice actor, of course, the conversation must sound lively. A lot needs to be invested in the artistry of the voice actor and in their ability to lure the user into the conversation. Synthesis gives a very sincere, but way too formal speech. On the other hand, synthesis provides a very fast implementation, so you can give variables a voiceover.

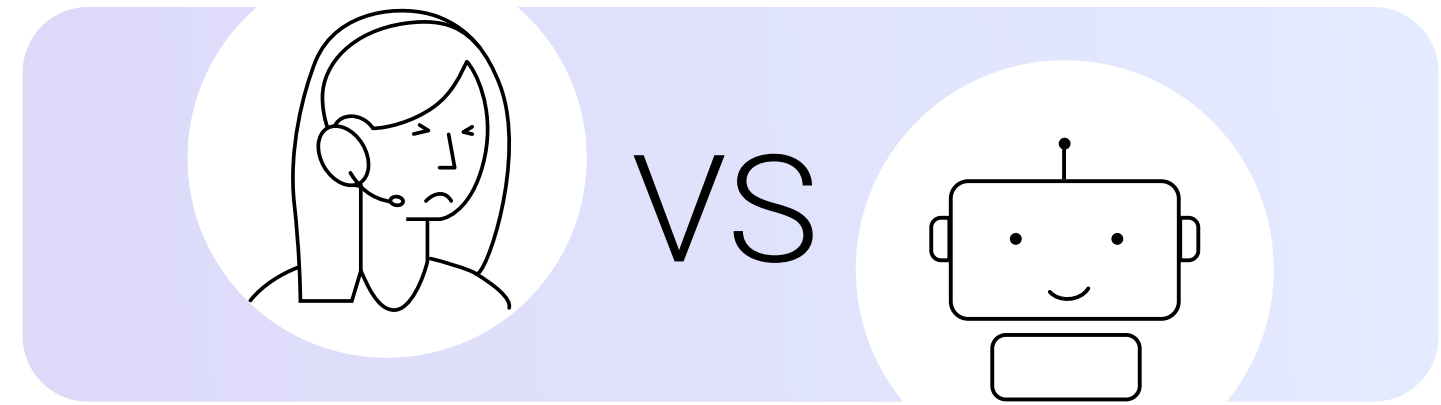
10. How to make a bot sound natural?

Many companies are moving away from the original speech synthesis model. They use hybrid synthesis or similar technology and synthesise variables from pre-recorded voices. Then it sounds as natural as possible.

Conversational design is also crucial. Some add customers' full names into the script, and bots keep repeating them throughout the entire call. This can be annoying. It is always better to use conversational phrases ("wait a second", etc.), reactions to interruptions, and, of course, A/B testing.

The dialogue model needs constant improvement, as well. Finding the best sequences for phrases and transitions impacts bots' performance.

NLU core training is also important to ensure that the AI agent understands what the customer wants.




An iterative enhancement model will result in an AI agent conversing much better than a human agent. Human agent's conversion rate may be lower than that of the bot even in lead generation and NPS surveys. After all, the AI-powered virtual assistant is completely devoid of the human factor, bad mood, unpleasant voice, etc.

11. How to make sure that customers don't hang up on a bot?

These days, people get a lot of calls from different organisations, which may be quite irritating. It is important to maintain communication neatly, that's the first and easiest step. The script is the second and more complex step. Often when people answer the phone, they can't even respond with a simple "Hi, who's this?" as they immediately hear an offer or a super long intro from a bot. Real people don't talk like that. If the bot sounds natural (hearing out the customer first and then proceeding with the offer), then people's reactions will be different.

Further, it is important not to overload a person with introductory information. If users repeat the same questions bots must reply with different phrases to keep the dialogue natural. The scenario is the key, it should be concise and valuable. The more details it has, the more efficiently the bot will work.



**The scenario is the key,
it should be concise
and valuable**

Automation is not about the fact that we're using bots for calling. It's about easing the company's workload, saving resources and increasing sales volumes. Customers are, indeed, used to speaking to bots when calling large companies since there is a large flow of information. As for outbound calls, customers should not feel like "a soulless machine" is talking to them. Not everyone is ready to talk to robots. So those who make voice bots sound as natural as possible, win.

12. What are some common mistakes in scenarios for outbound calls?

- **The simplest and most effective tip is to use different responses to the same question**

If the offer is too long, customers may lose interest and stop listening to the bot. Or they may start asking too many questions and confuse the bot. It also happens that bots can only hear the beginning or end of a sentence. In this case, you should have a default line in the script asking the customer for clarification.

Sometimes the bot goes into a cycle. The simplest and most effective tip is to use different responses to the same question.

13. Inbound and outbound voice bots: is there a difference?

The difference is about who has the initiative in the conversation. If it's the bot calling, the initiative is always that of the bot. If the customer is the one to call, the virtual assistant at first does not know its task. After all, the sales department bot can get calls for customer support. This adds variability.

There are lots of topics that people contact customer support for, and each one has a subtopic. You may start with 4-6 issues, break them down and we end up with 75 unique topics.

Customer support automation is particularly beneficial for companies with fewer employees.

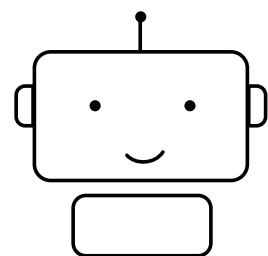
They can reduce the cost by as much as



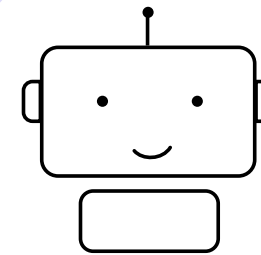
14. When should the bot transfer the conversation to a human agent?

It makes sense to pass the conversation to a real person if the bot fails to handle the task. The most complex scenarios are probably those related to inbound calls. The process of training bots is infinite, but there will always be that one customer who will ask a question no one has ever asked before.

If the bot realises that the issue is too complex, it should transfer the call to the human agent. Some companies use lines like: "I'm a newbie, I may not know some things, let me better transfer you to a specialist," and customers find it cute.



I'm a newbie, I may not know some things, let me better transfer you to a specialist



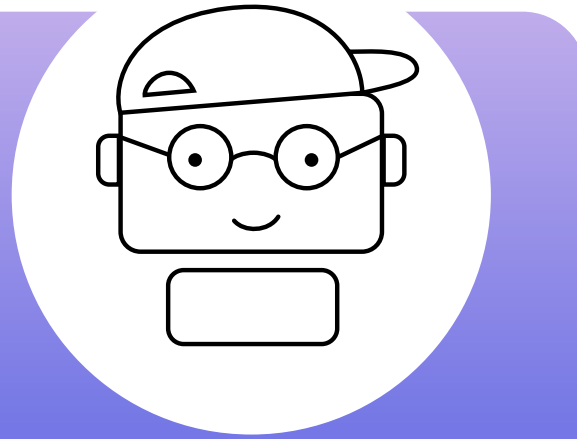
Just give me another chance, please, otherwise they'll shut me down, I'm a robot, after all.

Bots have more control over outbound calls. Exceptions are complex offers when they need to pick up details from internal systems. When bots don't have the necessary integrations, it makes sense to redirect the call to the agent at a certain stage.

Of course, when the customer asks, the bot should oblige. Although the bot can ask to give it another shot. If the bot's persona implies irony, it can say something like: "Just give me another chance, please, otherwise they'll shut me down, I'm a robot, after all." That's something for a well-trained scriptwriter to do. During such conversations, a customer usually develops empathy toward a bot.

15. Does a virtual AI agent need a personality?

Many companies (mainly larger ones) try to associate the bot's name and voice with the company's brand



In this case, either the company's brand policies or the internal policies of the contact centre regulate the bot's personality. The company's brand management defines how the AI agent should speak, what it should convey to the customer and other basic things.

16. Should a bot introduce itself as one or pretend to be a human?

In some countries, bots are not obliged to introduce themselves as AI by law. In some US states, it is quite the opposite. Conversion-wise, if a voice bot makes sales calls without saying it's an AI, it has a better conversion with the old-school audience.

But when businesses DO admit to using a bot, customers may find it exciting. The level of engagement in the conversation is higher than if it was a human agent calling.



Are you a robot?

Moreover, if the robot gets asked: "Are you a robot?", it must say so. Because if a person has doubts, they will try to break the bot with the most unexpected questions.

! So, let the bot admit its AI origins, but try doing a creative spin on it

Statistics say that more than half of the people who revealed the bot's identity in the conversation ended up having a proper dialogue with it. People forget that they're talking to a bot and begin talking as if it were a person.

17. How do you know if contact centre automation is effective?

One of the things businesses care about the most is the return on investment. The key factor is what percentage of people reached the target action. All other metrics are outstripping.

There is always a percentage of failed dialogues when bots fail to understand users. Usually, it is

0.5-1%, sometimes 1.5%

- but this is how communication works.

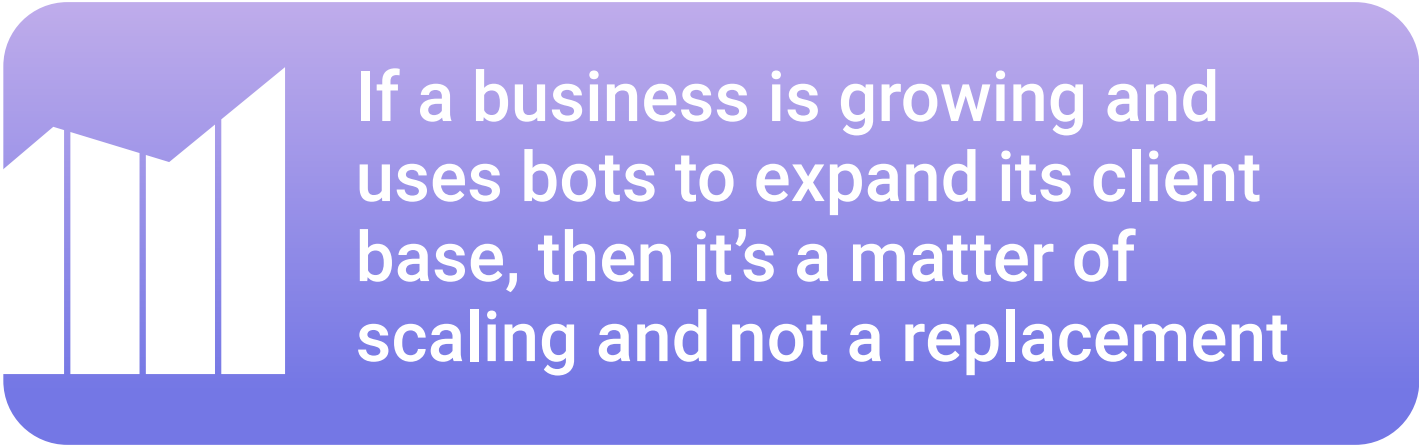
The percentage of error recognition is another important factor. The way the level of recognition quality is growing is impressive. At the moment, the percentage of errors is negligible.

Try comparing the number of consents that bots get from customers with the number of operations that took place in your systems. If the numbers diverge, look for errors. This parameter should never diverge.

Analyse conversations: track customers' reactions to certain phrases, and changes in their behaviour.

18. Will the bots eventually replace all humans in contact centres?

It's all about finding the right balance here. Voice bots are great for routine tasks, but they can't be empathic. In sensitive situations, humans need a human.



If a business is growing and uses bots to expand its client base, then it's a matter of scaling and not a replacement

When voice bots take care of mundane tasks, human agents can focus on industry-specific expertise and improve their skills.

Also, behind any bots there are people: no one writes a script better than a telemarketer. There's also prototyping, development, training, and more. So humans aren't going anywhere.

19. What's in store for voice bots and the contact centre industry in general?

It's challenging to make predictions in today's realities as too many factors can come into play. When talking about markets, we should always consider regulatory risks. Those vary from country to country: some allow cold calls while others don't. At a certain point, cold calls might disappear and only service calls will remain. There will be an impact on everyone in this market, of course.

At the same time, everyone has been predicting the death of e-mail for the past 20 years, and it is alive and well. The same goes for phone calls. People from the chatbot industry say that phone calls will lose the battle to text.

But certain estimates show that

over 80% of warm base contacts are real people. It's impressive.

People will always speak and write

A good tool would be the implementation of multi-modal communication. If one channel doesn't work, a company can always move to another communication method.

Meet our experts



Siama Hussain

Senior Enterprise Sales Manager at Tovie AI

View profile 



Joshua Kaiser

CEO at Tovie AI

View profile 

About Tovie AI

At Tovie AI, we set ourselves a goal to make an interaction with a robot, virtual assistant, or a simple bot to be as natural as possible.

Our comprehensive tool ecosystem, end-to-end solutions, accurate NLP engine, and customised analytical reports enable our users to test the market and get the most out of their investment.

We offer solutions and technologies that help bring to life conversational AI projects of any complexity: from basic to advanced. Our technological capabilities allow for deep customisation, as well as integrations with all popular business systems. Powered by the trailblazing hybrid synthesis technology, our voice bots sound as human as possible.

For more information, visit tovie.ai or contact us at contact@tovie.ai

Sources

Tovie AI, Tractica, Aimultiple, Artificial Solutions, Voicebot.ai, IDC, IDG Connect, Juniper Research, MarTech Series, Telecompaper, Softengi, O'Reilly, Deloitte, OCCRP, Statista, MIT Technology Review, MarketsandMarkets Research, Valuates Reports, ABI Research, Liveperson, Vodafone, Ernst & Young Global Limited, Capgemini, Grand View Research, PwC.

