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### Contents

**CHAPTER 1 | WHAT IS A CHATBOT ANYWAY?** 

**CHAPTER 2 | A BRIEF HISTORY OF CHATBOTS** 

**CHAPTER 3 | CHATBOTS VS. CONVERSATIONAL AI - WHAT'S THE DIFFERENCE?** 

**CHAPTER 4 | CONVERSATIONAL AI - HOW IT WORKS** 

**CHAPTER 5 | CHATBOT FEATURES AND BENEFITS** 

**CHAPTER 6 | HOW AI CHATBOTS DRIVE BUSINESS VALUE** 

**CHAPTER 7 | USE CASES AND CASE STUDIES** 

**CHAPTER 8 | CHATBOT BEST PRACTICES FOR ENTERPRISE** 



# INTRODUCTION

Welcome to the enterprise chatbot guidebook! In the pages of this guide, we will take a comprehensive look at chatbots, conversational AI and their related technologies. We will outline how and why conversational AI has become crucial to the successful digitization of customer service for large-scale enterprises, and go over use cases and best practices for how to best get started with a chatbot project.

Whether you're just curious about automation or researching in preparation to deploy your 8th chatbot (go, you!), we're confident that you'll find everything you need here to walk away with the knowledge necessary to help your business thrive in today's world of digital-first customer service, sales and support. 5

# WHAT IS A CHATBOT ANYWAY?

Let's start with the basics. In its purest form, a chatbot is a computer program designed to allow interaction between humans and technology. As the name implies, this was originally confined to just text-based communication, however, over the years, this interaction paradigm has evolved to include other input methods such as voice and gestures.

Chatbots have also, in the recent past, almost exclusively been deployed as customer service tools. They allow consumers 24/7 access to businesses and empower self-service, but that too is changing. As the technology powering chatbots has improved, so have the number of use cases that they cover. The 21st-century chatbot has evolved from a simple question-and-answer bot into a swiss-army knife of automation that can enhance not just customer support and service, but an organization's operational efficiency, too.

What really distinguishes a good chatbot from a bad one is the underlying technology powering it. Artificial intelligence has revolutionized what's possible to accomplish with a chatbot. Even the most basic bot with off-the-shelf tech can automate simple tasks. Larger enterprises, however, have equally larger needs and require sophisticated chatbots with more powerful technology in order to automate customer interactions at scale.

That's where conversational AI comes in and when things start to get really interesting, but... hold that thought, we'll get back to this topic shortly.

First, let's rewind a bit and look at where chatbots came from.

### WHAT IS A CHATBOT **ANYWAY?**

#### What's in a name?

You've no doubt noticed that there are myriad different names out there for chatbots. Some popular ones include virtual assistant, AI chatbot, intelligent assistant, conversational agent... and the list goes on!

These names are basically all interchangeable and will vary based on the vendor or solution. At boost.ai, we prefer the name 'virtual agent' because an agent, by definition, is "a person who acts on behalf of another person or group". It makes sense then, that chatbots powered by conversational AI should go by another name when, as you'll learn from this guide, that they can do so much more than just chat!



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## A BRIEF HISTORY OF CHATBOTS

The first chatbot - or proto-chatbot, if you will - was developed in 1964 at MIT by computer scientist Joseph Weizenbaum. Named ELIZA, it is considered an early example of a natural language processing computer program and was designed to simulate communication between humans and machines.

It used a basic pattern-matching algorithm and substitution methodology to give users the illusion that the chatbot understood them, but in reality, had no ability to contextualize events. Even though ELIZA was pretty basic, it laid the groundwork for the future of chatbots. Below are some other significant milestones in chatbot history that brought the technology to where it is today.

### **A BRIEF HISTORY OF CHATBOTS**

#### 1950

#### **The Turing Test**

Even before ELIZA was a glimmer in its creators' eye, Alan Turing posed the question of whether a machine could think in his seminal paper 'Computing Machinery and Intelligence'.

#### 1966

#### ELIZA

The world's first chatbot was proof positive that humans were eager to communicate with machines. ELIZA could carry on (relatively) convincing conversations by mimicking response

Inspired by ELIZA, the Artificial Linguistic

Internet Computer Entity was the natural

as the inspiration for the 2013 film Her.

language processing chatbot that itself served

#### 1972

#### PARRY

Described as "ELIZA with an attitude", this Standford-developed chatbot attempted to simulate a person with paranoid schizophrenia and successfully fooled many experienced psychiatrists.

#### 1988

#### Jabberywacky

Jabberwacky was an early attempt at creating an artificial intelligence through human interaction and was designed to simulate natural chat in a humorous way. It was eventually released online in 1997.

#### 1995

#### A.L.I.C.E



EEEEEEE

EEEEEE

EEEEEEE

#### \_\_\_\_

2001



#### SmarterChild

Available on AOL Instant Messenger and MSN Messenger, SmarterChild was the first chatbot to achieve mainstream adoption by millions of users in the early 2000s.

#### 2010

#### Siri

Launched initially as a standalone iPhone app, Siri was integrated into iOS with the launch of the iPhone 4S in 2011. This ushered in the era of voice-enabled virtual assistants that included Google Assistant and Amazon's Alexa.

#### 2016

#### **Facebook Messenger Bots**

The wide-spread adoption of chatbots exploded when Facebook announced that it would begin allowing bots onto its popular messaging platform. By 2018, there were more than 300,000 active chatbots on Facebook Messenger.



#### 2022

#### ChatGPT

Developed by OpenAI, ChatGPT represents a quantum leap in conversational AI. Leveraging the capabilities of Large Language Models (LLMs), ChatGPT can engage in fluid and dynamic interactions, simulating human-like conversations across a multitude of topics thanks to its adaptive learning and vast knowledge base. CHATBOTS VS. CONVERSATIONAL AI - WHAT'S THE DIFFERENCE? Basic chatbots only have the capacity to complete a limited number of tasks. Typically, this means answering simple FAQs and not much else. In order to meet the demands of larger enterprises, chatbots need conversational Al to enhance their ability to understand human language and to provide transactional functionality in addition to their informational capabilities.

Conversational AI is the synthetic brainpower that makes chatbots capable of understanding, processing and responding to human language.

Conversational AI can be used to power chatbots to become smarter and more capable. But it's important to understand that not all chatbots are powered by conversational AI.

#### Scalability is king!

Large organizations, like banks or government agencies, often have thousands of customer service requests every day that can vary wildly. This can be impossible for basic chatbots to keep up with. Conversational AI can enable a chatbot to scale its language understanding and capacity without any reduction in accuracy.

### CHATBOTS VS. CONVERSATIONAL AI - WHAT'S THE DIFFERENCE?

Using sophisticated deep learning and natural language understanding (NLU) algorithms, conversational AI makes it possible for a chatbot to go beyond translating website content into simple chat responses.

It can unlock the potential for enterprises to empower customer self-service by automating complex interactions such as blocking credit cards, filing insurance claims, upgrading data packages, generating invoices and much, much more.

	Basic chatbots	Chatbots with conversational Al
Online 24/7	$\checkmark$	$\checkmark$
Natural language understanding	Keyword-based tech	$\checkmark$
Dynamic, context-based navigation	Button-focused navigation	$\checkmark$
Multi-level intent hierarchy	lf/Then statements	$\checkmark$
Unlimited scalability	Limited improvement capacity	$\checkmark$
Broad scope	Narrow scope	$\checkmark$
3rd-party integration support	Limited understanding model	$\checkmark$
Self-improving over time	0	$\checkmark$
Consistently high-resolution rates	Ø	$\checkmark$
Omni-channel	Ø	$\checkmark$
Entity extraction	Ø	$\checkmark$
User authentication	$\odot$	$\checkmark$
Voice and conversational IVR	0	$\checkmark$
Multi-lingual	0	$\checkmark$
Privacy & security compliant	Ø	$\checkmark$

### CHATBOTS VS. CONVERSATIONAL AI -WHAT'S THE DIFFERENCE?

#### In the 2019 report, <u>'Competitive Landscape: Virtual-Assistant Platforms</u>,

Worldwide', Gartner outlined three types of technology that most of the chatbots you will come across on the internet are built on. Understanding the difference between these three key chatbot technologies will help you make the right decision on which one is right for your business:

#### **Rule-based programming**

Common architecture of most basic chatbots. Uses keywords and other language markers to trigger predefined responses.

#### **Computational Linguistics**

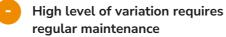
A flexible approach for dealing with multiple languages by tackling customer requests at various linguistic levels.

#### Machine Learning (conversational AI)

Most advanced implementation. Uses a large set of training data that enables deep learning algorithms to classify intents and better understand human language.

+	Easy to implement
•	Does not scale

Easily adapted to new languages





High response accuracy. Scalable



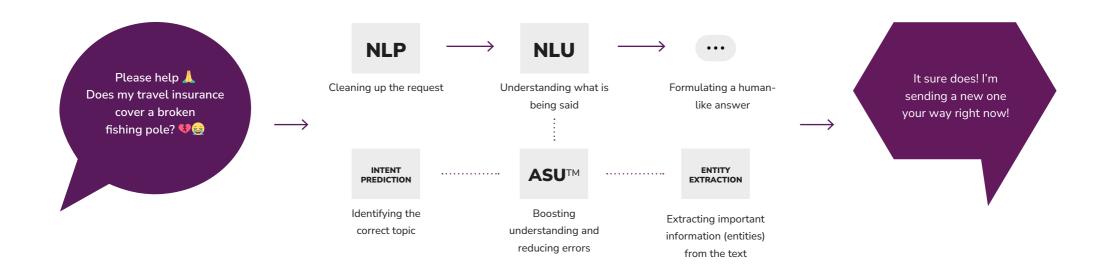
Deployment can be resource-intensive



CONVERSATIONAL AI - HOW IT WORKS How does conversational AI translate human language into something it can respond to and action on?

On the surface, it's deceptively simple - a customer interacts with a chatbot and is given an appropriate response. But there are actually a number of different technologies working behind the scenes to ensure this interaction goes smoothly.

### **CONVERSATIONAL AI - HOW IT WORKS**



The first step involves Natural Language Processing (NLP). It's the job of NLP to correct spelling, identify synonyms, interpret grammar and break down a request into words and sentences that make it easier for a chatbot to understand.

Once the request has been preprocessed, a variety of deep learning and machine learning models take over.

These are collectively known as Natural Language Understanding (NLU), and are a subfield of NLP. NLU is responsible for identifying the correct **intent** (i.e. topic) of a request and extracting other important information that can be used to trigger additional actions such as context, account preferences, entity extraction, sentiment classification etc.

Tldr; NLP is anything that has to do with the processing of natural text, while NLU is more specifically about making sense of a chunk of text.

An 'intent' refers to the goal or topic a customer has in mind when typing in a request.

### CONVERSATIONAL AI - HOW IT WORKS

Once the request is understood, it's time for the chatbot to formulate a response. Conversational AI outshines basic chatbot solutions in its ability to communicate in a personalized manner. By combining the information gathered by the NLU (customer intent, contextual information, etc.) with a structured hierarchy of conversational flows, a chatbot is able to respond appropriately and in a conversational manner, whether it's answering a simple question or carrying out a complex transaction on a customers' behalf.

As the chatbot has more and more interactions, conversational AI can grow smarter, improving how it responds. This can be aided by technology like self-learning AI that improves based on conversation data, and by human AI Trainers that tweak the model to make it more effective and efficient over time.

#### **Proprietary power-ups!**

At boost.ai, our NLU stack includes a proprietary algorithm called Automatic Semantic Understanding (ASU). ASU helps to enhance the overall language understanding capabilities of our virtual agents, increasing their ability to parse complex sentences and reduce the occurrence of false positives by up to 90%.



### **CONVERSATIONAL AI -HOW IT WORKS**

#### Do more with conversational AI

Thanks to advanced language understanding capabilities conversational AI can enable chatbots to do so much more.

#### Self-learning AI

Build smarter and deploy faster with artificial intelligence that improves with the more data you feed it. This can mean scanning a website (or another chatbot) to build a viable model in just a few hours or analyzing conversation data to help AI Trainers optimize in real-time.

#### Voice and conversational IVR

With powerful language understanding, a chatbot can go beyond text-based interactions and become the foundation for voice-driven customer service using text-tospeech and speech-to-text integrations.

#### Virtual Agent Network

Large enterprises can break down departmental silos by connecting multiple chatbots together in a network. Advanced NLU detects and transfers users to the correct bot seamlessly and within the same chat window to maximize the customer experience.

#### Al-assisted human chat

Connect a chatbot to existing knowledge base systems and supercharge its ability to assist front-line customer service staff. Conversational AI can provide helpful suggestions and increase employee productivity without needing to put customers on hold.

#### Integrations

Conversational AI can make it possible for a chatbot to integrate with applications you already know and love. That means frontend integrations like Zendesk, Facebook Messenger and Slack, and powerful back-end integrations like RPA and OCR.



CHATBOT FEATURES AND BENEFITS Now that we've established what chatbots are and how they work, it's time to dig in and find out how they can help.

When deciding on the right conversational AI platform to deploy for your business it's important to have a clear understanding of the key features and benefits that an AI-powered chatbot can deliver.

Here's a list of enterprise-grade features you should look for and expect:

#### High accuracy & resolution rates

A chatbot can't help if it doesn't understand. That's why conversational AI needs to be built on robust language understanding algorithms in order for it to be effective at automating customer requests. A chatbot must be able to:

- Interact with customers in a conversational manner
- Understand and act on customer intent, regardless of how complex the request is
- Identify multiple intents in the same request and provide customers with actionable responses for each
- Understand context to keep interactions from veering offtrack
- Ask follow-up questions to clarify information and gather actionable data

### **CHATBOT FEATURES AND BENEFITS**

These crucial features make it possible for conversational AI chatbots to achieve high automation rates of up to 90%. Without these in place, you run the risk of frustrating customers and reducing their confidence in your chatbot.

#### Scalable intent hierarchy

Many basic chatbot solutions are only able to automate actions and answer questions on 100-200 topics at most. This is fine in the case of a florist or food delivery service but soon becomes untenable for larger enterprises such as banks, insurance companies, telcos, e-retailers or government organizations.

Larger organizations often have complex product and service offerings that require a scalable chatbot solution. A robust conversational AI platform will allow a chatbot to handle a number of intents orders of magnitude higher than rule-based chatbots, averaging in the thousands, rather than just a few hundred.

Conversational AI places intents into a hierarchical structure making it easier to scale. Having all intents at the same level (which is typical of many solutions) makes them difficult for the AI to keep track of. Instead, categorizing intents per subject matter (i.e. insurance types, banking products, etc.) negates the need to scroll through a long list in order to find the correct intent.

#### Broad scope vs. narrow scope

Trying to solve a narrow set of problems with a chatbot may seem like a quick fix but, ultimately, will not lead to sustainable returns on investment. Conversational AI makes it possible to cast a wider net and deploy chatbots that have a broad scope.

This approach is particularly applicable to enterprises that have large volumes of customer service traffic every day, and goes hand in hand with a chatbot's ability to scale and automate at consistently high resolution rates. A conversational AI chatbot with a broad scope can help an organization achieve long-term strategic goals instead of just short-term wins.





### **CHATBOT FEATURES AND BENEFITS**

#### Total cost of ownership

As conversational AI becomes smarter and more capable, it's natural for enterprises to want to be more in control of what their chatbots can achieve. This means moving away from the need to hire data scientists and developers towards solutions that offer low-code or no-code software and puts the power of automation into the hands of customer service reps, leveraging their expertise and experience to build dynamic customer interactions.

By giving an organization complete ownership of the solution - from building and implementation to optimization - you achieve greater organizational buy-in which results in better customer experiences overall.

#### Pre-built, vertical-specific content

Launching a brand new chatbot from scratch can mean a lot of initial work. This can be mitigated by selecting a conversational AI platform that offers ready-made content for your specific vertical. Instead of building banking intents from the ground up, you can implement a banking-ready chatbot that has knowledge about credit cards, mortgages and more, and then tailor its responses to match your brand guidelines.

Combined with self-learning AI, this can dramatically reduce implementation timelines from weeks and months to only a few days.

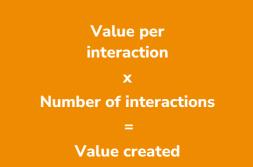
#### **Conversation analytics**

Analyzing and understanding what your customers are asking about is crucial to chatbot optimization. Look for analytics tools that allow an organization to mine conversation and interaction data, with features such as advanced search, tagging and quality rating, clean-up reports and API support.

#### Seamless human hand-off

The advantage of robust natural language understanding is that it allows a chatbot to correctly identify when it doesn't recognize a customer request. Conversational AI can use this information (complete with a chat transcript and account info) to seamlessly loop in a human agent to assist without the customer experience breaking down.

By recognizing when something is outside of a chatbot's scope and leveraging human support to help instead, you stand to increase customer satisfaction and loyalty.



HOW AI CHATBOTS DRIVE BUSINESS VALUE Customers prefer to use chatbots over legacy channels like phone and email because they are convenient, easy to use and empower self-service. Chatbots also have a number of benefits for enterprises including helping to reduce operating costs and increasing employee productivity.

### HOW AI CHATBOTS DRIVE BUSINESS VALUE

Here is a list of the top areas where conversational AI-powered chatbots can drive value to both businesses and consumers:

#### Instant response times

<u>69% of consumers prefer chatbots because of their ability to provide fast answers to simple questions.</u>

Consumers value speed and convenience when seeking help online. Al chatbots eliminate the barrier between a brand and its customers by providing immediate responses.

#### **Increase revenue**

Chatbots expected to drive \$112 billion in retail revenue by 2023.

Chatbots powered by conversational AI can interface with a customer's account and suggest products and services they may be interested in, helping to increase sales and drive revenue.

#### Keep costs down

Chatbots can cut operational costs by up to 30%.

A scalable conversational AI-powered chatbot can do the equivalent work of <u>hundreds of human agents</u>, without an organization needing to onboard any additional staff.

#### Increase employee efficiency

70% of white-collar workers will interact with conversational platforms on a daily basis by 2022.

Free up employees to focus on high-value customer interactions by using a chatbot to empower self-service and automate repetitive inquiries.

#### Open up new channels

<u>Chatbots saw a 92% use increase since 2019, making it the brand</u> <u>communication channel with the largest growth.</u>

Chatbots allow enterprises to deploy and test new, fully-automated omnichannel experiences for sales, service and support without tying up resources to onboard and manage new teams.

#### **Bolster brand loyalty**

<u>67% of US Millennials say they would purchase a product/service from</u> <u>brands using a chatbot.</u>

Deliver your customers a dynamic and memorable self-service experience and they'll keep coming back (and spending more!).

#### Available 24/7, 365

Over 50% of customers expect a business to be open 24/7.

In today's connected world, it's not unexpected that customers should want to reach you outside of office hours. Chatbots present a fast and scalable way to answer customer queries about your business when it suits them best.

With the right conversational AI platform powering it, a chatbot can be a powerful tool for both customer-facing support/sales and optimizing organizational efficiency.

In this chapter, we will explore a variety of chatbot use cases that can be applied across industries, and share examples of client success stories.

#### Banking, credit unions & financial services

#### Automate core banking services

Whether it's opening a new account, reporting a lost card, checking account balance, processing mortgage payments or any other core banking services, conversational AI makes it possible for customers to have agency over the process via a friendly, conversational interface without needing to involve a human operator unless they want to.

#### Instant & personalized service

Break down customer service and support barriers by delivering instant, accurate and consistent answers to questions related to your bank's products and services. User authentication can allow for personalized and proactive responses, tailored to individual customers' needs, that improve over time.

#### **Onboarding and internal support**

Combine conversational AI with RPA to automate time-intensive back-office processes, such as document management and contract review, ultimately increasing employee productivity and streamlining operations. Onboard new staff with training and knowledge base content built directly into the AI chatbot.



#### **Case study: DNB**

Challenge	Norway's largest bank needed to scale customer support to handle high volumes of incoming chat traffic
Solution	Routed all customer service chat traffic through conversational AI chatbot
Result	Chatbot automated over <b>50%</b> of all incoming chat traffic in 6 months.
	Now accounts for <b>20%</b> of all customer service automation, including channels like phone and email

#### Insurance

#### Automate claims processing

For insurance companies, ensuring a fast and frictionless claims process is key to maintaining strong customer relationships. A chatbot can answer questions about claims instantly, while interfacing with back-end systems and 3rd-party integrations (i.e. Optical Character Recognition), to fully automate the claims process.

#### **Boost employee productivity**

Complex policy structures and documentation can be accessed by support and service staff via an internal-facing chatbot, instead of needing to call back-office support lines. This can increase productivity and help to maintain consistency of the information provided to customers, while simultaneously reducing overall call times.

#### Fight fraudulent activity

Chatbots powered by conversational AI can help insurance firms to fight fraud and protect customer privacy. Natural language technologies can be trained to identify early warning signs of fraud and allow for automation processes put in place to mitigate potential challenges.



#### Case study: Tryg

Challenge	Denmark's largest insurer needed to reduce complexity for human support staff in order to increase operational efficiency
Solution	Deployed internal AI-powered chatbot to assist customer support staff by answering questions about policy and products without needing to put customers on hold
Result	Chatbot answers questions on over <b>1,200</b> topics with a <b>95%</b> success rate. Assists over <b>750</b> employees daily

#### Telecommunications

#### Powerful upselling potential

Combine existing customer data with conversational AI to create intelligent cross-selling opportunities. Purchase history and account info can be leveraged to offer personalized plans and services that customers didn't even realize they needed.

#### Increase acquisition rates

Chatbots present a unique and dynamic channel for customer acquisition. Potential customers can get to know which of your products and services are the best fit for them through targeted questions and AI-powered recommendations based on past user behavior.

#### **Product and technical support**

If a customer has a question about one of your products or is experiencing technical difficulties, a chatbot saves them from having to wade through FAQs to look for an answer. Conversational AI can help diagnose the issue and either provide automated support or transfer the customer to the correct human operator for further assistance.



#### **Case study: Telenor**

Challenge	The largest telecommunications company in the Nordics needed a channel to deliver consistent, on-brand customer self-service
Solution	Deployed a customer-facing AI chatbot with over <b>20</b> unique integrations to automate key processes including requesting a PUK code, upgrading mobile data plan, viewing an invoice, and more
Result	Telenor's chatbot can answer questions on more than <b>2,000</b> topics and successfully handled over <b>630,000</b> inquiries in 2020. Chatbot integrations helped Telenor reach its ROI goals in less than <b>12</b> months

#### **Public sector**

#### Easy access to public data and information

Chatbots are a great way to give citizens access to public information that may otherwise be difficult to track down on government websites or by phone. This can include anything from information on new legislation to what day of the week the rubbish is collected in your neighborhood.

#### Extending office opening hours to 24/7

Government agencies are famously known for having limited opening hours, making it difficult to get in touch with them.

Chatbots don't have this problem. They are available 24/7 (yes, even on public holidays!) and can help citizens with queries outside of standard office hours.

#### **Collecting feedback**

Implementing a new policy and want feedback? Chatbots provide a unique way for citizens to engage with local and national government through dynamic conversations that can act as surveys or simply as a place to let people's voices be heard.



#### Case study: Norwegian Labour and Welfare Administration

Challenge	Help businesses and citizens maintain access to key social benefit programs during coronavirus pandemic
Solution	Al chatbot was deployed to help assist with questions related to pension, child support, unemployment benefits, employee sick leave and more
Result	Conversational AI allowed chatbot to scale to handle over <b>270,000</b> inquiries at peak of the pandemic, doing the work of <b>220</b> FTE with an <b>80%</b> success rate including channels like phone and email

#### **E-commerce**

#### Promote sales and marketing campaigns

A chatbot can intelligently make recommendations to customers based on active sales and marketing campaigns by asking questions or interfacing with a CRM system for personalized recommendations.

#### **Re-engage customers**

Avoid abandoned carts by using conversational AI to remind customers that they have an unfinished order. Chatbots can help complete lingering purchases by providing additional product information or helping to resolve any issues a customer may have.

#### 24/7 order support

Extend your support hours to 24/7 with the help of automation. Offer automated return processes and assist customers with inquiries outside of contact center office hours so that they can keep buying your products and services when it suits them, not you.



#### **Case study: Posten**

Challenge	Norwegian postal service needed to scale customer service and support during busy holiday period
Solution	Chatbot launched with advanced functionality including parcel tracking and address change
Result	More than <b>370,000</b> customer service inquiries successfully automated in December 2019. In December 2020, Posten's chatbot surpassed over <b>1 million</b> customer interactions

#### Healthcare

#### **Provide critical information**

A chatbot can be a great resource for a hospital or medical organization to provide accurate and updated information on procedures, illness symptoms, mental health, health insurance and more.

#### Support doctors

Conversational AI can interface with medical databases and other systems to help doctors retrieve information that can be helpful during patient diagnosis. Answers to queries on symptoms, medication, dosages and more are just a chat away.

#### **Assist patients**

More than just answer-bots, AI chatbots can also help patients in a proactive manner. They can remind you when it's time to take medication, provide instructions for how to apply simple treatments and, with the help of 3rd-party integrations, help monitor patient health.



#### Case study: Västra Götaland

Challenge	Sweden's second-largest county needed a reliable and always-available channel for its 1.7 million residents to access information about the latest coronavirus guidelines
Solution	Al chatbot developed and launched in just 6 working days in collaboration with local healthcare professionals
Result	More than <b>800</b> conversations automated each day. Chatbot proved so effective that it was adopted by the wider Swedish population

Building and implementing a chatbot powered by conversational AI can be a daunting task - but it doesn't have to be! In this final chapter, we want to share a list of best practices that the boost.ai delivery team has developed from hundreds of successful virtual agent implementations across Europe and North America.

Following these recommendations can help you, as a project manager, successfully deliver your next conversational AI project quickly without compromising on quality.

#### Decide on the correct use-case(s) for your chatbot

Identify which parts of your organization would benefit most from automation and then decide on relevant use-cases. Use-cases can include:

#### Service and support (external chatbot)

- Automated first responder
- Automate a portion of customer service and support
- Increase self-service rates
- Increase support capacity
- Cost-effective 24/7 support
- Handle unexpected peaks

#### Internal knowledge (internal chatbot)

- Centralized knowledge base
- Convenient and anonymous
- HR, IT and payroll support
- Personalized
- Cost-effective 24/7 support
- Handle unexpected peaks
- AI assist with Smart Replies

#### Sales optimization (external sales chatbot)

- Automated sales
- Self-service and web-form guidance
- Increase up-sell and cross-sell
- Revenue goals with tracking and analytics
- Design and optimize customer journeys



Delivering an AI-powered virtual agent

- 1. Identify use-case
- 2. Scope
- 3. Build

For more information on industry-specific use-cases refer back to chapter 7

#### Set and agree on a clear scope

Establish the scope and KPIs for your chatbot and ensure all stakeholders are aligned. This is where you can set goals for your project and assess what resources may be needed. When setting scope and expectations, remember to:

Outline goals and clarify expectations, so that all stakeholders are on the same page about what they want to achieve

Define the requirements for the product, process and project. This means focusing on what questions need to be covered by the chatbot

Identify any limitations that could slow down or impede the project from moving forward

#### Assemble the right (dream) team

Buy-in across all levels of your organization can be crucial to your chatbot's success. We recommend the following structure for your internal (your company) and external (the chatbot vendor) teams. This can, of course, vary from organization to organization but is a good starting point for how to set up a winning project team.

#### **Internal team**

- Executive sponsor (critical)
- Project manager
- Content Designers/AI Trainers
- User testers
- Frontend developer

It is important to include an 'Executive sponsor' on your internal team. This should ideally be someone in a senior position who can act as a champion for the project and help to remove any roadblocks.

#### **External resources**

- Project manager (optional)
- Al Supervisor/Platform expert
- Al Trainer
- Technical specialists





#### Integrate your chatbot with your support team

Some AI chatbot solutions are black boxes that need a team of developers or data scientists to operate. This is not the right approach for enterprises that may require greater control over their customer service automation.

It's important to opt for a conversational AI platform that has a user-friendly, nocode or low-code, interface. This will allow for an organization's best customer service resource - its existing customer service staff - to take ownership of training and maintaining the chatbot. These subject matter experts, due to their experience and expertise, are best positioned to develop the kinds of dynamic interactions and conversation flows that make for the best automated customer experiences.

#### **Choosing the right KPIs**

When setting KPIs, you need to be mindful of the use-case that you have selected for your chatbot, and the scope you have landed on. Here are some common performance metrics that you should look to measure:

- Resolution rate
- Deflection rate
- Avg. handling time
- Reduction in queue times
- Number of sales automated

Also, it can be important to monitor what types of inquiries your human support staff see an increase or decrease in once the chatbot has been implemented. This will give you a good indication of where the bot may be helping most.

#### **Chatbot visibility matters**

Visibility is one of the core principles of (interaction) design. The more visible an element is, the more likely users will know about it and, in turn, interact with it. This applies to chatbots just as much as it does to websites, buttons, or content.

If you make your virtual agent difficult to find, customers will typically interpret this as you not wanting them to get in contact a cardinal sin in customer service. Here are some best practices to follow for virtual agent visibility:

- Ensure your chatbot is easy to find on your webpage
- Design a visually appealing avatar that is instantly recognizable
- Use text to encourage engagement with the chatbot, i.e. "I can help!"
- Use dynamic designs such as avatar animation or text pop-ups when hovering over the chatbot
- Proactively launch the chat window to grab the customer's attention

Chatbot visibility should also align with your KPIs. There is no sense in hiding your chatbot away on the 'Contact' page of your website if you set a KPI goal to automate 50% of all chat inquiries. It needs to be visible on the front page and promoted so that it can reach its full potential.

#### Anticipate and mitigate risks

All projects inherently have some level of risk attached to them. If you can plan for these risks in advance, then it can mean the difference between being surprised by an unexpected roadblock, and deftly navigating around it. These are some recommendations for how to think about risk mitigation for a conversational Al chatbot project:

- Identify and describe potential risks
- Determine the probability of how likely it is for a risk to become an issue
- Categorize the level of impact the issue might have on the project
- Have a plan in place for what mitigation measures to adopt to deal with the different categories of issues that may arise

#### **Consider going 'chat-first'**

For the best ROI, we recommend that our clients adopt a 'chat-first' approach. This is where all incoming chat traffic is directed through the chatbot first before other channels like phone or live chat. This allows an organization to automate the highest possible amount of interactions, and our NLU will intelligently transfer customers to the right human agent if a request is outside of the chatbot's scope. We have many clients that successfully use this approach to automate upwards of 40% of their total customer service

#### Chatbot project pitfalls to avoid

Without proper planning and foresight a large-scale chatbot project can quickly derail. Here are five of the most common pitfalls to avoid to ensure your virtual agent launches on-time and on-scope.

- **Insufficient planning** Failing to plan is a big no-no. Establishing a detailed roadmap for where you want to see your chatbot in 12, 18 or 24 months crucial to reducing overall risk and failure rates.
- **Scope creep** Keeping your eye on the prize, and scope under control, is critical for efficient delivery. There will always be time later to add in additional functionality to your new chatbot.
- Not anticipating hiccups Even the most carefully planned project can run into trouble. Sometimes hiccups are unavoidable, but it helps to acknowledge that they can happen, and to try and have an contingency plan in place in case they do.
- Undefined or misaligned expectations Your c-suite may define success in a completely different way than your front-line support team, so it's important to make sure your Critical Success Factors are easily measurable.
- Not thinking about the 'ever after' You need to be thinking ahead to after a project is completed; how will the solution be operated, builtupon and continue to grow? Taking time to consider these factors will make you ready to tackle them later.



### About boost.ai

Committed to delivering outstanding customer experiences, boost.ai stands at the forefront of enterprise-grade conversational AI. Driven to enable unparalleled interactions between people and organizations, boost.ai harnesses cutting-edge technology to push the boundaries of AI responsibly. Its proprietary self-learning AI platform empowers businesses to automate interactions at scale, enhancing efficiency and driving positive outcomes. Trusted by enterprises across various industries, boost.ai's virtual agents consistently maintain resolution rates above 90 percent, automating thousands of interactions daily. Founded in 2016, boost.ai is backed by Nordic Capital and operates from its headquarters in Sandnes, Norway, with global offices in cities including Los Angeles, Copenhagen, and London.

# Transform your customer experience with AI

Are you ready to revolutionize your customer experience with cutting-edge conversational AI? At boost.ai, we offer innovative solutions that can transform your customer service into a more efficient, engaging and responsive experience.

Request a demo today and witness firsthand how conversational AI can elevate your customer experience to new heights. Join the ranks of businesses embracing the future of customer engagement.

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www.boost.ai contact@boost.ai



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