



Hi!

CONVERSATIONAL AI+

BUILDING A SELF-SERVICE EXPERIENCE
THAT CUSTOMERS LOVE



INTRODUCTION

Many conversational AI solutions boast the capability for anyone to “deploy a chatbot in minutes.” But just because you can, doesn’t mean you should. Since your bot, or virtual agent, is only as valuable as how frequently your customer use it, it’s critical that it understands what your customers want.

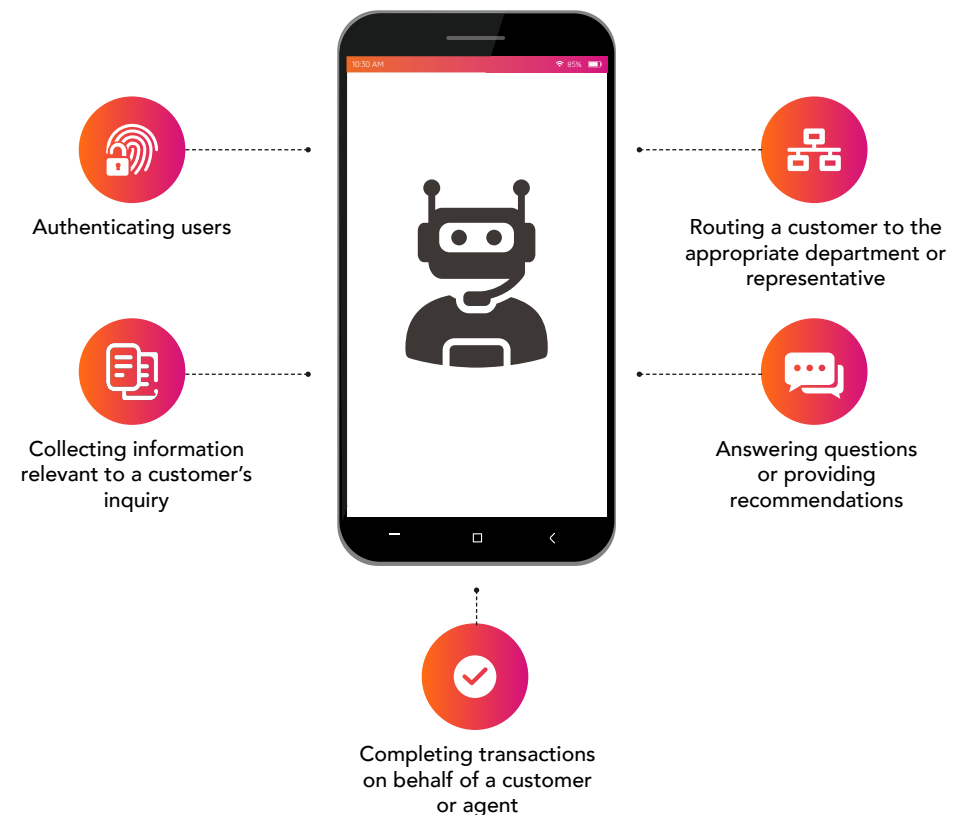
The truth is, building a bot that successfully resolves customer issues and drives self-service rates will require some time and effort on your part.

The good news is there is some truth to the claim that building a bot is much easier than it used to be. You don’t have to be a developer or have coding experience to build and deploy a virtual agent. In this guide, we’ll share best practices for building virtual agents that go beyond automating conversations—to understand customer needs, drive engagement and deliver personalized experiences at scale.

WHAT TO EXPECT FROM SELF-SERVICE?

The appeal of self-service is always-on support. Offload repetitive inquiries from the contact center to reduce costs, improve the customer experience and drive operational efficiencies.

More businesses across industries and sizes are prioritizing self-service experiences to automate processes such as:





BOTS, CHATBOTS, VIRTUAL AGENTS, VIRTUAL ASSISTANTS – WHAT’S THE DIFFERENCE?

Many people use these terms interchangeably; however, they don’t all mean the same thing.

Chatbots

Chatbots are rules-based, meaning they are programmed to follow pre-defined workflows. They are best suited for straightforward transactions and single-turn conversations. In other words, chatbots are great for queries that can be completed with just one response, like FAQs. Voice bots deliver a similar experience, the difference being it’s across voice channels.

Bots are commonly used as shorthand for chatbots. Bot is also short for robot, a software application programmed to automate tasks that simulate human activity. For this eBook, we will use the term chatbot, bot or basic bot to refer to chat and voice bots that are simplistic in their delivery of service to a customer.

Virtual Agents (Conversational AI)

Virtual Agents are powered by artificial intelligence to understand human language and respond dynamically to each turn in a conversation. They’re commonly referred to as Intelligent Virtual Agents (IVAs). Since customer service inquiries are typically more complex in that they involve more than one question and answer, a virtual agent is better suited for most contact center use cases. With proper training, virtual agents surpass the limitations of rules-based chatbots to understand the context of the conversation and carry out tasks on the customer’s behalf.

[Conversational AI](#), is a newer term used to describe virtual agents or IVAs; however it’s limiting to believe that conversational AI is only for customers and self-service experiences. The applications of this technology can also benefit internal teams, especially agents. Conversational AI can augment agent capabilities with actionable insights, knowledge bases, alerts and notifications—all during live customer interactions. For example, if an agent forgets to disclose important information necessary for compliance, an AI-enabled program can send him or her a reminder.

This application of conversational AI won’t be explored in this eBook, but if it piqued your interest, we recommend learning more about our [Agent Assist](#) capabilities that leverage conversational AI.

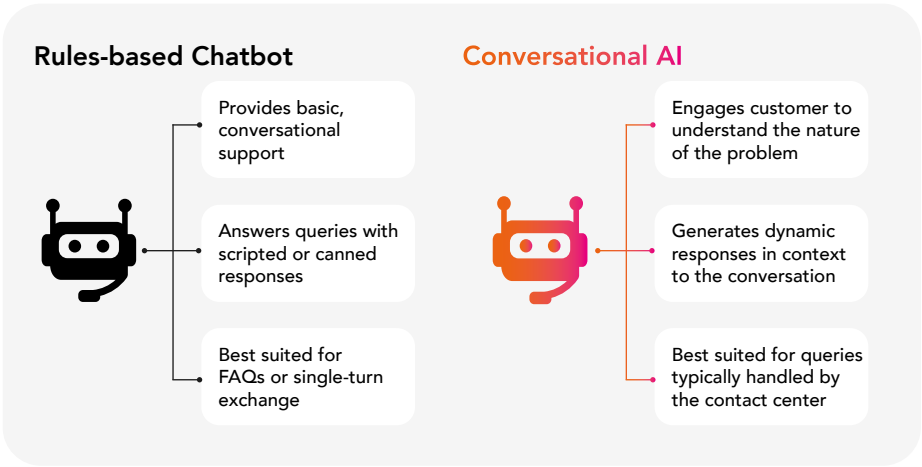


Fig. 1. Comparison between a basic chatbot conversation and a Conversational AI conversation



SELF-SERVICE EXPERIENCES CUSTOMERS ACTUALLY WANT TO USE

Surprise! There isn't a one-size-fits-all solution. It all depends on the needs of your business and the use cases you're hoping to transition to self-service. We distinguished between chatbots and virtual agents, but there is more to consider when it comes to engaging self-service experiences. **The key word is adoption.** If your customer doesn't want to use it, then you're not going to deliver the business transformation you desire. Worst case, if not deployed accurately, you put your company's reputation and revenue at risk.

Understanding Your Customers' Expectations

First, it's important to understand your customers' perspective. Fig.2. illustrates the customer expectation maturity model. Level 4, "Delight Me," represents the pinnacle of an engaging experience that will lead to an important milestone: adoption. Regardless of whether it's a self-service or human-assisted experience, this is what customers desire when engaging with a business.

Taking this view into consideration, we can start to see where chatbots fall short of delivering on customer expectations and the opportunity for virtual agents to deliver experiences that customers love.



"Understanding customers' needs and expectations for their service experience is integral for improving loyalty and creating customer value."

Gartner

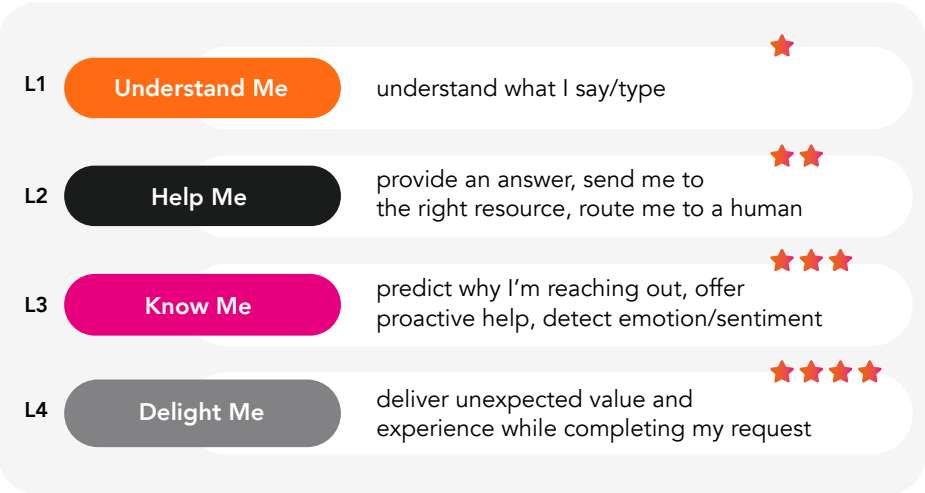


Fig. 2. Customer expectation maturity model.

The Opportunity

There's an opportunity to ramp up automation and heighten customer satisfaction at the same time. By deflecting and containing customers on a channel they prefer, organizations can also boost their ROI--a win for both corporations and customers.

40% of people who contact a call center have first looked for answers to their questions via self-service.



HOW TO DRIVE ADOPTION AND BUILD AN ENGAGING SELF-SERVICE EXPERIENCE

Step 1 – Establish the Purpose

Before you start creating a self-service experience (or changing your existing experience), it's important to establish the objective for conversational self-service. What is it you're trying to achieve?. Most companies want to achieve one or a combination of the following goals: improve the customer experience, reduce costs and/or drive revenue. These goals are interconnected and can be further refined based on the unique needs of your business.

Step 2 - Understand Your Customer

Who is the intended audience for the self-service experience? Depending on your customers and how they engage with your brand, you may need to tailor the experience accordingly. You have to factor in the learning curve for your customer and ensure the self-serve option feels like a value-add versus an inconvenience.

For example, the learning curve may be higher if your company has been doing business in-person and now want to offer virtual self-service, as opposed to if your company has always been digital-first and this offering is an extension of how customers already interact with you.

Or it could be a matter of catering to certain demographics—some customers may prefer to engage your brand over text or chat, while others prefer to reach out over voice. Understanding your customers' needs and preferences will help you determine which communication channels to deploy your virtual agent.

Step 3 - Choose the Use Cases

Chatbots and virtual agents can automate many types of queries. The table below showcases a few examples across industries that could easily be automated.

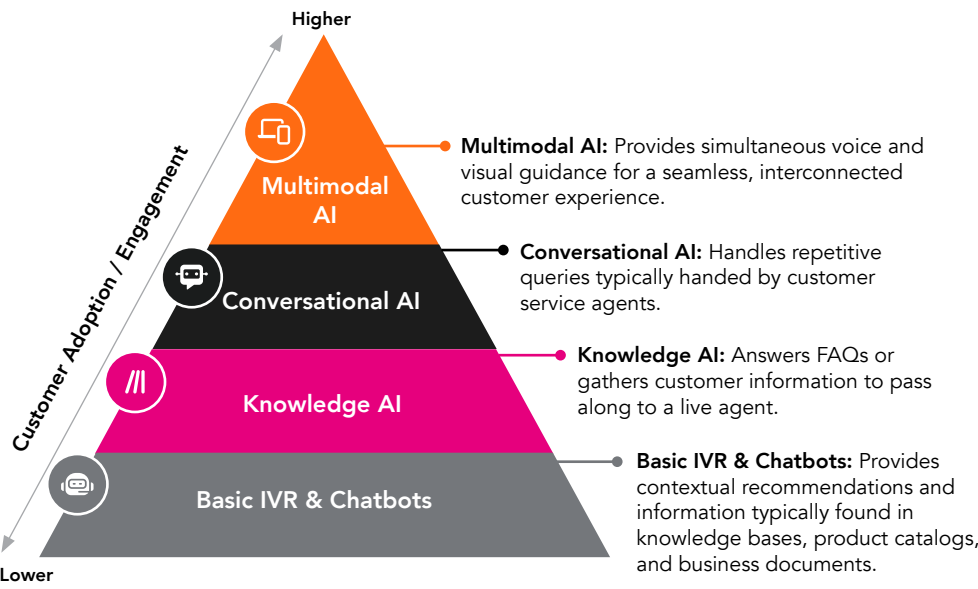


Fig. 4. Best technology for each type of use case.



"Uniphore is an important part of our overall vision to make it easier for customers to self-serve through their preferred channels. As PSE continues to invest and find ways to improve our customer experience, working with Uniphore to update our automated voice system allows us to offer a customized and innovative option."

Director of Business Integration





Step 4 – Training and Tuning

Training a virtual agent is essentially an exercise in anticipating what your customers will ask and how they will ask it, including possible variations for any given request.

"Where is my package?"

"Track my package"

"Check order status"

Beyond setup, self-service experiences fall short when they're not actively being tuned and updated. It's important that this process is simple and easy to avoid the bottlenecks that come with relying on one team (typically the IT team) to make the changes.

Using a low-code/no-code design platform empowers business users to create conversational experiences without a single line of code. Go even further with pre-built conversational elements, or steps, that users can drag and drop into a conversation flow. Once built, the same conversation flows and business logic can be deployed across channels. This "build once, deploy everywhere" approach ensures a consistent customer experience, in addition to saving valuable build time and resources.

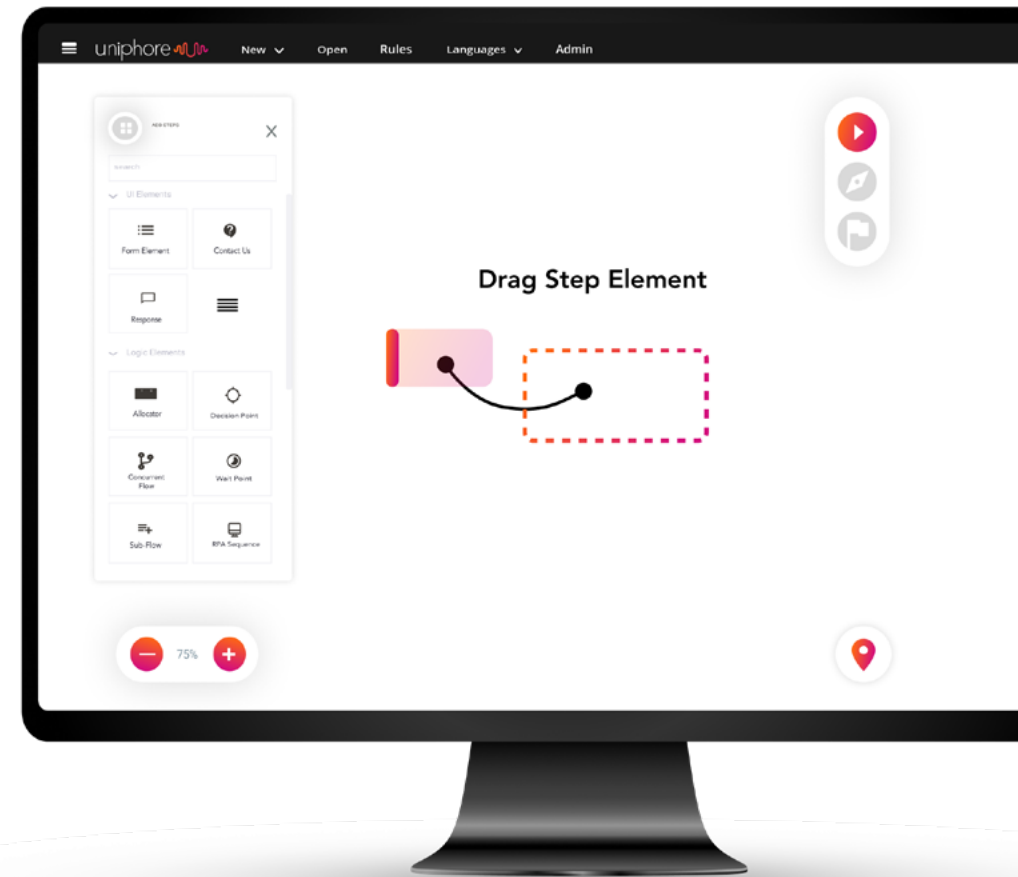


Fig. 5. Drag and drop step elements into a conversation flow




Delivering Engaging Self-Service Experiences

Let’s walk through some examples of what it looks like when you align your goals with the use case and the right technology.


Goal 1 – Improve CSAT and Reduce Average Handle Time (AHT)	
Maybe you’re not ready to completely automate an entire use case. This is a good way to start small and still see an impact.	
Use Case	Reduce the need for customers to repeat themselves.
Example	Customers have to provide upfront information to an Interactive Voice Response (IVR), only to repeat the same information when they reach an agent.
Self-Service Solution: Basic Chat or Voice Bot	Customers are authenticated on your self-serve channel and then transferred to the agent with full context, including authentication information. Eliminating the need to repeat information will reduce average handle time (AHT), as well as improve the overall customer experience.


Before Uniphore



Hello, I would like to know what’s my current balance. My name is Megan and the last three numbers of my account are 456


I’ll contact an agent, wait a moment please...






...

Hi, my name is David. How can I help you?





After Uniphore



Hello, I would like to know what’s my current balance. My name is Megan and the last three numbers of my account are 456


I’ll contact an agent, wait a moment please...





...

Hi Megan, my name is David. Your current balance is \$67. Is there anything else I can help you with?






Delivering Engaging Self-Service Experiences


Let’s walk through some examples of what it looks like when you align your goals with the use case and the right technology.

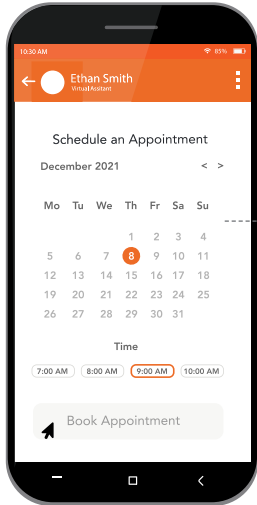

Goal 2 – Reduce Cost, Improve CSAT and Drive Revenue	
You’re ready to dive in and want customers to complete an entire request via the self-serve channel and drive upsell and cross-sell.	
Use Case	Bill dispute
Example	Customer believes there’s an inaccurate charge on their account.
Self-Service Solution: Conversational AI + Multimodal Experience	The virtual agent greets the customer. The customer speaks naturally describing their complaint. The customer does not have to use “pre-canned words or phrases”. The virtual agent pulls the appropriate information from the customer’s account and advises it can credit the charge. It then proceeds to upsell the customer on a new service: a personalized offer based on the customer’s account.



Hello, I need to schedule my annual service check.


Great, I am going to send you a link so you can select a date and time that work well for you.





Visual Guided Experience

OK. You are confirmed for this Friday. I’ve also sent you an email confirmation.





BUILDING VIRTUAL AGENTS WITH UNIPHORE

U-Self Serve is Uniphore's virtual agent solution that intelligently resolves customer service issues over voice, chat and text. Powered by the Uniphore X platform, U-Self Serve leverages conversational AI, knowledge AI and automation to create experiences that delight the customer and boost self-service rates.

Before we walk through how to build with Uniphore it's important to understand with a few key components of a virtual agent:

How Virtual Agents Work

Virtual agents use natural language processing (NLP) and machine learning to analyze, understand and generate responses that mimic human conversation. This capability goes beyond traditional Interactive Voice Response (IVR) and chatbots, both of which follow predefined workflows and only deliver canned responses.

The basic process requires the virtual agent to analyze what the customer says (an utterance) to determine the intent (the goal the customer wants to achieve). Intents are used to define how your virtual agent responds to queries, so they're an integral part to building and training your bot.

Another key component to building your bot are entities, which provide context for the intent. By identifying entities from utterances, your virtual agent can extract relevant information that is essential to an inquiry. For example, if a customer asks if she can reschedule her appointment to Friday at 4pm, the entities "Friday" and "4 p.m." are crucial pieces of information that determine if her request can be accommodated.

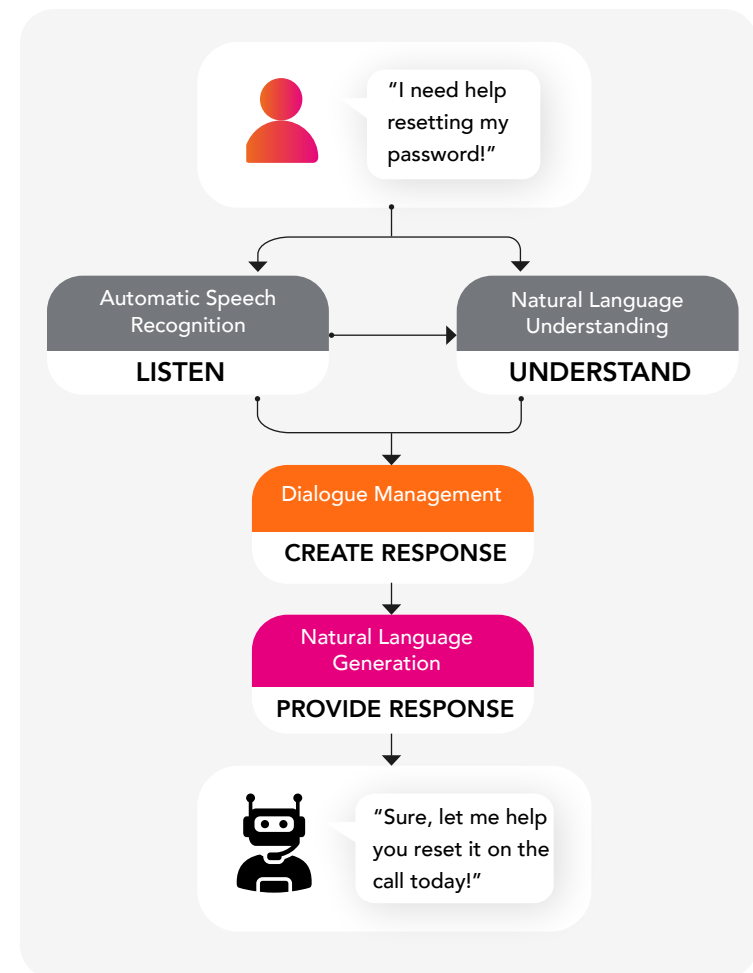


Fig. 6. AI building blocks

It's time to start building!

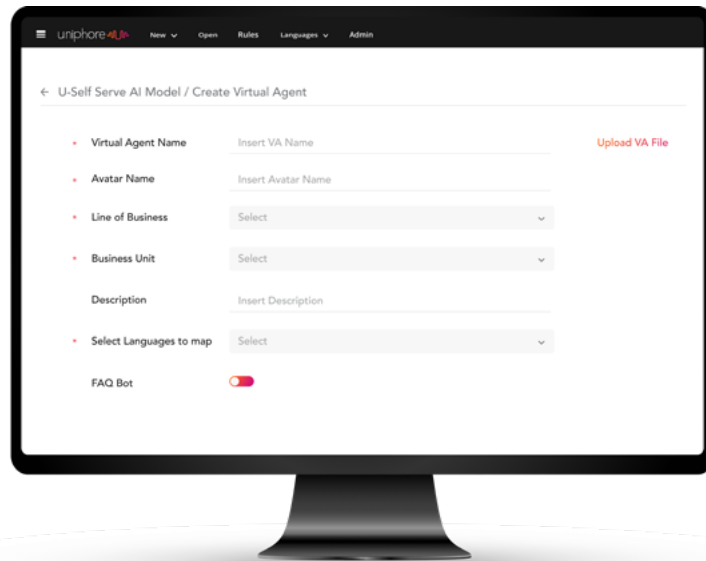


THE STEP-BY-STEP GUIDE

Now that you're familiar with what to consider when building a virtual agent, let's take a look at how U-Self Serve will help you deliver an engaging customer experience.

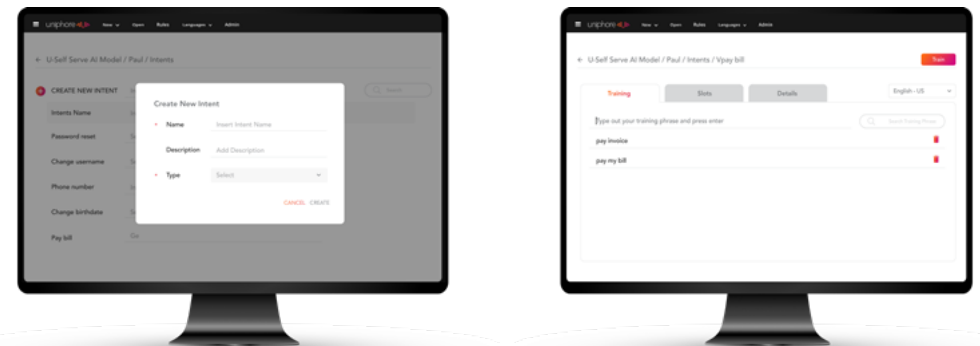
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Step 1: Create a virtual agent with its intended use case in the AI Model Section.



2

Step 2: Add intents.



In order for your virtual agent to handle specific customer inquiries, you will need to define and train intents. For example **pay bill request, view plans or upgrade plans**.

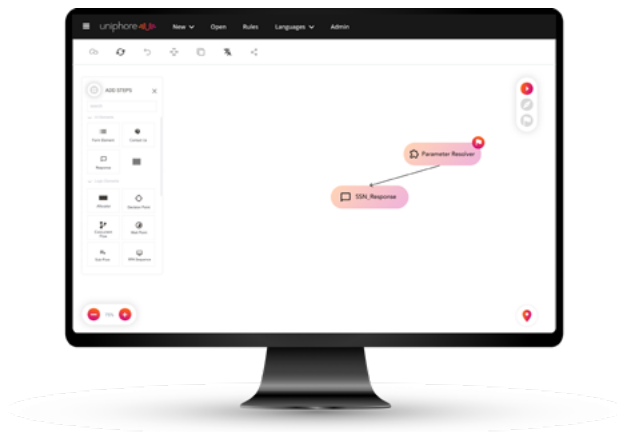
Each intent needs a list of phrases (also known as utterances), which the AI model can be tuned to look for when customers interact with the virtual agent. When setting up intents, you can also set up entities that you would like to extract from a customer's inquiry such as social security number, credit card information or phone numbers.



THE STEP-BY-STEP GUIDE

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Step 3: Create business logic flows in the X Designer.

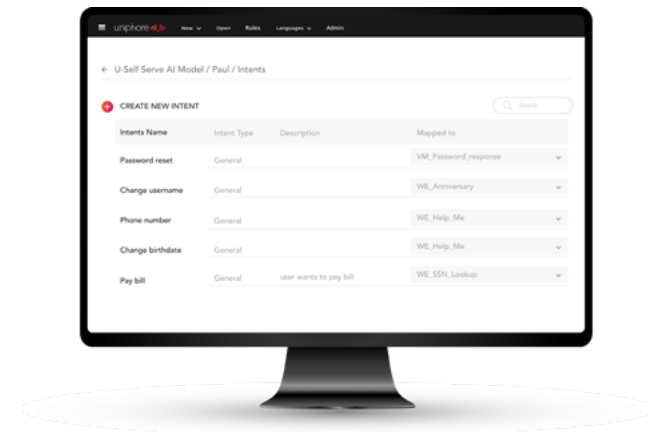


When a virtual agent detects an intent in a conversation, you may want it to trigger an intent flow: a set of actions before responding to the customer. The end result of all intent flows should be a response that the bot can return back to the customer. Learn more about the [X Designer](#).

With the X Designer, you can configure conversations with multimodality communication. For example, if a customer calls your bot and asks about a fraud alert, you can configure a flow that texts a link to the customer to allow them to verify the transaction.

4

Step 4: Assign flows to intent.



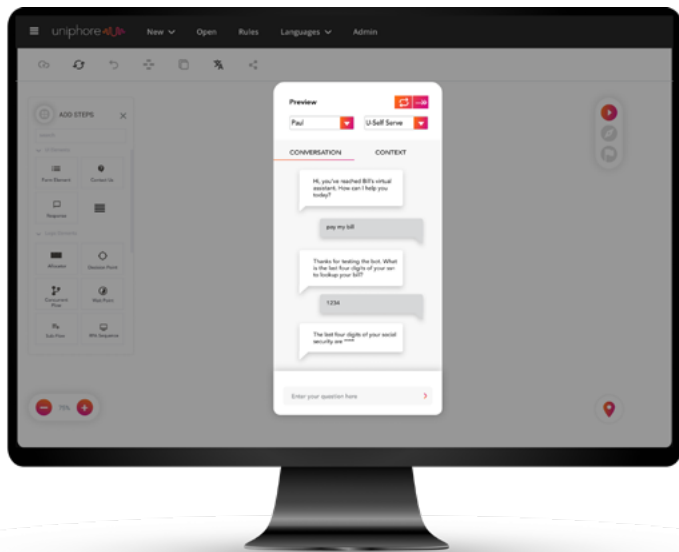
Once you have created intent flows, you will need to map each of these flows to a customer intent that you have already defined for your virtual agent.



THE STEP-BY-STEP GUIDE

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Step 5: Test the bot in the simulator.



Once you have configured your virtual agent, you will want to test its functionality to see how it performs before handing it to customers.

In the X Designer, you can preview your virtual agent and see how it responds to different inquiries.

About Uniphore

Founded in 2008, Uniphore is the global leader in Conversational Automation, the combination of AI and Robotic Process Automation. With a mission to unlock the full value of every enterprise conversation, Uniphore automates, analyzes, and optimizes millions of conversations every day. Uniphore employs 700 people and counting, with headquarters in Palo Alto, California and six offices across the world.

[Click to Learn More](#)

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