Five9

Five9 Intelligent Virtual Agent Solution Guide

How to automate customer care with
AI-powered self-service

Consumer Demand Drives Contact Centers to Invest in Automation
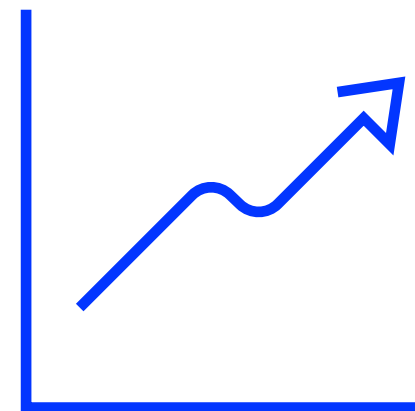
As a contact center manager (and a consumer), you understand how our relationship with technology has changed. From the moment we open our eyes until the minute our heads hit the pillow, we are now glued to our smart devices— and we increasingly interact with them through voice. We've become accustomed to speaking to our smartphones and smart speakers in a natural and conversational manner. We've also come to expect them to understand us with great accuracy and help us navigate the complexities of our day.

Adoption is astonishing. Already one in four US adults now owns a smart speaker, and more than half of those who own them use voice commands at least once a day.[1]

As consumers become accustomed to getting help from their personal virtual agents, they now increasingly prefer to have self-service options when contacting a business for service. In a Capgemini study, nearly 70% of respondents said they will progressively replace visits to a store or bank with their voice agent within three years' time.[2] According to industry analyst

Donna Fluss, "A remarkable thing is happening in the realm of customer service: After years of rejecting self-service, customers are changing their tune. Consumers of all ages are showing a preference for self-service solutions over talking to agents or using chat boxes, provided they do their jobs well."[3]

At the same time that customers are showing an increased preference for self-service through voice interfaces, overall consumer demand is increasing. There are now more consumers purchasing more goods and services than ever before, which is driving an increase in service volume. And with more devices at their disposal, consumers expect service across more channels.

As consumers become accustomed to getting help from their personal virtual assistants, they now increasingly prefer to have self-service options when contacting a business for service.

[1] "The Smart Audio Report," National Public Radio and Edison Research, 2020.

[2] "Smart Talk: How organizations and consumers are embracing voice and chat assistants," Capgemini, 2019.

[3] "IVAs Can Remake the Self-Service Landscape," DMG Consulting, 2018.

IVAs can perform all kinds of tasks to care for customers.

What Are Intelligent Virtual Agents?

Intelligent virtual agents (IVAs) are automated, self-service applications that you can offer to your customers. They offer capabilities that are similar to human service and support agents — they just never rest or take a vacation — and they're substantially cheaper.

Virtual Agents Have Skills

For example, they can understand human speech in over 100 languages and respond using text-to-speech (TTS) that is almost indistinguishable from a human agent. IVAs can be configured with very basic skills — the most basic agent might simply answer the phone, ask the caller if she wants to maintain her place in queue, and schedule a callback. An advanced IVA might have the skills to understand human speech in multiple languages; determine intent using natural language processing; process PCI-compliant payments; and respond in multiple languages over the phone, via chat, or messaging channels.

Virtual Agents Can Automate Things

They can perform all kinds of tasks to care for customers. They can make appointments, reset passwords, look up orders, survey customers, process payments, and answer all kinds of questions — over the phone, chat, or messaging channels.

Virtual Agents Are Employed Like Human Agents

Just like a team of outsourced contact center agents, you purchase IVAs and pay for them for as long as you need them, on a monthly basis.
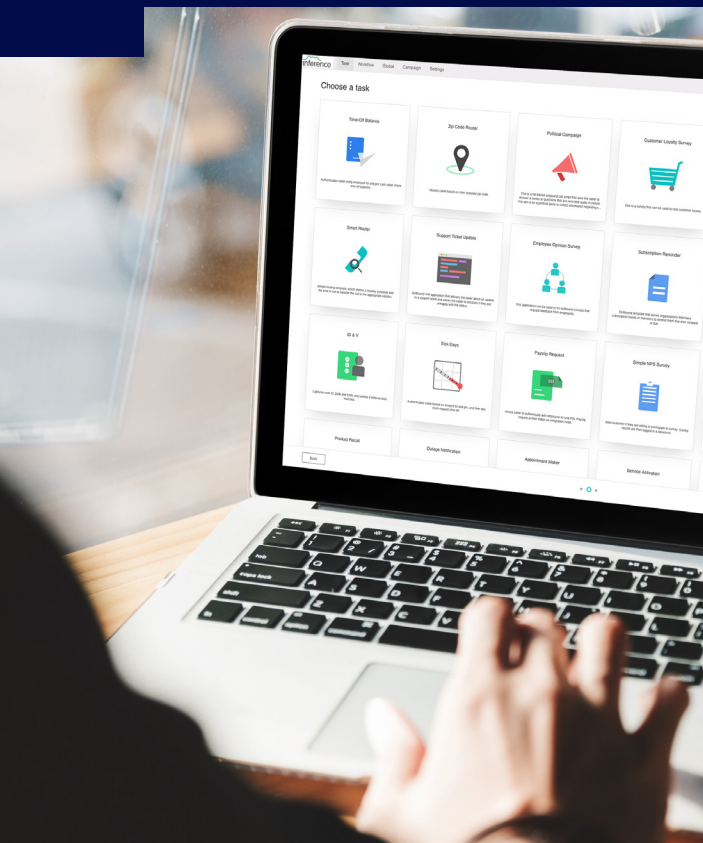
Agent Skills:

- IVR
- Speech Recognition
- Natural Language Processing
- Text-to-Speech
- Voice Biometrics
- Sentiment Analysis
- SMS
- In-App Chat
- PCI-Payments
- HIPAA-Compliance
- Intelligent Callbacks
- BroadWorks Integration
- Workflows
- Dialer
- Remote Data Connectivity

**Dial this number to listen to our text-to-speech voices: +1-256-305-6049**

Check out this video on delivering a more human experience with Five9 IVAs.
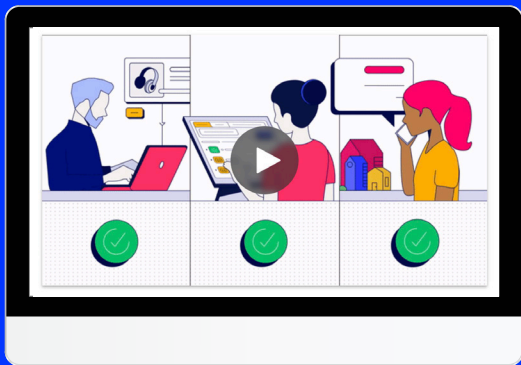
Upgrade from IVR to IVA for More Conversational Self-Service

We offer an easy-to-use, visual, IVR builder as part of the Five9 Intelligent Cloud Contact Center. IVR enables human-computer interaction for inbound and autodial campaign calls.

Five9 Intelligent Virtual Agent is more powerful than the previous generation of technology, enabling calls to be transferred to intelligent virtual agents that use the latest speech-to-text, text-to-speech, and natural language processing from Google, IBM Watson, and other cloud-based conversational AI providers. This enables Five9 customers to easily build and deploy self-service applications that automate many more of the routine and repetitive tasks that are traditionally handled by live agents.
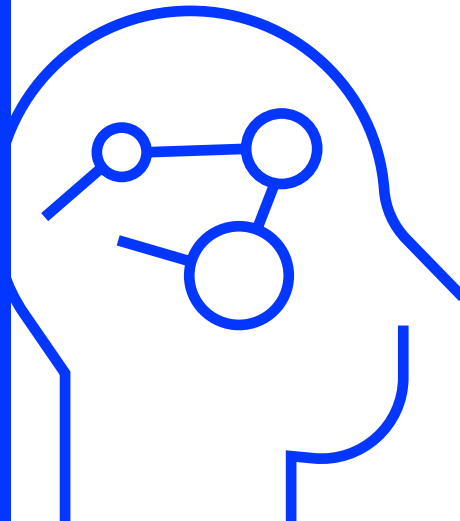
How Does it Work?

Using our code-free, visual builder, you can drag and drop components to create your IVA, or customize one of the prebuilt IVA templates. Then, configure the Five9 Transfer Module to pass incoming calls and caller data to a virtual agent.

The virtual agent can then offer a wide variety of self-service capabilities, using speech recognition and text-to-speech in hundreds of languages and a wide variety of voices. What's even more powerful is that, as described in the next section, your virtual agents will be able to respond to open ended prompts like "How can I help you today?" using natural language processing. This makes the user experience more conversational while enabling you to automate tasks that were previously too cumbersome to be handled using speech recognition.

By 2024, 40% of enterprise applications will have embedded conversational AI, up from less than 5% in 2020.[4]

[4] "Emerging Technologies: Research Roundup for NLP and Conversational UI," Gartner, Inc. 2021.

Eliminate complex IVR menus and go beyond speech-enabled, directed dialog systems.

Natural Language Processing

Virtual agents that understand

Natural language processing makes it easier for your customers to get support through self-service because the complexity of the interaction can be dramatically simplified. It also increases the percentage of inquiries that can be automated, helping you reduce costs. NLP lets you eliminate complex IVR menus and go beyond speech-enabled, directed dialog systems. Five9 Intelligent Virtual Agent helps you embrace NLP by packaging and integrating the most advanced technologies from companies like Google and IBM into Five9.

With NLP you'll be able to do:

Intent Matching: This enables your virtual agent to determine what your customer wants. Intents are created for anything a customer might request. For each intent you simply provide a set of examples for how the customer might make the request. For example, "I want to make an appointment" or "I want to cancel an appointment." The virtual agent then matches user requests against intents that it knows how to resolve ("Book Appointment" or "Cancel Appointment"). As customers use your virtual agents, you can incorporate what they've said into training examples that help them get smarter over time.

Entity Extraction: This helps you extract important information from what is said to your virtual agent so that you are able to act on it. This information can include system entities like dates, times, place names, amounts, developer defined entities or temporal user entities.

Dialog Control: This allows you to control the flow of the conversational experience between the customer and the virtual agent so that you can optimize the dialog to quickly and accurately collect the information needed to respond to their request.

Watch a demo of Natural Language steering call.
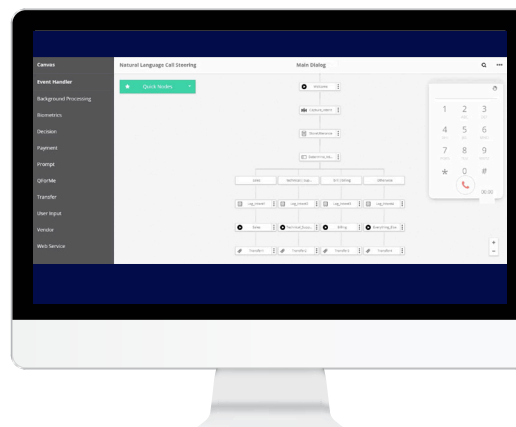
Common Use Cases and Cost Benefits

Natural Language Call Steering

Many businesses use IVAs to steer calls to the correct person or department ("Please tell me who you'd like to reach"). Calls can be routed quickly and easily without requiring the caller to wait for a receptionist.

Appointment Scheduling

Customers, including health care providers, use IVAs to schedule appointments and send reminders. This improves the customer experience by allowing customers to book appointments at any time of the day or evening. It also lowers the cost to serve by reducing the need for more front office staff.

### PCI-Compliant Payment Processing

A large state government organization uses IVAs to process payments for all kinds of services, including renewing drivers' licenses and paying fees. The customer handles up to 500,000 calls every month. By automating payment processing, they have saved hundreds of thousands of dollars each month in labor costs while ensuring that payment processing complies with PCI-DSS regulations.

Insurance Enrollment

An organization offers health benefit enrollment through IVAs processing 350,000 calls per month. Automating enrollment enables them to scale up during busy open enrollment periods while lowering labor costs by hundreds of thousands of dollars each month.

Virtual Concierge

A major hotel chain allows consumers to manage reservations through IVAs. It handles more than 600,000 calls each month and improves the service experience by enabling travelers to make and change reservations more conveniently.

Task Library

Things your virtual agent will be able to do
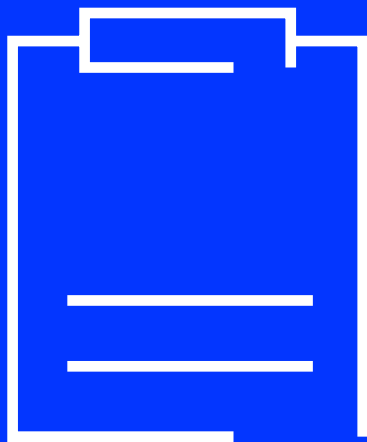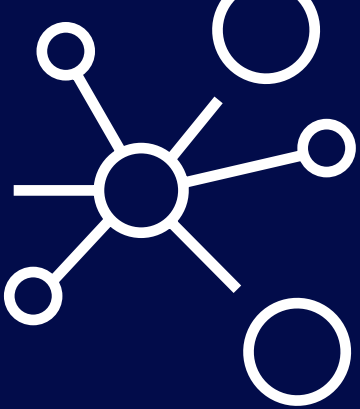
Five9 Inference Studio offers a suite of pre-packaged self-service applications. You can use these applications as is, extend them, or build your own from scratch.

Appointment Maker

For any business built around professional services, management of appointments can be a burden. Free up your staff and offer your clients a 24x7 hotline to schedule their own appointments. This app can be integrated easily with any existing calendaring system.

Appointment Reminder

No-shows are a real problem for professional practices. Minimize no-shows without diverting your staff from other duties by creating an automated reminder system. The app is easy to customize with your branded message and integrate with your appointment system.

Card Payments

Credit card payments are time consuming and expose your business to potential violations. Eliminate that risk with an automated PCI compliant task. The PCI Credit Card Payment task will allow customers to enter their credit card details and payment amount. Then it will process the payment, all over the phone, 24 hours a day.

Collections

Get started with the Collections app to automate the process of following up on outstanding accounts. Draw debtor details from a spreadsheet or, if you prefer, integrate the solution with your billing system. This is an easy and economical way to manage debtors.

Inbound Ticketing

Running a service desk requires supreme organization. The Inbound Ticketing app makes it simple to quickly create a solution that enables customers to choose self-service. When a human agent is required, a screen pop displays details of the account history and ticket status.

Password Reset

This app offers an ideal solution to a common and costly problem: users can reset their system passwords without IT input. It's all automated using biometric security to authenticate each user by voiceprint, saving everybody time and frustration.

Product Recall

Protect your brand by acting swiftly if a product recall is required. Use the Product Recall app to set up campaigns to deal with a range of situations. Look up data or integrate with other systems to create a 'ready-to-go' response. The assurance provided reflects well on the business in difficult times.

QforMe

The QforMe app makes it easy to set up a service that allows customers to receive a callback rather than waiting on hold. Customers are delighted to receive this level of service; it's a valuable part of customer experience.

Task Library

Order Lookup

Provide customers with a 24-hour helpline to query order status. You don't have to roster more agents to work around the clock. The Order Lookup application means you can quickly create and deploy a self-service system, providing greater customer service at minimal cost.

Service Activation

Easily create a customer service message to greet each new client with news of service activation, drawing data from a spreadsheet or through simple integration.

Outage Notification

Make prompt service outage calls by automating the process through simple customization within the Outage Notification app. It's extremely easy to create a branded message to enhance the customer experience.

Smart Attendant

Recognize customers with a personalized interaction, not a tree of menu options, by referring to data you already have. The Smart Attendant app makes it easy to integrate speech recognition and custom text-to-speech prompts based on location, preferences, and history.

Smart Router

Call volumes vary with the day, time of day, seasons, and holidays. Use the Smart Router app to route calls based on a range of variables. This is the quick and smart way to implement intelligent call routing and enhance the customer experience.

Snow Days

Use the Snow Days app to create any campaign where you need to quickly get a message out to a defined group with a minimum of fuss. Don't waste time fielding calls; get the message out first.

Subscription Lookup

Offer customers a service to look up their membership details. Establish an automated service to provide a 24×7 helpline that simply queries records based on the member number.

Subscription Reminder

Keep the customers you already have. Implement a reminder system to contact clients when membership nears expiry. The Subscription Reminder app makes it easy to get started and to create the right messaging to reflect your brand. Think laterally and create another campaign to offer special deals on landmark anniversaries.

Support Ticket Update

The Support Ticket Update app makes ticketing even smarter by providing clients with updates via automated outbound calls. It's a simple, affordable way to keep customers informed. Create and initiate multiple campaigns, run from a spreadsheet, or integrate with other systems.

Survey

Add an extra level of customer care with outbound surveys or present your employee satisfaction survey as a handy telephone poll. Multiple pre-made templates mean endless options for easy customization.

Task Library

Learn more.

Want to learn more about how our virtual agents can help you improve customer service and support?

Visit our website or call us at +1-800-553-8159.

Teleclock

The Teleclock solution is the smart choice for a remote timekeeping system. Field workers use a standard telephone to call in and clock on and off. Authentication is by voice biometrics, yet this solution is inexpensive and easy to set up.

Text Alert Sign Up

A quick and easy way for your customers to sign up to receive your important alerts. Paired with our Outage Notification or Snow Day Apps (SMS and voice), the Sign Up App maintains a list of all your customers who want to receive important messages.

Track + Trace

Track + Trace makes sense in a high volume call environment. The Track + Trace app means you can quickly create a self-service option yet retain the ability to speak to an agent where necessary.

ZIP Code Router

Promote a unified brand presence and deliver personalized local service using the ZIP Code Router app. It's quick and simple to update the app to direct calls based on a caller's ZIP code. Enjoy the efficiency of centralization.

Service Outage

Make prompt service outage calls by automating the process through simple customization of the application. It's easy to create a branded message to enhance the customer experience.

Natural Language Call Steering

This is an inbound task that uses the caller's spoken phrase to determine a transfer destination. The task welcomes the caller and starts with the prompt "How can I help you today?" It provides a standard call steering data store for caller utterance and steering destination reports.

Salesforce Lookup

This is a pre-packaged integration with Salesforce. It enables the virtual agent to read and write from the Salesforce CRM.

MS Dynamics Lookup

This is a pre-packaged integration with Microsoft Dynamics. It enables the IVA to read and write from the Dynamics CRM.

References

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1 "The Smart Audio Report," National Public Radio and Edison Research, 2020. https://www.nationalpublicmedia.com/insights/reports/smart-audio-report/#download

2 "Smart Talk: How organizations and consumers are embracing voice and chat assistants," Capgemini, 2019. https://www.capgemini.com/dk-en/news/smart-talk-how-organizations-and-consumers-are-embracing-voice-and-chat-assistants/

3 "IVAs Can Remake the Self-Service Landscape, DMG Consulting," 2018. https://www.dmgconsult.com/ivas-can-remake-self-service-landscape/

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4 "Emerging Technologies: Research Roundup for NLP and Conversational UI," Gartner, Inc. 2021. https://www.gartner.com/document/3995389?ref=solrAll&refval=273924463

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