

Make your virtual assistant ‘Employee of the Year’

VAs can help you reduce costs, improve CX and increase call deflection and containment.

Creating an intelligent resource your customers will love – in as little as 90 days

Intelligent virtual assistants come in many different shapes and sizes – from simple webchat boxes to carefully crafted avatars that can speak numerous languages and express a range of human emotions. They can also be deployed to fulfill a wide variety of tasks – from providing an intelligent interface to your Website’s FAQ page or making your site easier to navigate, to answering complex customer queries or supporting product sales.



In just three months you could create your new ‘Employee of the Year’ – not just for this year, but for every year.

Virtual assistants can operate as everything from standalone search or chat windows, to a sophisticated omni-channel platform integrating data from your CRM, ERP, financial and/or analytics systems to deliver much broader functionality, a richer customer experience, and maximum ROI. If you’re thinking about implementing one, you’ll also need to consider how long it will take to set up and digest all the information it needs for the tasks it’s going to perform, how quickly it will deliver a return, and the overhead on your IT team in ensuring it effectively evolves over time.

With such a diverse range of options and issues surrounding virtual assistants, there can be confusion about how best to ensure that introducing one adds value to your business and your brand, and the practicalities of integrating it into your contact center, information systems and customer experience. To help you, this whitepaper provides a detailed overview of how Nuance is working with leading enterprises to deploy the Nina virtual assistant, the benefits of doing so, and how in just three months you could create your new ‘Employee of the Year’ – not just for this year, but for every year.

What is Nina?

Nina is an intelligent virtual assistant designed to deliver an intuitive, friendly and professional automated experience across multiple channels including webchat on desktop and mobile browsers, mobile apps, text messages and Facebook Messenger, with conversational IVR due in 2017. Leveraging world class natural language understanding technologies, Nina is able to understand not only the words your customers speak or type, but also the intent behind their requests.

This level of intelligence streamlines engagement and allows Nina to rapidly answer questions, guide customers to products, or provide step-by-step instructions for complex activities. Sophisticated dialogue capabilities also enable Nina to engage in natural, human-like conversations that consumers are happy to engage in – whether to refine their requests, discuss next steps or complete a task.

Nina Multichannel delivers a consistent experience no matter which channel a customer selects, and remains fast and easy to use, even as they move between channels. Nina also increases customer satisfaction while lowering costs, by creating personalized engagements that rapidly resolve individual issues, at high volumes and within low cost service channels, and allowing live agents to focus on high-value customers and more complex interactions.

In addition, Nina is designed to provide a future-ready foundation for intelligent automation.

- Upfront targeting enables businesses to serve their consumers with the right experience at the right time. Strong branding and best practice built in, means that the targeting engine is able to decide when to offer Nina, for example when a site visitor is stuck during the checkout process.
- Sophisticated tooling allows for rapid optimization – as interaction data is automatically clustered for context and fed back into the system to allow the virtual assistant to continually learn and advance to handle more complex customer engagements.
- Nuance Customer Engagement Platform balances the benefits of machine learning with human knowledge and skill – enabling trained agents to engage and curate how Nina responds when presented with unfamiliar requests, and ensuring a fast response to changing market conditions in real-time.
- Investments in Nina easily extend from one channel to another, creating both a consistent multichannel experience and low total cost of ownership.

Nina is cloud-based, minimizing IT overhead. And, to meet the needs of large global companies with rigorous demands for data security, reliability, systems integration, language capabilities etc., Nina is PCI compliant, with enterprise-grade SLAs; integrates easily with a wide range of third-party systems, including CRM, knowledge management and live chat solutions; and supports close to 20 unique languages over 25 regions worldwide.

Where can I use Nina, and what kinds of information systems can I integrate with?

In terms of the kinds of situations in which virtual assistants can be used, there are three increasingly sophisticated categories where Nina can add value. These are:

- General inquiries that do not rely on an enterprise's backend data or require user authentication, but which typically take undue time and effort for users to find on a Website – such as contact information, directions to offices, operating hours, opening times etc. – resulting in customers being forced to escalate their query by calling into the contact center.
- Searches which, for optimal performance, can involve backend data, but where the user remains anonymous – such as hotel booking information (rates, availability), merchandise inventory, pricing checks, etc.
- Requests that need both backend data and authentication for highly personalized interactions – such as banking transactions, access to health records, etc.

Global reach



Nina supports close to 20 unique languages over 25 regions worldwide.

Web first

For many consumers, the web is their preferred first port of call – increasing call deflection and, as a low cost channel, improving ROI. Because Nina delivers significant benefits without backend integration, many enterprises' first step is therefore to add the virtual assistant to their Website or mobile app to enhance their existing web presence.

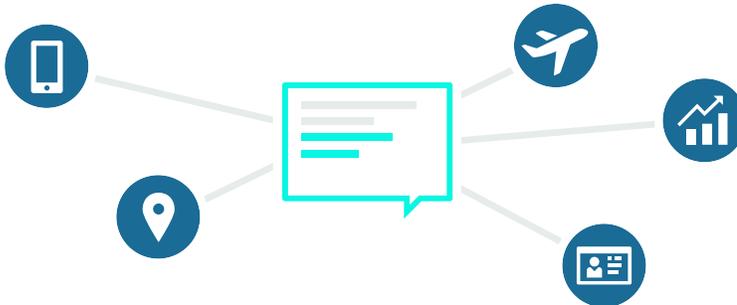
- You could, for instance, deploy Nina as anything from a simple text-based chatbot to an omnipresent avatar that sits on multiple highly trafficked pages on your Website or mobile app, and acts as a first point of contact for your customers – answering their queries, or helping them instantly find the information they need, rather than having to search for an FAQ or other relevant pages.
- The targeting engine enables Nina to be available proactively to the consumer, based on a variety of parameters, including time on page, browsing history, and specific business conditions, etc.
- This can be particularly helpful if your Website has long or complex FAQs that visitors find difficult or time-consuming to navigate, or if you want to keep the user in a flow, such as guiding them to a checkout while they search for answers to questions that might otherwise cause them to drop out.
- You could also integrate Nina with your contact center to offer a live chat facility, so that if a customer requests help from a live chat agent (or the virtual assistant is unable to confidently answer their query), details of Nina's conversation with the customer are automatically passed to the appropriate agent to assist with resolving the issue.
- And you could extend Nina's scope by making the virtual assistant accessible to internal employees – for example, to provide a source of company-related information such as questions about training, where to go for particular resources, etc.

Integrating with CRM

To make more of Nina's intelligence, the virtual assistant needs access to a broader range of data, so the next step will often be to integrate it with backend systems such as contact management, CRM or Marketing Automation solutions like Salesforce.com. This is so that when a customer logs in to your Website or mobile app, Nina will be able to access information about them and provide a more interactive, personalized or proactive level of service. For example:

- An airline's or travel company's virtual assistant could be aware that a customer contacting it has a flight booked within the next few days and so is likely to want to check that their flight is on time or has not been cancelled – in which case the virtual assistant could begin the conversation by asking if they want to check their flight details.
- For a car rental company, if someone logs in to their account and the virtual assistant knows they have a car that is shortly due to be returned, it could ask if they'd like details of how and where to return it or if they want to extend their rental – a situation where integration with financial systems will also be beneficial.

Nina can also integrate with existing authentication and verification systems (Nina ID) to ensure the person interacting with your virtual assistant is who they say they are.



ERP, financial and other data

The third major area for backend integration is with ERP (enterprise resource planning), financial and/or other information systems.

- Integrating with ERP enables customers – either anonymously or via their account – to check information such as product pricing and availability, discounts, delivery schedules etc.
- Integrating with financial systems aids in order processing, sales enablement, up-selling and increasing average basket size. It can also increase cart completion by helping customers navigate difficult parts of the Website or fill out complex order forms.
- The customer experience can also be enhanced by location-based data. So, for example, if a telecom service provider’s virtual assistant knows there is a service disruption in the area in which a customer is located, it can proactively inform them about progress in fixing the fault and when the service will be back up and running.

Delivering a consistent experience in the omni-channel world

In addition to supporting these very different types of applications, Nina can deliver a consistent customer experience across multiple channels, without the need to create or code multiple applications – reducing total cost of ownership.



Automated webchat: Nina can help ensure customers quickly and easily resolve issues on the channel they turn to first – your Website – by providing a concierge service experience without the need for a site redesign.



Mobile apps: Incorporating Nina into an existing native app improves discoverability, increases self-service resolution rates, encourages repeated use, and brings your app to life.



Text messaging: Nina creates a natural two-way automated dialogue that lets you engage customers through proactive reminders or responses to messages sent to your existing text numbers.



Messaging apps: plugging Nina into emerging channels like Facebook Messenger allows users to connect with your brand in a simple and conversational way on their channel of choice.

The Nuance Customer Engagement Platform enables a design-once, deploy anywhere approach whereby companies can easily and cost-effectively extend their investment to multiple channels and continuously optimize automated and human-assisted customer experiences, thereby reducing costly one-off channel implementations and multiple backend integrations.

What else can Nina help me achieve?

Speed of deployment

Each Nina deployment is overseen by Nuance's Professional Services team (NPS), who are experts in dialogue, conversation, and the questions asked by consumers. These include frequently asked questions by industry and vertical, their intent, and the interactions needed to get as fast a resolution as possible within a specific knowledge base.

This enables Nina to be implemented very quickly – with initial deployment often in as little as three months. Nina's 'out of the box' social content and language skills enable it to excel in multi-slot dialogues and layered conversations – natural interactions that allow customers to better articulate what they're looking for or trying to achieve, just as if they were talking to a real human being.

Human-assisted AI and machine learning

Once Nina has been deployed and its initial knowledge base created, it applies highly targeted AI and machine learning to the conversations it handles. Unlike the kinds of PR disaster that can result from virtual assistants being given total control over the responses they generate, Nina can only offer responses that meet set confidence limits (e.g. 85%).

If a potential response is available that falls below this requirement (e.g. 83% confidence), this will be flagged by the system for human review and approval – thereby ensuring that all enterprises deploying Nina have complete transparency and governance over the content and quality of the responses being made.

The same principle applies to how Nina evolves its comprehension of dialogue and expands its knowledge base, for example by making it as easy as possible for the virtual assistant to absorb any changes to business policies or rules, and implement those changes within its conversations.

Another ability, which is currently under development and being tested by several clients, allows Nina to reach out to a human agent in real time in case it doesn't know how to handle a certain situation. The agent can then submit the correct answer, helping Nina to continue the conversation. Nina will remember and learn from the live agent feedback, and apply the new knowledge to future conversations.

With the recent acquisition of TouchCommerce, Nuance is even better positioned to provide market-leading brands with software and services to better engage with their customers digitally on any device – through online and SMS chat, self-guides, personalized rich content and other automated solutions – resulting in enhanced customer experience, increased revenue and reduced support costs. Offerings include a real-time customer targeting engine that leverages Big Data to target and engage customers in a personalized digital assistance experience, and award-winning technology and mobile solutions with an emphasis on data, self-service and automation.

Analytics

Nina includes analytics capabilities providing a comprehensive view of what's happening within the virtual assistant and how well conversations are being handled. These range from high level insights (how many things Nina understood, how many sessions ended with an answer, how many users dropped out of a conversation) and detailed analysis of Nina's performance (e.g. where Nina did not understand something, what training is needed to address this) to logs of individual conversations. This can be vital in ensuring compliance in industries such as finance and healthcare, as well as for continuously improving Nina's performance.

Besides engagement activities, Nina's reporting can also drill down to specific customer acquisition and customer care KPIs, giving enterprises the opportunity to estimate the influence of their virtual assistant into their everyday business outcomes. Our central data repository stores current as well as historical data for creating default and custom reports and this data is collected and analyzed to construct, refine and optimize dialogue and Website behavior.

Nina can also integrate with external analytics programs including Google Analytics and Adobe® SiteCatalyst®, to enable events – such as a customer starting and finishing a conversation, whether this had to be escalated to live chat, which page the conversation started on, what they did after it finished – to be passed to the program to give a single view of activity on the Website or mobile app, and a clear view of Nina's impact. And Nina can produce ranked lists of the most popular topics it was asked about, which in turn can help improve Website design, performance, content, SEO etc.

Brand differentiation

Because Nina can very quickly become a first point of customer contact across a variety of channels, it's vital that the virtual assistant exemplifies and reinforces the enterprise's brand in terms of language, tone of voice, personality, visual appearance etc. and that this is applied consistently, appropriately and memorably to all aspects of Nina's operation.

Unlike virtual assistants whose primary focus is simply to automate access to structured and unstructured content and information, Nuance has built on these knowledge and process management abilities with insights into the people who are interacting with Nina, further helping enterprises to reinforce and differentiate their brand.

What happens in a typical deployment?

Although every organization is different and there is no 'off the shelf' version of Nina, the NPS team applies a common collaborative process to every deployment of the virtual assistant.

1

Your goals

The starting point is agreeing what you want to achieve. Is it improving the experience on your Website, deflecting calls from your contact center, supporting sales on your Website or mobile app, or any of the other processes that Nina can help you improve?

2

Your use cases

To achieve your goals, the team will work with you to define the use cases, processes and conversational flows that Nina will be built to handle, using a simple, drag-and-drop graphical toolset. For example:

- If you want to provide an intelligent interface to your FAQs, this could be as simple as defining answers to a standard set of questions related to a fairly static set of content.
- If the aim is to deflect contact center calls, the exercise could look more broadly at why people are calling your contact center and how Nina can help them achieve the same result without leaving your Website – for example by providing an easier way of answering their questions, or leading them through clear step-by-step processes.

3

Your avatar

In parallel with this the NPS team will discuss with you and your branding team what your virtual assistant will look like. Will you have an avatar, will it be embedded into or float over various pages, what tone of voice should it have, etc.?

4

Integrations

As well as agreeing your virtual assistant's content, branding and persona, the NPS team will assist with any technical integration. So, for example, if you wanted to create transactional use cases such as enabling customers to pay a bill or check their account balance, the team will work with you to define and build APIs enabling secure access to and control over the information flows required.

5

Your natural language model

Once your use cases and content have been defined, the team will use a natural language toolset to help you create the language model that will drive your virtual assistant. This tool can be used, for example, to import huge quantities of chat transcripts or spreadsheets of the many things customers might say; group common topics, issues and phrases into customer intents; test that these accurately reflect what's happening in your customer interactions; tailor the responses you want your virtual assistant to make; and then automatically generate your initial language model.

In addition to this language model, the process aspects of how Nina behaves – how it responds if it doesn't understand a customer, how it asks them to rephrase their query, and what it does next, such as offering live chat or a contact phone number – are fully customizable. And Nina can automatically switch into different modes, depending on how a customer is behaving – for example, if they want to be contacted; they're expressing frustration, criticism, dissatisfaction, profanity etc.; or the question they're asking is beyond the virtual assistant's scope.

6

Pre-production, testing and optimization

Depending on the complexity of your deployment, in as little as 4-6 weeks you could have a working version of your virtual assistant, which can then be used for an iterative process of pre-production and testing.

7

Go live

At the end of this optimization you will be at a point where customers can actually communicate with your virtual assistant, and it can go live on your Website. The NPS team will then undertake another month of daily tuning and optimization to ensure Nina understands the intent of any additional phrases your customers are using.



Ongoing operation

Throughout the life of your virtual assistant, the NPS team will continue to provide guidance and support, leveraging best practices from across the Nina installed base to help it continually improve and evolve – through regular conversation reviews, reports, and assistance with adding new content (e.g. related to organizational or process changes, new product launches, etc.).

What kinds of results can I expect?

Right now, Nina provides intelligent support and assistance to the customers of leading global enterprises in industries including airlines, automotive, education, entertainment, financial services, healthcare, manufacturing, pharmaceuticals, technology, telecom and travel. Across all of these industries, Nina is typically achieving First Contact Resolution (FCR) rates of 75-85% (the same rates associated with live human agents), and deflection rates of 40-70%.

Coca-Cola, Domino's Pizza, Jetstar, SFR, Swedbank and Windstream are among the many companies benefiting from Nina's advanced capabilities, and you can learn more about their experiences by clicking on the logos below. At Swedbank, for example, Nina Web averaged over 30,000 conversations per month within just three months of being deployed, and achieved 78% FCR, handling over 350 customer questions and answers, and increasing the personalization of customer experiences. At Windstream, meanwhile, in the first three months the virtual assistant handled on average more than 24,000 conversations per month, achieved 72% FCR, and deflected 44% of contacts escalating to the company's contact center.

To get a more detailed understanding of what Nina is able to do for your customers and your business, please visit our [Website](#).



About Nuance Communications, Inc.

Nuance Communications is reinventing the relationship between people and technology. Through its voice and language offerings, the company is creating a more human conversation with the many systems, devices, electronics, apps and services around us. Every day, millions of people and thousands of businesses experience Nuance through intelligent systems that can listen, understand, learn and adapt to your life and your work. For more information, please visit nuance.com.