Prepare to pilot and scale Virtual Agent

What’s in this Success Insight

Virtual Agent is an in-platform conversational interface that augments humans and machines with intelligent automation to give users personalized and contextual interactions. Users can perform a wide range of tasks: ordering an item, checking case status, requesting leave, or resetting passwords. Using ServiceNow® for your virtual agent solution lets you build a standardized and consistent model on the Now Platform® that connects with the existing workflows you’ve already built and uses your ServiceNow data to create and update records.

This Success Insight includes guidance on where to get started by answering the following key questions:

1. **What is a virtual agent that’s enabled by Natural Language Understanding?**
2. **What foundations should be in place before I start my Virtual Agent pilot?**
3. **How should I select the conversations for my Virtual Agent pilot?**
4. **What should I do to scale up my Virtual Agent conversations?**

1. **What is a virtual agent that’s enabled by Natural Language Understanding?**

A virtual agent can satisfy many business goals. It can help you deliver a better user experience because it triggers workflows and surfaces information in a messaging interface. It also meets users within the app or system they’re using: Microsoft Teams, Slack, mobile, or web. At the same time, a virtual agent reduces support costs and live support workloads and breaks down operational bottlenecks.
There are three different types of virtual agent conversations or topics users can have:

- **Request for action** – These are questions or requests that are focused on triggering an action or creating a record within either the main process or one of the available sub-processes in your service, such as “I need Adobe installed on my laptop.”

- **Request for information** – These are questions focused on the process itself, such as, “how does it work?” or “what do I need to do?”

- **Request for knowledge** – These are questions focused on an existing individual record in your process, such as, “what is the status of a particular task?” or “can I have information about a specific event?”

Today’s virtual agent with Natural Language Understanding (NLU) interprets beyond the traditional keyword constructs so they can understand, process, and respond conversationally. This leads to an easier and more contextual user experience that helps a virtual agent take on more complex issues with higher adoption, which ultimately brings you even greater business value.

ServiceNow offers two levels of NLU. The first is to use NLU conversations that are out-of-the-box (OOTB) and prebuilt into Virtual Agent. These include customizable templates for the most common enterprise IT, HR, and customer service scenarios.
These NLU-enabled OOTB conversations are updated monthly. Check our product documentation for the most up-to-date list.

You can use Virtual Agent Designer to create and modify conversations, building topics to meet a specific objective or user goal such as fulfilling a request or completing a task. You do this work in a drag-and-drop environment that doesn’t require scripting or advanced skills.

The next level is to use NLU models to provide a richer and more natural conversation experience. These models are trained to understand statements a user might make during a conversation and relate them to the task the user wants to perform. NLU models include these three elements:
• **Intents** – What a user wants to do, for example perform an action such as submitting a service ticket or getting an update on an order

• **Utterances** – The different ways that a user expresses an intent

• **Entities** – The object or context for an action, such as a laptop, case number, or an employee’s name

Visit [Now Learning](https://now-learning.servicenow.com) for more information on understanding NLU.

### 2. What foundations should be in place before I start a Virtual Agent pilot?

First, set your foundations. To do that, answer these five questions:

- **What is your users’ current path to find the answers or complete the tasks your virtual agent will pilot?** To make sure you put your virtual agent in the right place, you’ll need to consider your users’ current path. Do users go to an internal portal? Will you need service catalog items? What other paths will users use? You can integrate ServiceNow Virtual Agent with the Now Mobile app, Slack, Microsoft Teams, Workplace by Facebook, and custom chat integrations, so consider whether your users need an integration with one or more of these channels.

- **Will users need live transfer?** If your potential use cases need live transfer, either include chat or implement Agent Workspace or Service Operations Workspace. These use cases will have significant organizational change management implications, so be certain to complete their implementation before you launch your Virtual Agent pilot—otherwise, you may need to consider alternative virtual agent conversations to pilot. Keep this in mind as you prepare to expand your Virtual Agent conversations—seamlessly transferring the entire conversation history and context to the right live agent will quickly address any escalations and resolve user issues.

- **Will your knowledge base support your needs?** Will your current knowledge base support your intended pilot or do you need to build in additional content?

- **What feedback and metrics will you need to evaluate the pilot?** There are two types of metrics to track: the adoption and quality of the virtual agent, and the business impact on cost savings and user satisfaction. ServiceNow Virtual Agent has a conversational analytics dashboard that you can use to track user metrics.
  - Measure your virtual agent adoption with KPIs such as active users, new users, or conversation sessions.
  - Capture the quality of the user experience through user experience survey ratings or metrics such as the average handling time and the number of transfers to live agents.
  - These KPIs will serve as leading indicators for the cost savings you get through deflection and self-service rates. They also provide early insight into your customer satisfaction (CSAT) score and may correlate to your customer effort score (CES) and net promoter
score (NPS). Define appropriate targets for each of these—you can use ServiceNow Performance Analytics to track and visualize your progress toward your goals.

- **How will organizational change management (OCM) support your pilot?** You’ll need to build an OCM to support your pilot. Confirm that you have leadership and executive sponsor support for both OCM and enablement. See our Success Playbook for details and resources on how to start your OCM plan.

### 3. How should I select the conversations for my Virtual Agent pilot?

Now that your foundations are in place, start small. Select five to ten potential pilot opportunities. Start with the NLU-enabled OOTB conversations grouped by ITSM, HR Service Delivery, and Customer Service Management that we discussed earlier. These OOTB solutions will be the most straightforward to implement. Also define a greeting and a search fallback topic in case the virtual agent doesn’t understand the user.

Engage with your business analyst or process engineer to understand which of these OOTB conversations align with the current bottlenecks in your business.

Look to tools such as Virtual Agent Topic Recommendations to identify the top opportunities for conversations.

Conduct an analysis of your case, request, and incident data. You’ll likely find a large volume of service desk interactions that come from a small set of issues—password resets, checking case status, ordering an item, or requesting leave. These are great opportunities for quick wins.

Once you’ve selected your pilot conversations, create a structure that will allow your teams to share feedback and document the lessons learned from the pilot.

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**Practitioner insight:** Don’t start with virtual agents that function based on keywords. This is a limiting approach and will create migration challenges when you move to NLU. There are finite circumstances when starting with keyword is advisable—primarily when you’re considering launching languages that you don’t currently support. If this is your case, speak with your ServiceNow account team.

**Practitioner insight:** User acceptant testing (UAT) is critical to every virtual agent conversation. Put a robust UAT process in place to make sure that each interaction is intuitive and the answers are accurate.
4. What should I do to scale up my Virtual Agent conversations?

Now that your foundations are in place and your pilot has launched, prepare to scale up your virtual agent conversations. Here’s how:

- **Align your virtual agent strategy with your organization’s goals** – To help you prioritize virtual agent conversations, review your organization’s goals and priorities, for example:
  - Scaling business efficiency and reducing costs while handling increased volumes of routine tasks
  - Reduced agent workloads by automating routine requests
  - Improved service by providing customers and employees instant answers through 24/7 automated support
  - Faster time to resolution through reduced wait times and self-service for low complexity requests

- **Identify the success measures that will support your business objectives** – To measure customer use, look at your number of active users, new users, retained users, bot sessions, and method of choice for solving problems. For user experience, look at your first response time, average handling time, number of transfers to a live agent, time to resolution, number of completed conversations versus total conversations, chat exits prior to resolution, and user ratings from surveys.

- **Build teams as you evolve to more complex topics** – Complex topics that create workflows across multiple systems will usually require developers and scripting. Be sure to scope your resources to include:
  - Business analysts to gather use cases and map conversation flows
  - Service/process owners who understand the end-to-end flow of a process and can identify success metrics
  - A business owner to define the decision trees and set the priority for conversations to be built
  - Virtual agent developers who are comfortable with JavaScript skills and using the Virtual Agent Designer
  - An NLU administrator whose responsibilities include building, maintaining, and training the models, along with controlling their release; should have experience in ServiceNow implementation, Virtual Agent training, and an understanding of NLU
  - A ServiceNow systems administrator who’s experienced in ServiceNow implementation and has taken the Virtual Agent training
  - Executive sponsors who provide organizational support for the project

- **Create governance for your Virtual Agent journey** – This should include implementation governance and post-implementation governance. Implementation governance supports successful implementation, and post-implementation governance supports the long-term success of Virtual Agent in your environment. Your implementation governance team should identify your post-implementation (maintenance) governance team before disbanding.
• **Keep user adoption at the forefront of your planning** – Virtual agent adoption is driven by several factors, including how well it:
  
  - **Provides accurate results** – Users won’t go back to a virtual agent that isn’t reliable, so accuracy and reliability are paramount to adoption. Perform extensive UAT to help you mitigate risk and collect ongoing feedback to get insight into how you can improve.
  
  - **Offers an intuitive interface** – Users don’t want to spend time figuring out how to use a virtual agent. Be sure to include testing across wide groups of users to make sure your offering is intuitive. By that same token, make sure the experience is seamless by giving your virtual agent your organization’s tone and brand.
  
  - **Appears organically within the user journey** – Users won’t go out of their way to find a virtual agent—it has to be within their existing journey. If your users currently go to the Now Mobile app, Slack, Microsoft Teams, Workplace by Facebook, or custom chat integrations to find answers or complete tasks, implement ServiceNow Virtual Agent into the app they use.
  
  - **Offers a personalized experience** – The best virtual agent conversations are personalized to users. For example, your virtual agent should know the details that could impact the conversation, including the user’s location, time zone, devices, etc.

For more insight into launching Virtual Agent, see our [Virtual Agent Readiness Checklist](#).

### Additional resources

- [Virtual Agent overview](#)
- [Virtual Agent Implementation Readiness webinar](#)
- [Virtual Agent Now Community forum](#)
- [Virtual Agent product docs](#)
- [Integrate Virtual Agent with Microsoft Teams](#)

Additional resources are also available on our [Customer Success Center](#).

If you have any questions on this topic or you would like to be a contributor to future ServiceNow best practice content, please contact us at [best.practices@servicenow.com](mailto:best.practices@servicenow.com).