

## Are Intelligent Virtual Assistants Ready for the Enterprise?



Not only is the answer 'yes,' see how Capital One, Domino's Pizza, Hyatt Hotels, and others are deploying IVAs in their organizations

With personal virtual assistants like Apple's Siri, Microsoft's Cortana, and Amazon Echo becoming commonplace among consumers, they are coming to expect such capabilities when they call businesses as well.

By Phillip Britt

People access their intelligent virtual assistants (IVAs) at least one time per day, according to Dan Miller, lead analyst and founder of Opus Research.

Companies are also pursuing this technology because virtual assistants can provide a better customer experience than a simple interactive voice response (IVR) system. IVAs tend to incorporate natural language speech and understanding, so the better ones can interpret many different ways of saying the same thing. Plus, they can understand different accents, limiting customer/employee frustration and the need to default to a live agent.

"Enterprise intelligent assistants [another term for IVAs in the enterprise] are the way that individual customers or employees can gain access to the company's artificial intelligence," Miller says. "As individuals are finding more success with self-service, we are seeing increasing customer satisfaction and increased task completion. These systems are morphing from unforgiving IVR systems into pleasant conversational iterations that can successfully complete as many as 80 percent of customer requests."

"Consumers are overwhelmed with the different interfaces they need to understand in order to do what they want," adds Rebecca Jonsson, chief researcher for Artificial Solutions. "They have had to learn the language of technology." And that's a foreign language for many, particularly since web- and voice-based help systems have differed so much from company to company.

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Now with the conversational interface of IVAs, technology is learning the language of humans so that natural language is the means of interaction for people to achieve their goals, Jonsson explains.

The first goal of companies employing IVAs, according to Miller, is to go after the low-hanging fruit, such as establishing a better, more efficient way for customers to get commonly asked questions answered without having to go through a lengthy IVR frequently-asked-question decision tree, which can easily lead a customer down a wrong path.

"Enterprise intelligent assistants do a better job of understanding what you are asking and then responding to it," Miller says. "They take turns, so it becomes conversational speech."

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"We have gone from virtual assistants that could help out navigating Web pages [such as IKEA's Anna, fluent in 20 languages] or virtual assistants that helped out in customer service [answering frequently asked questions] to intelligent virtual assistants that can perform tasks, take over well-defined processes, and solve issues for the enterprise by becoming digital employees," Jonsson says.

IVAs offer more than just the opportunity to take pressure off the call center, says Rick Collins, president of NextIT. "They can handle highly complex interactions. They have a way of parsing text in a conversational way to provide a response that is satisfactory."

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Anna and similarly brand-personalized, customer-facing IVAs can boost a company's business by employing personalities that attract people to the enterprise and provide for excellent customer service, Jonsson adds.

Through their own use of personal assistants, consumers have come to expect advanced capabilities when interacting with enterprise IVAs.

"Customers have the expectations that you know them and that you should sound smart," says Eduardo Olvera, emerging technology lead for Nuance. "Users are getting smarter, so they are asking tougher questions. They want more than the time and the weather. They know that the company knows things about them, so they want you to be better at managing things, they want you to be proactive."

So if a customer has already checked into a flight via an app, he expects notification if the flight is delayed. Similarly, once checked in, he expects the IVA to immediately identify him so he can progress to advanced queries. IVAs from Delta Air Lines and American Airlines already employ such capabilities, according to Olvera.

When customers call from telephone numbers stored by either airline, they are greeted by name and provided with proactive notifications to inform them of important travel information about upcoming reservations. This way customers don't need to re-enter identity information every time they log in and can quickly access the most likely needed information.

Another advantage to IVAs, according to Jonsson, is that enterprises can add features without changing the physical interface that consumers use, so there is no disruption for upgrades—unlike previous "help" technologies, in which entire interfaces or processes of use changed when new features or functionality were added.

In this way, the interaction with the consumers becomes independent of the device, operating system, and consumer's technology expertise, Jonsson says. Also, this allows a customer to speak in his or her native language (be it English, Spanish, Chinese, etc.) and in natural vernacular—using different words meaning the same thing—rather than learning structured commands or enterprise terminology.

